59TH NATIONAL COST CONVENTION 2019

THEME

COST AND MANAGEMENT ACCOUNTANTS: "POWER OF THE PAST - FORCE OF THE FUTURE"

20 - 21 January 2019, Pune

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

Statutory Body under an Act of Parliament

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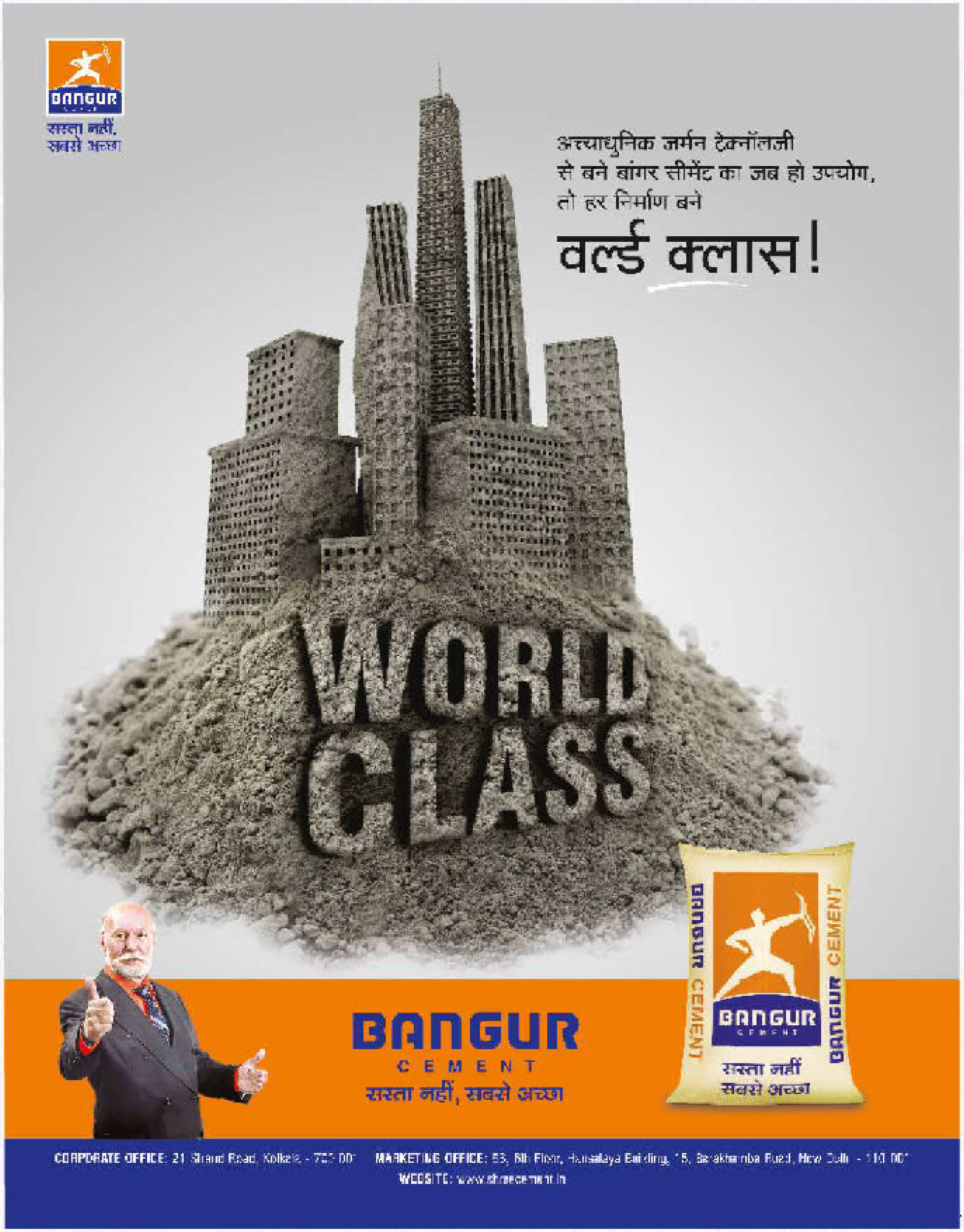
Behind every successful business decision, there is always a CMA

SOUVENIR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59TH NATIONAL COST CONVENTION 2019

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA
75 Years
1944 - 2019

THEME

COST AND MANAGEMENT ACCOUNTANTS: "POWER OF THE PAST - FORCE OF THE FUTURE"

20 - 21 January 2019, Pune

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

तमसो मा ज्योतिर्गमय

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CMA Bhawan, 3 Institutional Area
Lodhi Road, New Delhi - 110003
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MISSION STATEMENT

"The CMA Professionals would ethically drive enterprises globally by creating value to stakeholders in the socio-economic context through competencies drawn from the integration of strategy, management and accounting."

VISION STATEMENT

"The Institute of Cost Accountants of India would be the preferred source of resources and professionals for the financial leadership of enterprises globally."

प्रधान मंत्री

Prime Minister

MESSAGE

It is a pleasure to learn that the Institute of Cost Accountants of India is organising the 59th National Cost Convention (NCC) – on 20-21 January 2019 at Pune, during its Platinum Jubilee year. The theme of the Convention – "Power of the Past – Force of the Future" is a relevant and timely initiative.

The professionals in the field of cost and management accountancy look after the financial health of the society and our nation. In an era of digital technology, technological innovations have immense potential to increase the accuracy and speed of cost accountancy-related activities. The cost and management accountants must embrace latest technology and learn from best international practices and experiences.

The National Cost Convention will bring together an assembly of experts in the field of cost and management accounts to deliberate upon issues related to trade, industry and the corporate sector. I am sure that the discussions will focus on drawing a practical roadmap to deal with various issues facing the service industry, particularly the manufacturing sector.

Our Government has launched schemes such as Skill India, Digital India and Start-Up India. The discussions at the Convention can dovetail its ideas with these schemes to widen their ambit.

Best wishes for successful deliberations at the 59th edition of National Cost Convention.

(Narendra Modi)

New Delhi

17 January, 2019

सुरेश प्रभु
SURESH PRABHU

सत्यमेव जयते

स्वच्छ भारत
एक कदम स्वच्छता की ओर

मंत्री
वाणिज्य एवं उद्योग;
एवं
नागर विमानन मंत्रालय
भारत सरकार, नई दिल्ली

MINISTER
COMMERCE & INDUSTRY;
AND
CIVIL AVIATION
GOVERNMENT OF INDIA, NEW DELHI

MESSAGE

I am glad to know that the Institute of Cost Accountants of India is organizing its 59th **National Cost Convention (NCC–2019)** on the theme- **"Cost and Management Accountants : Power of the Past – Force of the Future"** at Pune, Maharashtra on January 20-21, 2019.

Indian economy is all poised to emerge as a leader among growing economies of the world. Whereas micro units are aspiring to become medium units, medium units climbing the ladder to become large enterprises, large enterprises are looking forward to become multinationals. To materialize their dreams, businesses shall be equipped with effective scaling up strategies in the areas of operations, technology, investments, marketing, people resources, etc. The success of scaling up is directly proportional to the value addition to their stakeholders.

Cost & Management Accountants (CMA) has an increasing role than ever before, considering the complexities of the scenario and the capabilities of CMAs to address this situation. CMAs shall be the key enablers to lead this transformation with disruptive technologies and effective processes. With power of the glorious past, the Institute and its members are stepping towards becoming the Force of the Future wherein the emerging avenues like AI, IBC, Valuation, Banking and Insurance, etc. are posing and enhancing professional scope as well for them.

I am happy that the Institute is organizing such a thought-provoking convention and believe the Conference will be an incentive for the delegates, moreover the souvenir brought out on this occasion will be useful and informative as well.

I extend my best wishes to the organizers and participants of the event.

(Suresh Prabhu)

Ministry of Commerce & Industry : Udyog Bhavan, Rafi Marg, New Delhi-110011
Tel. No. : 91-11-23062223, 23061492, 23061008, Fax : 23062947, E-mail : cimoffice@nic.in
Ministry of Civil Aviation : Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi-110003
Tel. No. : 91-11-24610350, 24632991, Fax : 24610354, E-mail : hm.moca@nic.in

सत्यमेव जयते

रक्षा मंत्री
भारत
MINISTER OF DEFENCE
INDIA

MESSAGE

Pleased to know that The Institute of Cost Accountants of India is organizing its 59th National Cost Convention (NCC-2019) on the theme 'Cost and Management Accountants: Power of the Past-Force of the Future" at Pune, Maharashtra.

Indian Economy is all poised to emerge as a leader among growing economies of the World. Whereas Micro units are aspiring to become Medium units, Medium units are climbing the ladder to become Large enterprises and Large enterprises are looking forward to become Multinationals. To materialize their dreams, businesses shall be equipped with effective scaling up strategies in the areas of operations, technology, investments, marketing, human resources etc. The success of scaling up is directly proportional to the value addition to their stakeholders.

Cost and Management Accountants has an increasing role than ever before, considering the complexities of the scenario and the capabilities of CMAs to address this situation. CMAs shall be the key enablers to lead this transformation with disruptive technologies and effective processes. With the power of the glorious past, the Institute and its members are stepping towards becoming the Force of the Future wherein the emerging avenue like AI, IBC, Valuation, Banking & Insurance etc. Are posing and enhancing professional scope as well for them.

The Institute of Cost Accountants of India is organizing such a thought-provoking convention and firmly believe the Conference will be an incentive for the delegates; moreover the souvenir brought out on this occasion will be useful and informative as well.

Best wishes to the organizers and participants of the event.

'Jai Hind'

(Nirmala Sitharaman)

New Delhi
17th January, 2019

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Office : 104, South Block, New Delhi-110011, Ph. : +91 11 23012286, +91 11 23019030 Fax : +91 11 23015403

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राज्य मंत्री
विधि और न्याय
और
कारपोरेट कार्य
भारत सरकार

सत्यमेव जयते

P.P. CHAUDHARY
Minister of State
Law & Justice
and
Corporate Affairs
Government of India

MESSAGE

I am happy to note that the Institute of Cost Accountants of India is organizing its 59th National Cost Convention (NCC – 2019) on the theme "Cost and Management Accountants: Power of the Past – Force of the Future" at Pune, Maharashtra on 20-21 January, 2019.

Indian Economy is poised to emerge as a leader among growing economies of the World. Where Micro units are aspiring to become Medium units, Medium units are climbing the ladder to become Large enterprises, Large enterprises are looking forward to become Multinationals. To materialize their dreams, businesses need to be equipped with effective tools and strategies in the areas of operations, technology, investments, marketing, human resources etc. The success of scaling up is directly proportional to the value addition to their stakeholders.

Cost and Management Accountants (CMAs), have an increasing role than ever before in creating this value for the stakeholders, considering the complexities of the present global scenario. The emerging avenues like Artificial Intelligence, IBC, Valuation, Banking & Insurance etc. are posing new challenges thereby enhancing professional scope for the CMAs. I am sure that CMAs shall be the key enablers to lead this transformation towards higher value addition with emerging technologies and effective processes.

I am happy that the Institute of Cost Accountants of India is organizing such a thought-provoking convention. I firmly believe that the Conference will provide beneficial insights to the delegates. The souvenir brought out on this occasion will be useful and informative as well.

I extend my best wishes to the organizers and participants of the event.

(P.P. CHAUDHARY)

Law & Justice : Room No. 401, A-Wing, Shastri Bhawan, New Delhi-110001, Tel. : 011-23380406-7-8
Corporate Affairs : Room No. 437, C-Wing, Shastri Bhawan, New Delhi-110001, Tel. : 011-23386554
Residence : 19, Teen Murti Lane, New Delhi-110011, Telefax : 011-23017469 (10 Lines)
E-mail : ppchaudhary@gmail.com, mos-mlj@gov.in

Injeti Srinivas, IAS
Secretary

सत्यमेव जयते

भारत सरकार
कारपोरेट कार्य मंत्रालय
नई दिल्ली
Government of India
Ministry of Corporate Affairs
New Delhi

18th January, 2019

Message

It gives me pleasure to note that the Institute of Cost Accountants of India is organizing its 59th National Cost Convention 2019 on the theme "Cost and Management Accountants: Power of the Past – Force of the Future".

2. I believe that the convention will provide a robust platform for the professionals to strengthen themselves to meet the demands of their increasing role in the fast changing economic scenario marked with rapid expansion of the organized economy. This would give CMAs an opportunity to act as key enablers to facilitate this transformation. The Institute and its members are moving in the right direction by equipping themselves with new capacities to deal with IBC, Valuation, Banking and Insurance etc.

3. I convey my best wishes to the Institute, its professional fraternity and participants for a successful National Convention.

(Injeti Srinivas)

कमरा नं 519, 'ए' विंग, शास्त्री भवन, नई दिल्ली–110 001
Room No. 519, 'A' Wing, Shastri Bhawan, New Delhi - 110 001
Phones : 91-11-23382324, 23384017, Fax : 91-11-23384257, E-mail : secy.mca@nic.in

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

Statutory Body under an Act of Parliament

MESSAGE

I am pleased to know that The Institute of Cost Accountants of India is organizing **59th National Cost Convention (NCC-2019)** on the theme **"Cost and Management Accountants: Power of the Past – Force of the Future"** at Pune, Maharashtra on 20th and 21st January, 2019 in its **Platinum Jubilee Year**.

Swami Vivekananada said, "*The more we come out and do good to others, the more our hearts will be purified, and God will be in them*". Since 75 years, the CMA profession too has strived relentlessly to promote the socio-economic development of the country. The CMAs are considered to be the powerhouse in the Indian economy as they are trained to be cost competitive, utilize available resources in an efficient and cost-effective manner through cost optimization, efficient deployment of scarce resources leading to cost control, cost reduction and cost consciousness. In today's dynamic and uncertain world of business buffeted by persistent possibility of global shocks, it has become essential to devise strategies where the business gets value for every penny spent. Here, CMAs steps in with their professional skills to make it possible.

In NCC-2019, there will be Technical Sessions with focused discussions on the role of CMAs in the prevailing and emerging economic and regulatory environment of the Country, to enrich the knowledge of the participants and enhance the skill set of the professionals.

I heartily congratulate the organizers for organizing such Convention which would encourage the professional fraternity to explore the new areas of practice, opportunities and succor Government in its various initiatives towards progress of the Nation. I am sure the Convention will be an incentive for the delegates and the souvenir brought out on this occasion will be useful and informative as well.

Further, extending my best wishes for successful conduct of the event.

CMA Amit Anand Apte
President
The Institute of Cost Accountants of India

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MESSAGE

I am indeed very happy to note that The Institute of Cost Accountants of India is organizing **59th National Cost Convention** on the theme **"Cost and Management Accountants: Power of the Past – Force of the Future"** at Pune, Maharashtra.

The event would address on plethora of issues concerning the nation: Industry Revolution 4.0, AI, Big Data, Integrated Reporting, Infrastructure, Telecommunications, Insolvency, Business Valuation, Cost Audit and Cost Management, etc. Eminent experts, top-notch bureaucrats, policy makers and dignitaries from industry, academia and professional bodies will be giving their deliberations. I firmly believe that technical sessions will be highly brainstorming.

Ever since the year 1944, we have made steady progress, CMA Professionals have marked their excellence in various sectors of the economy. The specialized education and training provided by the Institute make the CMAs a versatile professional. With the power of 75 years of Institute's glorious journey towards becoming the Force of the Future, wherein the emerging avenues like AI, IBC, Valuation, Banking & Insurance etc. are posing immense professional scope for them.

The Souvenir that is getting released on this auspicious event has been prepared emphasizing the relevant aspects of recent times: Artificial Intelligence, Block Chain, CSR, Social Sustenance, Cost Management, Valuation and Banking & Insurance. Commendable efforts have been made to make the publication useful.

I take this opportunity to extend warm welcome to the resource persons and delegates attending the convention. I wish this event all the success.

CMA Balwinder Singh
Vice President
The Institute of Cost Accountants of India

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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MESSAGE

It's a privilege for me to address the esteemed dignitaries and my fellow members of the Cost and Management fraternity through this Souvenir which is being released on the auspicious event of ***National Cost Convention-2019*** organized by The Institute of Cost Accountants of India at Pune, Maharashtra.

The Convention is on the theme **"Cost and Management Accountants: Power of the Past – Force of the Future"**. The experts in the technical sessions would share their expertise knowledge and guide the participants to upgrade themselves in delivering their best to the stakeholders.

Necessary skills for Cost and Management Accountants identified in the changing scenario include adapting cost and management accounting technologies to new forms of manufacturing process, exploring data analytics and artificial intelligence in managing organizational change propelled by the Fourth Generation Industrial Revolution.

This manufacturing revolution will increase productivity and foster industrial growth, as well as modify the profile of the workforce-ultimately changing the competitiveness of companies and regions. As innovation continues to drive forward complexity, so professionals like CMAs must keep abreast of the latest developments. From automation to blockchain, big data to the cloud, they need to be able to advise clients and their bosses about how to get the best from the latest technological advances.

My sincere gratitude to all the Contributors, Sponsors, Advertisers, all the esteemed Council Members and Staff Members of the Institute for their earnest effort for publishing this souvenir in time.

Also wish this event a grand success!!!

CMA (Dr.) I. Ashok
Council Member of the Institute &
Chairman, Souvenir Committee, NCC-2019

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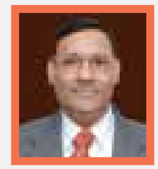
COUNCIL MEMBERS


CMA Amit Anand Apte
President


CMA Balwinder Singh
Vice President


CMA Sanjay Gupta


CMA Manas Kumar Thakur


CMA P V Bhattad


CMA Dr. I. Ashok


CMA P. Raju Iyer


CMA H. Padmanabhan


CMA Dr. P.V.S. Jagan Mohan Rao

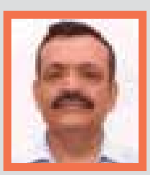

CMA Papa Rao Sunkara


CMA Biswarup Basu

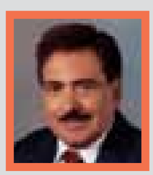

CMA Avijit Goswami

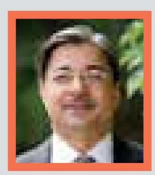

CMA Niranjan Mishra


CMA Vijender Sharma


Sh. Anurag Agarwal
Govt. Nominee


Sh. Surender Kumar
Govt. Nominee


Sh. Sushil Behl
Govt. Nominee


Sh. Ajai Das Mehrotra, IRS
Govt. Nominee

Ms. Mausummi Ray Bhattacharya
Govt. Nominee

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Ph: + 91 11 24666100/124/129

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Statutory Body under an Act of Parliament

ABOUT THE INSTITUTE

The Institute of Cost Accountants of India was first established in 1944 as a registered company under the Companies Act with the objectives of promoting, regulating and developing the profession of Cost Accountancy. On 28th May, 1959, the Institute was established by a special act of Parliament, namely, the Cost and Works Accountants Act, 1959 as a statutory professional body for the regulation of the profession of Cost and Management Accountancy.

The Institute has since been continuously contributing to the growth of the industrial and economic climate of the country. The Institute is the only recognized statutory professional organization and licensing body in India specializing exclusively in Cost and Management Accountancy.

The Institute of Cost Accountants of India is Founder member of International Federation of Accountants (IFAC), Confederation of Asian & Pacific Accountants (CAPA) & South Asian Federation of Accountants (SAFA). The Institute is a member of the Accounting Bodies Network (ABN) of The Prince's Accounting for Sustainability (A4S) Project, UK.

Institute's headquarters is situated at Kolkata with administrative office at New Delhi. The Institute operates through four regional councils at Kolkata, Chennai, Delhi and Mumbai as well as through 98 chapters situated in India, 9 Overseas Centres abroad and 2 Centres of Excellence. The Institute has a large base of over 75000 Cost Accountants either in practice or in employment and around 500000 students pursuing the CMA Course.

PAST PRESIDENTS


SANJAY GUPTA
(2017-2018)


MANAS KUMAR THAKUR
(2016-2017)


P V BHATTAD
(2015-2016)


Dr. A. S. DURGA PRASAD
(2014-2015)


Dr. SURESH CH. MOHANTY
(2013-2014)


RAKESH SINGH
(2012-2013)


M. GOPALAKRISHNAN
(2011-2012)


B.M. SHARMA
(2010 - 2011)


G.N. VENKATARAMAN
(2009 - 2010)

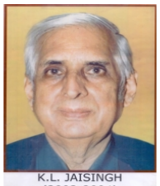

KUNAL BANERJEE
(2008 - 2009)


CHANDRA WADHWA
(2007 - 2008)


D.V. JOSHI
(2006-2007)


PRAVAKAR MOHANTY
(2005-2006)


DR. H.R. SUBRAMANYA
(2004-2005)


K.L. JAISINGH
(2003-2004)


B.V. RAMANA MURTY
(2002-2003)


V.V. DEODHAR
(2001-2002)


D.C. BAJAJ
(2000-2001)


MAHESH SHAH
(1999-2000)


R.J. GOEL
(1998-99)


AMAL KUMAR DAS
(1997-98)


N.P. SUKUMARAN
(1996-97)


HARIJIBAN BANERJEE
(1995-96)


V. R. IYER
(1994-95)


BUDDHA DEV BOSE
(1993-94)


G.B. RAO
(1992-93)


P.D. PHADKE
(1991-92)


SANKAR DATTA
(1990-91)

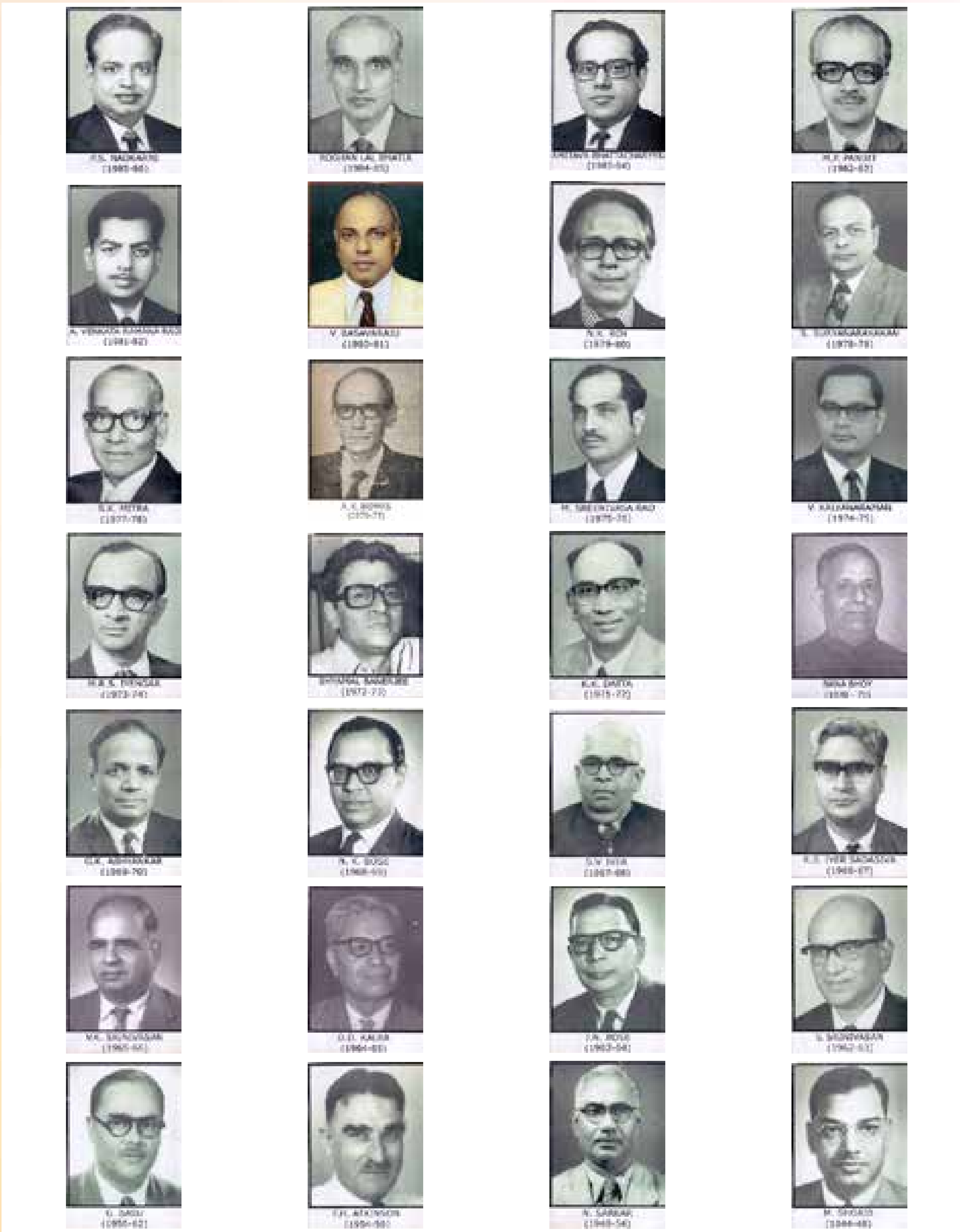

JUGAL KISHORE PURI
(1989-90)


PRAMOD D. PARKHI
(1988-89)


S. RAMANATHAN
(1987-88)


A.V. RAO SATYANARAYANA
(1986-87)

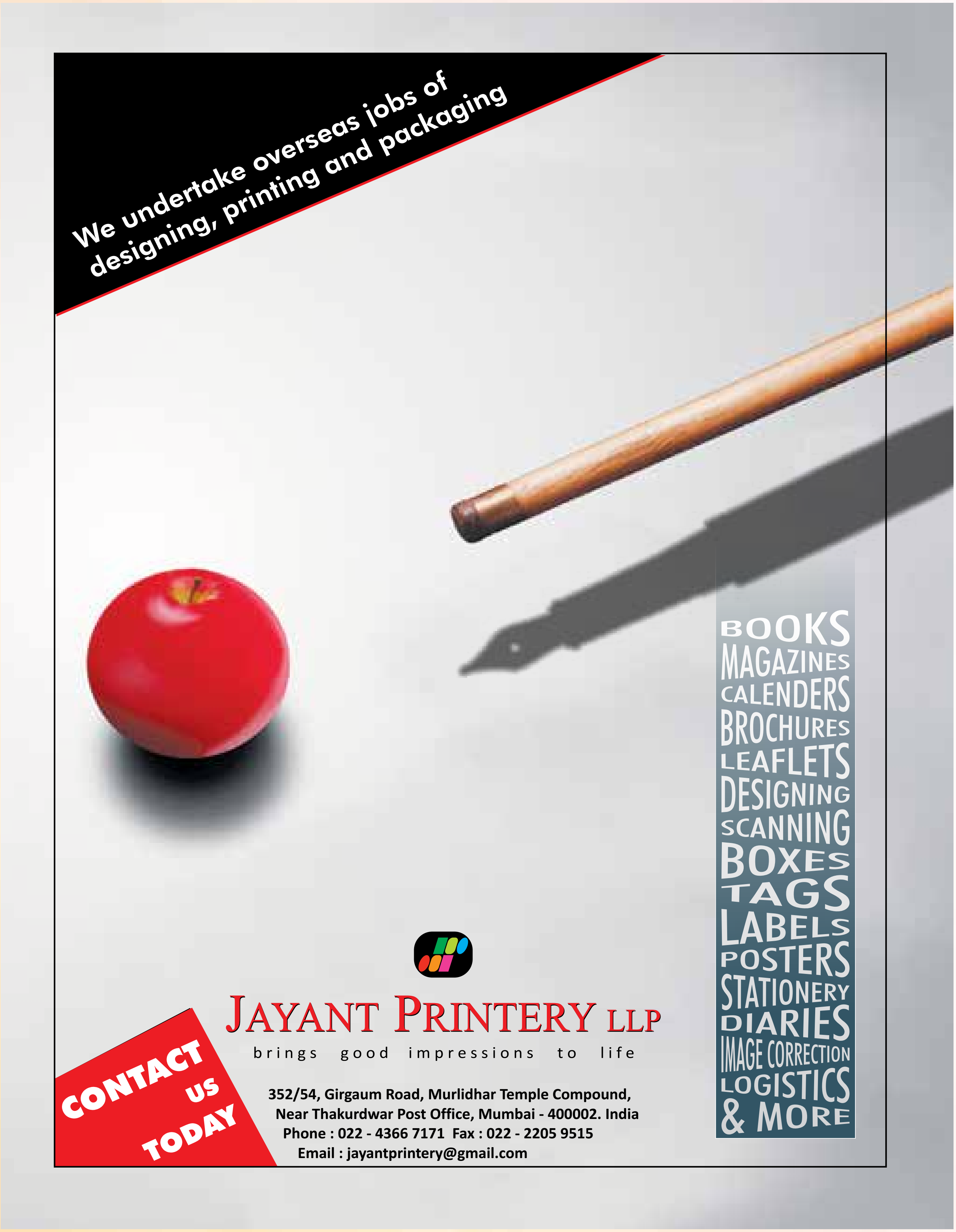
PAST PRESIDENTS



PAST PRESIDENTS

NAME	YEAR
Late CMA M. Shoaib	(1944-48)
Late CMA N. Sarkar	(1948-54)
Late CMA F. H. Atkinson	(1954-56)
Late CMA G. Basu	(1956-62)
Late CMA V. Srinivasan	(1962-63)
Late CMA J. N. Bose	(1963-64)
Late CMA D. D. Kalra	(1964-65)
Late Dr. V. K . Srinivasan	(1965-66)
Late CMA R. S. Iyer Sadasiva	(1966-67)
Late CMA S. V. Iyer	(1967-68)
Late CMA N. K . Bose	(1968-69)
Late CMA G. K. Abhyankar	(1969-70)
Late CMA R. Nanabhoy	(1970-71)
Late CMA K. K. Datta	(1971-72)
Late CMA Shyamal Banerjee	(1972-73)
Late CMA M. R. S. Iyengar	(1973-74)
CMA V. Kalyanaraman	(1974-75)
Late CMA M. Sreenivasa Rao	(1975-76)
Late CMA A. K. Biswas	(1976-77)
Late CMA S. K. Mitra	(1977-78)
Late CMA S. Suryanarayanan	(1978-79)
Late CMA N. K. Roy	(1979-80)
Late CMA V. Basavaraju	(1980-81)
Late CMA A. V. Ramana Rao	(1981-82)
Late CMA M. P. Pandit	(1982-83)
Late CMA Amitava Bhattacharyya	(1983-84)
Late CMA Roshan Lal Bhatia	(1984-85)
CMA P. S. Nadkarni	(1985-86)
Late CMA A.V.R Satyanarayana	(1986-87)
Late CMA S. Ramanathan	(1987-88)

NAME	YEAR
Late CMA Pramod D. Parkhi	(1988-89)
Late CMA Jugal Kishore Puri	(1989-90)
CMA Sankar Datta	(1990-91)
Late CMA P.D. Phadke	(1991-92)
CMA G.B Rao	(1992-93)
Late CMA Buddha Dev Bose	(1993-94)
Late CMA V.R. Iyer	(1994-95)
CMA Harijiban Banerjee	(1995-96)
CMA N.P. Sukumaran	(1996-97)
CMA Amal Kumar Das	(1997-98)
Late CMA R.J. Goel	(1998-99)
CMA Mahesh Shah	(1999-2000)
CMA D.C. Bajaj	(2000-01)
CMA V.V. Deodhar	(2001-02)
CMA B.V. Ramana Murty	(2002-03)
Late CMA K. L. Jaisingh	(2003-04)
Late Dr. H.R. Subramanya	(2004-05)
CMA Pravakar Mohanty	(2005-06)
CMA Dhananjay V. Joshi	(2006-07)
CMA Chandra Wadhwa	(2007-08)
CMA Kunal Banerjee	(2008-09)
CMA G.N. Venkataraman	(2009-10)
CMA Brijmohan Sharma	(2010-11)
CMA M. Gopalakrishnan	(2011-12)
CMA Rakesh Singh	(2012-13)
CMA Dr. S.C. Mohanty	(2013-14)
CMA Dr. A.S. Durga Prasad	(2014-15)
CMA P.V. Bhattad	(2015-16)
CMA Manas Kumar Thakur	(2016-17)
CMA Sanjay Gupta	(2017-18)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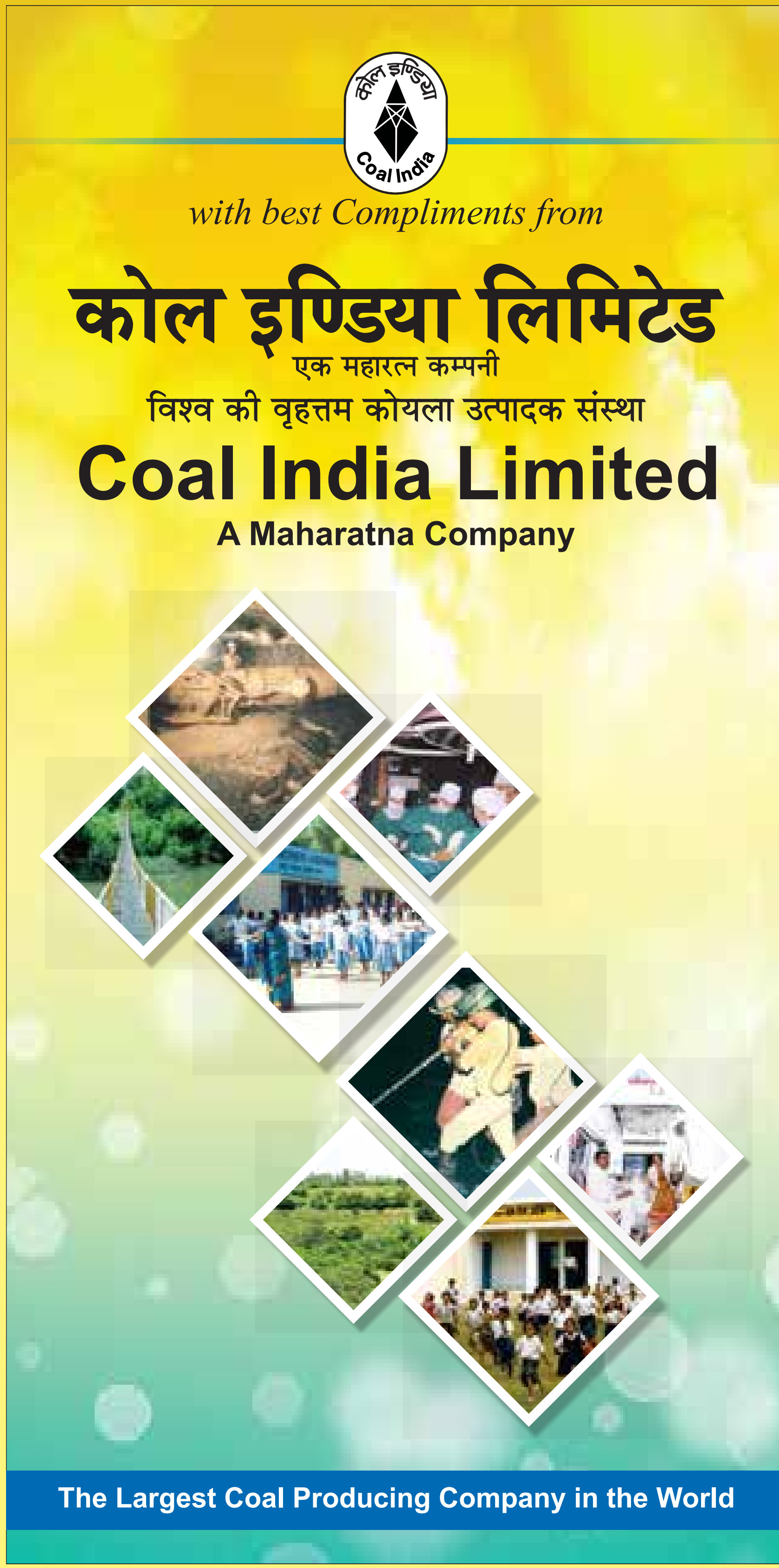
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विश्व की वृहत्तम कोयला उत्पादक संस्था
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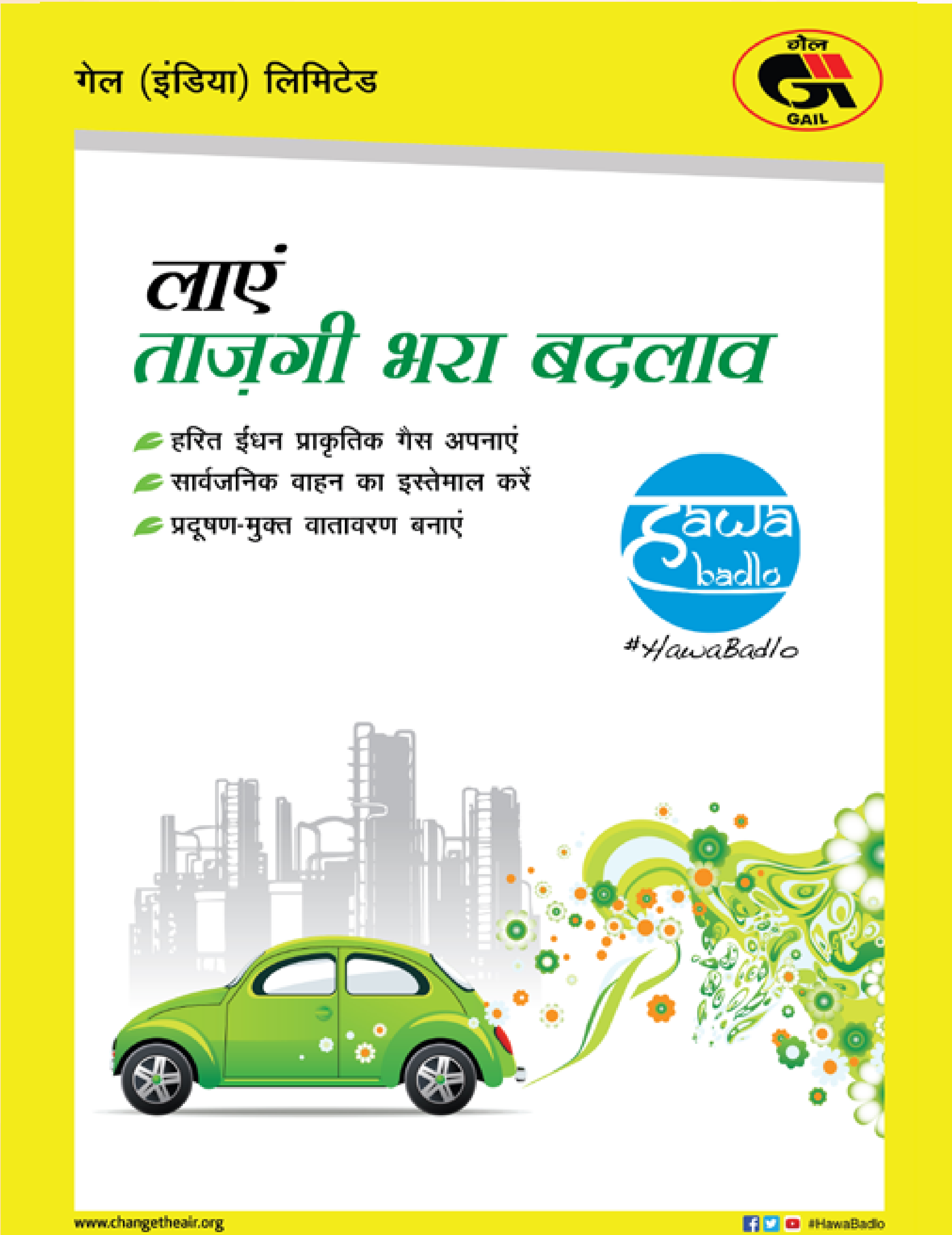
गेल (इंडिया) लिमिटेड
गेल
GAIL
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Cost and Management Accountants- Power of the Past – Force of the Future

"We need to curb down our costs to survive" said the CMA employed in this Manufacturing unit who has found themselves amidst these new competitors in the market and recently been waken up from monopoly dream.

"We are not wasting any resources, we need to put more pressure on sales to get it done" replied the management.

Like many other organizations, this one too became the victim of ignoring the most important aspect in any business i.e. **COST** and died an untimely death. With multi-product manufacturing and distribution ventures being the order of the day, it has become very important to understand the exact cost of creating and distributing every product and service at different stages so as to minimize expenditure and ensure optimum utilization of resources to survive in this competitive market and management has realized the critical role of CMA. Cost accountants play a pivotal role in every organization to make products cost efficient by reducing waste and increase cost efficiency. While financial accountants calculate assets and liabilities and show outside investors how a firm is doing. A cost accountant analyzes financial processes within an organization and makes recommendations for improved cost-control management.

Today, Cost accountants wear multiple hats and not just concerned about cost. They are not only acting as an efficiency auditor for smooth and proficient working of any process but are also the first whistleblower who informs the management on various discrepancies ranging from inventory to labor costs.

A CMA is advising management on profitable product mix, identifying business risks and ensuring its mitigation. They show the management the true picture of where they stand against where they should be.

Gone are the days when CMAs were meant for only Factories and manufacturing operations, they play a bigger role now in terms of long term and short term planning for business of any industry by forecasting future business and economic events and by formulating corporate strategy. They also play a major role in raising fund deciding on proper mix between debt and equity keeping in mind the dynamics of business. They have also been vested with decision making responsibility relating to effective running of business.

It has truly been said that cost accountants were power of the past but are force of the future.

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Cost and Management Accountants: Power of the Past - Force of the Future

This paper throws light on the Powers of the Cost and Management Accountants in the past and the new forces that have to be borne by the Cost and Management Accountants in the future.

In past decades, the main working area of Cost and Management Accountants was assumed to be inside the organization that was categorized in planning and decision making, operating, controlling and reviewing. In future the Cost and Management Accountants have to perform some more activities like Value based accounting, Non financial performances, Quality management, Activity based management, Strategic management accounting, Customer relationship management, Life cycle costing, Target costing, Green accounting and last but not the least, Maintenance of the secrecy of the confidential information, explained below in this paper, to have strong competitive advantage and to survive in the long run, due to increased forces of Globalization, Customer Awareness, Cut throat competition, increased eminence of service industry and new industrial revolution.

Cost and Management Accountants: The Power of the Past

Cost and Management Accounting Functions are complementary in nature; Management Accounting and Cost Accounting are two integral parts of the Accounting Discipline, where one (Management Accountant) is the main survivor of the planning, operating, directing and controlling functions, the another one (Cost Accountant) is the facilitator of these functions.

This is the Management Accountant who plays the function of planning and decision making, where this is the Cost Accountant who provide the necessary information being a ground for that planning and ensures the operations are to be done in accordance of that planning.

The functions that both the Management Accountant and Cost Accountant play mutually are

Master Budgeting
Taxation
Standard Costing
Marginal Costing
Budgetary Control
Cost-Volume-Profit- Analysis
Product Costing
Capital Budgeting
Process costing
Job Costing
Variance analysis

→

Horngren (1984)
Horngren and Sundam (1987)
Garrison(1985)
Garrison & Garrol (1990)

Management and Cost Accountants: The Value Enhancer of the Organization

"Management Accountants play a very important role in creating and **adding value to the organizations** by managing resources, people, process, activities and operations, and actively participate in decision making of the organization by providing relevant and eminent information." (Hilton, 2004).

Management Accountants **induces and enhances the values** in their working organizations by fulfilling five major objectives (Hilton, 2004).

Value addition by providing information: - Management accountants increases value in their organizations by providing true, accurate and important information in proper workable manner to the top management and then participate and help in **decision making**, to fulfill the day to day needs and long run survival objectives of organizations. Therefore have become an **integral part of top management team**.

Value addition by directing and controlling:- For achievement of its planned objectives and goals an organization requires the proper **direction and controlling** mechanism **during the operation phase** and that function is also served by management accountants.

Value addition by operating and implementing motivation mechanism: - This is the management accountant, who continuously keeps supervisory eyes on efforts being done by all, from managers to employees, from top to bottom towards the goals accomplishment of organization, if discrepancies are found between **individual and organizational goals then integrate them by motivation of personnel.**

Value addition by performance measurement: - Management accountants provide continuous feedback by **continuous measurement of performance and provide grounds for correction**, if required.

Value addition by competitive advantage: - Management accountants **analyze the organization's competitive position** and make it adjusted to compete with competition and **improvements**.

Management and Cost Accountants: The information providers to the concerned entities (Internal and External Reporting)

The role of management and cost accountants in past decades was assumed to be as **information provider** that we can notice from the given definition of various management masters/legends as under

"Management Accountants are concerned with providing relevant and useful information to high level management (involved in strategic planning and decision making) and middle and lower level management (involved mainly in execution of operations and implementation of strategy) working inside an organization who direct and control its operations." **(Garrioson, Noreen & Brewer, 2006).**

Likewise **Institution of Management Accountants (IMA, 1981)** been defined the role of management accountants by defining of the management accounting as: "The process of identification, measurement, accumulation, analysis, preparation, interpretation, & communication of the financial information used by management to plan, evaluate, and control an organization & to assure appropriate use of and accountability for its resources. Management accounting also comprises the preparation of financial reports for non- management group such as shareholders, creditors, regulatory agencies and tax authorities." **(IMA 1981)**

Helton on Management Accounting in 2006, by defining Managerial Accounting as " The process of identifying, measuring analyzing, interpreting & communicating information in pursuit of an organization's goal."

Information providers to the stakeholders & other external entities of the business as described by **Johnson & Kaplan in 1987.** "A management accounting system must provide timely & accurate inform to facilitate efforts to control costs, to measure & improve productivity, & to devise improved production process. The management accounting system must also report accurate product costs so that pricing decision, introduction of new products, abandonment of obsolete products & response to rival product can be made.

Ruling area of management and cost accountants in past *Johnson and Kaplan in 1987*

Cost Accountants

Cost control
Reporting of cost
Cost benefit analysis

Management Accountant

Involvement in strategic planning
Decision making
Improved productivity
Improvement in production processes

Introduction of new and improved products
Abandonment of obsolete products

The Chartered Institute of Management Accounting definition explained the main activities working areas of Management and Cost Accountants as:-

Involvement in planning process:-
Strategic Level/ Top management level (providing information)
Operational level (establishment of policies and formulation of budgets)
Involvement in decision making:-
Generating and gathering of information
Analysis and interpretation of information
Presentation and reporting of information
Monitoring, controlling and Review:-
Comparison of actual with the standard performance/budgets
Analysis and interpretation of deviations
Suggesting for elimination of variances

Cost and Management Accountant's were involved in various activities in the past

Planning Phase

Project Appraisal
Economic Appraisal
Cost Information Maintenance
Decision Accounting
Financial Planning
Preparation of Master Budgets
Capital Budgeting
Standard Costing

Operation Phase

Historical Cost Accounting
Marginal Costing
Cost Accounting
Cost ascertainment
Cost Assignments
Fixation of Selling Price
Tax Administration

Analysis and Controlling

Fund Flow Analysis
Cash Flow Analysis
Analysis of Financial Statements
Budgetary Control
Variance Analysis
Cost Audits
Communication and Reporting

Review Phase

Evaluation and Advising
Correction and Review

Management and Cost Accountants: - The Forces of the future

In addition to the past activities the Cost and Management Accountants have to perform these more activities, explained below, to have strong competitive advantage and to survive in the long run, due to increased forces of Globalization, Customer Awareness, Cut throat competition, increased eminence of service industry and new industrial revolution.

1. Value Based Management:-

Conventionally, In the middle of the twentieth century, the **role of Management and Cost Accountants was assumed to be a value enhancer of the business on part of its stakeholders** by increasing return on capital employed, return on investment, earning per share, growth rate of shares and so on. **In 1998 Rapport** described that the shareholder's value being a stick of performance measurement of management and cost accountants leaded the strong cash flows towards the uneconomic and loss incurring businesses, caused for the **value gap**.

Value Gap → Difference b/w market value of shares → Value of the shareholder being the value of business.

Value Based Management includes emphasis given on shareholder return, market value added with primary goal of increment in share holder value. **Explained by Cooper et al. (2001).**

Total Shareholder Return (TSR):- Compares the dividend distributed to the shareholder and increment done in the share price of original investment.

Market Value Added (MVA) This is the difference b/w Total market capitalization and the total capital invested in the business by own and loan capital providers.

Shareholder Value Added (SVA) As described by **Rappaport in 1998** being the economic value of an investment, can be calculated by using cost of capital to discount forecasted future cash inflows into present value.

Economic Value Added (EVA) as suggested by **Consultants Stern Stewart & Co.** aims to capture the economic profit of a business i.e. the net operating profit after charging opportunity cost of capital, leads to the increment in shareholder's value.

2. Non- Financial Performance Measurement Systems

Johnson and Kaplan (1987) argued that non financial performances like R&D, promotion, distribution, Quality improvement, applications engineering, human resources and customer relations are mandatory and unavoidable elements of an organization's performance and are vital for the company's long term competitive advantage.

Eccles in 1991 argued that "Income based financial figures are better at measuring the consequences, output and results of yesterday's decisions and operations than they are at indicating tomorrow's performance."

Global Economy → **Non financial Performances** → **Balanced score card Kaplan and Nortan, 1992,1993,1996,2001**

Global Economy ↓

Sustainable
Competitive advantage to
Survive in long run

Non financial Performances ↓

Higher Quality
Shorter Cycle Time
Smaller batch sizes
Greater variety in Product Mix
Cost Reduction and Control
Human Resource Relation
Customer Relation

3. Strategic Management Accounting

Johnson and Kaplan in (1987) stated that accounting and controlling systems could not compete with Dynamic information requirements of new manufacturing environment and increased eminence of service industry.

Strategic Management Accounting as defined by **Simmonds in 1981** as "the provision and analysis of management accounting data about a business organization and its competitors which is of strong use in the development and monitoring of the strategy of that business organization."

Bormwich (1990) "Provision and analysis of financial information of firm's product markets and competitor's cost structures and monitoring of the enterprise's strategies and those of its competitors in these markets over a number of periods."

Wilson (1995) "An approach of management accounting that explicitly highlights strategic issues and concerns. It sets management accounting in a broader context in which financial information is used to develop superior strategies as a means of achieving sustainable competitive advantage."

Strategic Management Accounting (A shift from inward looking to outward looking)

- Evaluation of firm's competitive position in relation to its competitors. **(Simmonds)**

- Analysis of financial information and corporate strategy **(Bormwich in 1990)**

- Working towards future development **(Bormwich and Bhimani in 1994)**

- Highlighting Strategic issues and use of financial information to develop superior strategies for sustainable competitive advantage. **(Wilson 1995)**

4. Quality Management

Business Process Reengineering as defined by **Hammer and Champy (1993)** as "the fundamental rethinking and redial design of business processes to achieve dramatic improvements in critical contemporary measures of performance, such as cost, quality, service and speed."

Total Quality Management by **Deming, Juran and Crosby** and Japanese Masters such as **Ishiwaka, Shigeo, Shingo and Yoshio Kondo.**

Edward Deming → Positive Cooperation → Innovation / Joy in work / Cooperation

Joseph M. Juran → Quality Trilogy

Quality Planning	Quality Improvement	Quality Control
↓	↓	↓
Identification of customer Need Determination Defining Specification Developing the products of best fit Features optimization	Developing Processes for being capable of developing the planned products Process optimization and improvements	Process Controlling (matching the actual with standardized) Transferring process to operation

Kaoru Ishiwaka Not only the quality of Product to be improved but also the after sales services –**CRM**

Quality Of Management- Decision making- planning-fulfillment of organizational objectives

Quality of Human Being- Non financial management

Shigeo Shingo Eminence is given to training of workers → Quality Improvement; → Strong Competitive Advantage added by CRM

Yoshio Kondo Balancing of Creativity, Leadership and Humanity

Just- In-time No or very minimum storage of material is done, to minimize the storage costs and also for avoiding the costs incurred due to the obsolescence of quality of stored material. To follow this technique, the supplier network and control over the inbound activities must be so strong to avoid the delay in receipt of supplies as and when required.

Continuous Improved Processes Rather than doing one time improvements or on passage of some specified time periods, the improvements in all activities and operations are to be done on the continuation basis.

Six Sigma It is a technique used to improve the quality of products/services by removing the causes of defects and elimination of defects. In which the measures of standard deviation is done and tight controlling measures are taken to keep the observations around mean.

5. Controlling of Quality Cost:-

Controlling of Conformance cost (Prevention cost) Cost to keep the deviations out from the actual product and service.

Controlling of Non-Conformance Cost i.e. The Cost of Internal and External failure.

6. Life Cycle Costing

It determines and compound the cost of a product/service during its whole life cycle, form inception to abandonment. It helps in estimation and determination if the profits generated during the production phase cover all the life cycle costs or not.

Basically it is a cost and profit analysis of not only production and sales but the entire cost incurred during the whole life of the product/service.

7. Target Costing (costing at planning phase)

It is concerned with management of whole-of-life cost during the designing phase of the standardized product/service. Standard/Target costing is done at the initiation of planning phase but for the whole life of product/service. The activities to be performed in target costing are

- Determination of targeted price (Targeted sales price)
- Determination of targeted cost by deducting targeted profit margin from targeted sales price.
- Estimation of actual cost variance by comparing actual cost with the targeted cost
- Control of cost variance

8. Kaizen Costing (Costing at operation phase and production phase)

Cost reduction by employee motivation and empowerment. Emphasis is given on employee training, development and motivation to achieve the goals of cost reduction.

9. The Activity Based Management (Cooper and Kaplan, 1988; Cooper, 1990; and Cooper and Kaplan, 1992)

It is a technique of management that involves analysis and costing of activities with a goal of improving efficiency and effectiveness. The Activity Based Costing where focus is given on the activities with the aim of measuring the cost of products/services, Activity Based Management tries to calculate the cost as prominently as possible. In addition, Activity Based Management focuses on managing the activities themselves. In Activity Based Costing resources are compiled to the activities for the purpose of computing the costs while in Activity Based Management, resources are compiled to activities for evaluation of the activities themselves. In other words, in ABM efforts are made to improve the activities further. Thus Activity Based Management is a set of actions that management can take, based on information from an Activity Based Costing system, to enhance the profitability of the organization. For continuous improvements, Activity Based Management attempts the following analysis.

• Cost Driver Analysis • Activity Analysis • Performance Analysis

10. Customer Relationship Management (Seybold, Patricia in 2000 and Richard B. and Sriram Dasu in 2001)

Customers are the king of the market. In present era only those organizations which have strong customer relationship and are continuously working for delighting their customers can survive in long run and can lead the market.

Customer Relations cannot be developed overnight but are a result of active, honest and continuous efforts being done in this direction for years.

It helps not only in **retaining the old customers** but also **attracts the new customers** and motivates them to be a part of the organization.

In present scenario and upcoming industrial culture, it will be a **strong strategic tool**, focusing on competencies, technologies, and processes with continuous improvement to deliver effective customer services unstoppably to have competitive advantage.

11. Green Accounting (L. Shelton 2004, Rahim & Y.M. Abdel 2010) In 21st century, accounting's scope is spreading beyond the black and red lines of the bottom, and including the green lines in the deeper most layer into it, and hence broadening the working boundaries of Management and Cost accountants.

Organizations are expected to deliver the goods and render the services with keeping environment safe and protective.

Companies are expected to balance its business strategies, (a Working area of management and cost accountants) with environmental initiatives.

Working Area of Cost Accountants (Controlling of)	**Working area of Management Accountants**
↓	↓
Pollution Prevention Cost	Conducting environmental Researches
Environmental Protection cost	Information gathering about environment
Cost of recycling of resources	Analysis of information
Environmental Restoration Costs	Controlling the overall cost and pollution

12. Security of Confidential Information

The Management and Cost accountants are having the most confidential and secret information of the organization, the disclosure of that can cause the lost of competitive advantage and complete failure of the organization. So it is also a responsibility on them to ensure the safety of confidential information of the organization.

Conclusion

In past decades, the main working area of Cost and Management Accountants was assumed to be inside the organization that was categorized in planning and decision making, operating, controlling and reviewing. In future the Cost and Management Accountants have to perform some more activities like Value based accounting, Non financial performances, Quality management, Activity based management, Strategic management accounting, Customer relationship management, Life cycle costing, Target costing, Green accounting and Maintenance of the secrecy of the confidential information, to have strong competitive advantage and to survive in the long run, due to increased forces of Globalization, Customer Awareness, Cut throat competition, increased eminence of service industry and new industrial revolution.

References

1. *Hilton, 2004, Managerial Accounting, Sixth Edition.*
2. *Garrison R, Noreen E, & Brewer P. (2006), Managerial Accounting. Eleventh Edition.*
3. *Hilton, Ronald W. (2006), Managerial Accounting, Seventh Edition.*
4. *Johnson, H.T. and Kaplan, R-S (1987). Relevance lost: The Rise and Fall of Management Accounting. Boston, MA: Harvard Business School Press.*
5. *Otley, D.T. and Berry, A.J. (1994) Case study Research in Management Accounting and Control.*
6. *Vatter, W.J. (1950). Managerial Accounting. New York, NY: Prentice Hall.*
7. *Collier, Paul M., Accounting for managers, (2015) Fifth Edition, Aston University.*
8. *Cooper, S., Crowther, D., Davies, M. and Davis, E.W. (2001). Shareholder Value: the Development of Indicators for the Control and Measurement of Performance.*
9. *Rappaport, A. (1998). Creating Shareholder Value: A Guide for Managers and Investors. (Revised Edition). New York, NY: Free Press.*
10. *Bromwich, M. (1990). The case for Strategic Management Accounting: the role of Accounting Information for strategy in competitive markets. Accounting, Organizations, and Society, 15(1/2), 27-46.*
11. *Bromwich, M. and Bhimani, A. (1994). Management Accounting: Pathways to Progress, London: Chartered Institute of Management Accountants.*
12. *Chartered Institute of Management Accountants (1993) Performance Measurement in the Manufacturing Sector. London: Chartered Institute of Management Accountants.*
13. *Hammer, M. Champy, J. (1993). Reengineering the Corporation: A manifesto for Business Revolution, London: Nicholas Brealey Publishing.*
14. *Chase, Richard B. and Sriram Dasu 2001, 'Want to Perfect Your Company's Service? Use Behaviour Science,' Harvard Business Review, June.*
15. *Prahalad, C.K. and Venkatram Ramaswamy 2000, 'Co-opting Customer Competence', Harvard Business Review, Jan-Feb.*
16. *Seybold, Potricia B 2001, 'Get Inside the Lives of Your customer,' Harvard Business Review, May-June.*
17. *Deming, W.E., 1982, Out of Crisis, Cambridge Univ. Press, Cambridge.*
18. *Crosby, P.B., 1979, Quality is free: The Art of Making Quality Certain, McGraw Hill, New York.*
19. *Juran, J.M. and Frank M. Gryana Jr. 1973, Quality Planning & Analysis, Tata McGraw Hill, New Delhi.*
20. *Kondo Y. 1993, Companywide Quality Control, 3A corporation Tokyo.*
21. *Ishikawa, Kaoru 1986, Guide to Quality Control, Asian Productivity Organization, Tokyo.*
22. *Shingo, Shigeo 2007, The Saying of Shingo Shigeo, Productivity Press Tokyo.*
23. *Goldratt, E.M and Cox, J. (1986). The Goal : A Process of Ongoing Improvement. (Revd. edn). Croton – On- Hudson, NY: North River Press.*
24. *Kaplan, R.S and Cooper, R. (1998). Cost & Effect: Using Integrated Cost Systems to Drive Profitability 7 Performance. Boston, M.A: Harvard Business School Press.*
25. *Porter, M.E. (1985). Competitve Advantage: Creating & sustaining superior Performance. New York, NY: Free Press.*
26. *Slack, N., Chambers, S., Harland, C., Harrison, A. and Johnston, R. (1995). Operations Management. London: Pitman Publications.*
27. *L.Shelton, "Techniques & Procedure in International Environment Law. Environmental Audit." The United Nations Inst. Of Training & Research Palais the Nations, Geneva, 2004.*
28. *H.Y.M. Abdel – Rahim & Y.M. Abdel – Rahim. "Green Accounting – A Proposition for EA/ ER Conceptual Implementation Methodology." Journal of Sustain – ability & Green Business, Vol.5, No.1, 2010, pp. 27-33.*
29. *Cooper, R. and Kaplan, R. S.(1992). Activity-based-Systems: measuring the costs of resource usage. Accounting Horizons, 6(3), 1–13.*

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Cost and Management Accountants – Power of the Past – Force of the Future

India has made a considerable progress in almost all spheres of economic development during the last four years. The ministry of Commerce and Industry, since from the formation of our Government in 2014, has been formulating its policies and programmes to achieve the set targets and ensuring it done.

There are many recommendations in agricultural export policies. India has made a leap of 23 ranks in the world Bank's Ease of doing Business ranking this year and is now ranked at 77. Upward move of 53 ranks in the last two years is the highest improvement in 2 years by any large country since 2011. India now ranks first in Ease of Doing business report amount South Asian countries compared to 6th in 2014. India has improved its rank 6 out of 10 indicators and has moved closer to International best practices on (Distance to frontier score) on 7 out of the 10 indicators. In grant of construction permits, India's rank improved from 181 in 2017 to 52 in 2018, an improvement of 129 ranks in a single year. In trading across borders, India's rank improved by 66 positions, moving from 146 in 2017 to 80 in 2018. In paying taxes India's ranking is 121 and in resolving insolvency India's ranking stands at 108. To support start-ups and lower tax rates for MSMEs, quicker environmental clearances, from 600 days to 140 days has been implemented, abolition of inter-state check post after implementation of GST has been done, enhanced input tax credit and electronic GST network has been put in place and the creation of commercial courts to fast track enforcement of contracts and faster security clearances has lent support to the start-ups in the country.

ICMAI, as premier statutory professional accountancy body in India with the objects of promoting, regulating and developing the profession of Cost & Management accountancy profession in India. It is the only licensing cum regulating body of Cost & Management accountancy profession in India. It recommends the cost accounting standards to be followed by companies in India to which statutory maintenance of Cost records applicable. ICMAI is solely responsible for setting the auditing and assurance standards for statutory cost audit to be followed in the audit of Cost statements in India. It also issues other technical guidelines on several aspects like Internal audit, management accounting etc ., to be followed by practicing cost accountants while discharging their services. It works closely with the industries, various departments of Government of India, State governments in India and other regulating authorities in India e.g., Reserve Bank of India, Insurance regulatory and development authority, Securities and Exchange board of India etc., on several aspects of performance, cost optimization and reporting. The ICMAI being a founder member of the International federation of accountants (IFAC), Confederation of Asian and pacific accountants (CAPA) and South Asian Federation of Accountants (SAFA). ICAI being a member of the National foundation of Corporate Governance (NFCG), Federation of Indian Chambers of Commerce and Industry (FICCI), Confederation of Indian Industry (CII) and The Associated chambers of Commerce and Industry of India (ASSOCHAM), has made a CMA to be a Catalyst and accept the scope of wider responsibilities and role in the changes of recent developments accepting the Game changer for making them **"COST AND MANAGEMENT ACCOUNTANTS – POWER OF THE PAST – FORCE OF THE FUTURE".**

CMAs have got lot of opportunities in the recent scenario making them **Force of the future** which is as follows: -

1. Ministry of Corporate affairs (MCA) has notified the provisions governing valuation by registered valuers (Section 247 of the Companies act, 2013) and the Companies (Registered Valuers and valuation) Rules, 2017 (the rules), with effect from 18th October, 2017. A registered valuer would carry out valuation in respect of any property, stocks, shares, debentures, securities or goodwill or any other assets or net worth of the company or its liabilities, as per chapter XVII of the companies act. The concept of registered Valuers was brought by The Companies act, 2013 to regulate the practice of Valuation in India and to standardize the valuation in line with International standards. However, the valuer's qualification, experience, manner and process was not prescribed. Valuation itself is an evolving field and is an inexact science. Professional judgment of valuer is thus critical in any valuation exercise. Due to lack of Indian valuation standards and absence of any Regulatory authority to control, guide and develop the practice of valuation in India, different valuers have been taking different assumptions leading to drastic differences in value conclusion. In many cases, the valuation also lacks uniformity and generally accepted global valuation practices. A CMA cost accountant in whole time practice can be eligible to apply for being registered as a valuer. This has enlarged scope and role of CMAs, where specific provisions of Section 62(1)C, 192(2), 230(2)(c)(v), 230(3), 232(2)(d), 232(3)(h), 236(2), 281(1), under the Companies act 2013 requires valuation report from a registered valuer. Registered valuer under the insolvency code insolvency and bankruptcy board of India regulations, 2016 which requires valuation report from a registered valuer. Registered valuer under the SEBI (REIT and INVIT) regulations, 2016 which requires valuation report from a registered valuer. The notified rules attempt to bring in standardization in the valuation standards in India and ensure the valuation reports disclose a true and fair view and result in greater objectivity in valuation procedures. The increased transparency and fairness in the valuation system would also boost stakeholder confidence by bringing uniformity. CMAs are recognized to act as registered valuers for asset class securities or financial assets. Professionals can appear for the limited examination to take benefits of this new opportunity.

2. Arbitration is a form of alternative dispute resolution (ADR), is a technique for the resolution of disputes outside the courts, the parties to a dispute refer it to Arbitration by one or more persons (the arbitrations awards of arbitral tribunal), and agree to be bound by the arbitration decision (the award). A third party reviews the evidences in the case and imposes a decision that is legally binding on both sides and enforceable in the courts. In fact Arbitration is a process in which disputants can resolve dispute amicably. This method can bring solutions to disputes as well as among disputants. The objective of this course is to familiarize the participants with legal framework of arbitration, arbitration procedures, and arbitration practice. It is also designed to cover practical aspects covering case analysis and mock arbitral proceedings. This has lead to introduction of new course – "Certificate course in Arbitration". This course has been started from 1st July, 2018 from our Institute to train our members enlarging the scope of a CMA.

3. Goods & services tax (GST) is a major tax reform in the country and is a game changer. There has been a paradigm shift in the indirect tax structure with the GST rollout w.e.f 1st July 2017. As a professional, it is imperative to understand and assimilate the new taxation structure, associated compliances and the changes in business processes emanating there from. In the above backdrop, a course module on GST has been planned so as to upgrade the knowledge level of our members & professionals in a structured and practical oriented manner. Institute has twin expectations from this course, first the GST concepts and implementation has to be understood in a simple way by our professional colleagues, and second the same can be percolated to the business houses, traders and other such concerns having GST impact in their respective locations. This has lead to introduction of new course – "Certificate course in Goods and Services tax (GST)". This course is being launched in association with Tax Research Department of the Institute. This course has been started from 17th February 2018 to train our members. Notifications and circulars on GST are issued by the Ministry from time to time to keep the concerned people updated regarding changes made by them with regard to various compliance procedures, tax rates, and similar matters. All these have widened the scope and role of a CMA.

4. The process gained momentum with the government having put the ecosystem in place with the Insolvency and Bankruptcy code (IBC), which stipulates the need for insolvency professionals. They play a crucial role after a company is admitted to the National Company Law Tribunal (NCLT) as part of the process. A three-fourths majority of a committee of creditors will entrust insolvency professionals

with the job of either drawing up a defaulting company's revival plan or liquidating it within nine months. They are becoming critical for the success of the loan recovery initiative. IBBI, tasked with providing the framework for recovery proceedings, conducts exams that allow CMA and after clearing the IBBI exams need to obtain a certificate, after which they need to present to their respective agencies, which enroll them.Insolvency has brought in a bunch of opportunities to the CMAs who can now obtain their deserved professional credits enlarging the scope and role of a cost accountant.

5. The other recent avenues to CMAs are in Indian railways, surpassing major challenges can act as a game changer could actively take part in the formulation and implementation of innovative strategies. They can analyze the operating expenses and revenues and can suggest measures to improve the operating ratio and operative efficiency. The inclusion of Cost accountant qualification for the post of Chief financial officer in Reserve Bank of India is a milestone achievement. Cost accountants in practice are recognized under Regulation 11 of the Foreign Exchange Management (Transfer or Issue of security by a person Resident outside India) Regulations, 2017 for valuation of capital instruments of an Indian Company and also under Schedule 2. Again the Institute of cost accountants of India and its professionals are always in the forefront when it comes to implementation of Government policy and reforms in Insurance Sector too. The pricing of the various products can be better at with the skill of the Cost and management accountants, expanding the CMAs talents to serve insurance sector in areas of arriving operating profits, net profit or hassle free claim settlements they arrive at on a given point of time. Cost and management accountant can play a vital role in the team for coming up with different ideas for improving the expenses on CSR activities, acting as a catalyst and game changer in cost controlling techniques, and with suggestions of efficient strategic management driving towards development of social India and new India. In addition to this the agricultural policies for fixing up a minimum selling price for agricultural products, has made CMA to contribute more in pricing policies. The forensic audit coupled with risk audit is another area creating manifold unexplored opportunities for CMA.

Role of a CMA:

- Improving Cost competitiveness
- Resource management
- Performance management
- Financial reporting & strategy
- Cost audit and assurance
- Risk management and mitigation
- Direct and indirect taxation
- CMA Professionals do Cost audit, GST Audit, Cooperative audits and stock audit.
- CMA Professionals are Insolvency Professionals (IBC) and Valuers.

Basically, a CMA has proved **power of the past** in his career prospects either in service or in practice. In service there are avenues to go for Industry or as an academician.

A CMA has lot of potential to practice in the following areas :-

- Cost audit, advising on Cost records maintenance.
- Special audit and certification under GST regime.
- Internal audit & Concurrence audit.
- Stock audit for banks
- Consultancy – Tax, Project management
- Surveyor and Loss Assessor
- Recovery Consultant in Banking sector
- Advisor – Business valuation, Financial services
- Trustee, Executor, Administrator, Arbitrator Receiver, Appraiser, Valuer.
- Compliance audit of RBI.
- Assignments by the Central or State Government, Court of Law, Labour Tribunal or any other statutory bodies, regulatory bodies etc.,

A consultancy services given by a CMA are in the following areas:-

- Financial planning and policy determination

- Cost management planning and policy
- Capital structure planning and policy
- Working capital management
- Project reports and feasibility studies
- Budgeting and Budgetary control
- Supply Chain Management
- Inventory management
- Market research and demand studies
- TCM, TQM, BPR, Cost control and Value Analysis
- Cost methods and management information and reporting
- Designing staffing as per business process
- Framing employee benefit measures
- Management, Operational, Quality, Environmental and Energy audits
- Valuation in Business Reorganizations
- Strategic positioning, Integration
- Systems analysis and design
- Advisor on Funds management

The job opportunities for CMAs in functions are as follows:-

- Cost accounting, Financial management
- Financial/Business analyst, Systems Analysis & systems management
- Auditing, Internal Control
- Tax management (Direct and Indirect Tax)
- ERP implementation
- Process analysis in BPO houses
- Equity analyst
- Cost & Budget Executive
- Academia – as Faculties
- Implementing Business Intelligence systems

There are many academic opportunities for CMAs

- Lectures/Professors in accounting &Finance
- Pursue Ph.D with select universities in India after qualifying CMA Final examinations.

There are many emerging areas for CMAS:-

- Total quality management (TQM), Statistical quality control (SQC)
- Enterprise performance management
- Risk management – Project, Enterprise, Off-Balance sheet financing,
- Enterprise Governance
- Integrated reporting
- Independent practice – Taxation, Internal audits

Conclusion: - The above scenario shows that there are lot of opportunities and potentials to a CMA expanding his role making him "**POWER OF THE PAST – FORCE OF THE FUTURE"**

Reference

1. *www.icmai.in*
2. *The Management accountant journal, July 2018, Vol 53.*

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Industrial Revolution 4.0

The 1st industrial revolution was triggered by water and steam power, moving from human to mechanical manufacturing. Second industrial revolution build on electric power to generate mass production and third Revolution used electronics and information technology to automate manufacturing process. We are now at the start of a Fourth Industrial Revolution. These created a trend of automation and exchange of information in manufacturing process. This is commonly referred as Industry 4.0, which encourages the concept of Smart Factories that employs computer controls in multi-phase process of creating a product out of raw materials. Industrial Revolution 4.0 aims to take advantage of advanced technologies and manufacturing automations to facilitate flexibility in manual processes and to address a potential and global market. Extensive application of information technology in all business process will change the way of doing business.

Introduction:

Although still there are some doubts about the results of the third Industrial Revolution, a new set of technologies has been emerged as a Cyber-Physical Systems (CPS) which has been defined as a combination of physical and cybernetic systems. With the CPS, intelligence is not centralized but distributed in the process steps which at a time gives more stability and greater flexibility to the operations. CPS derived from some important technical advances on the internet, embedded systems, computer science and artificial intelligence.

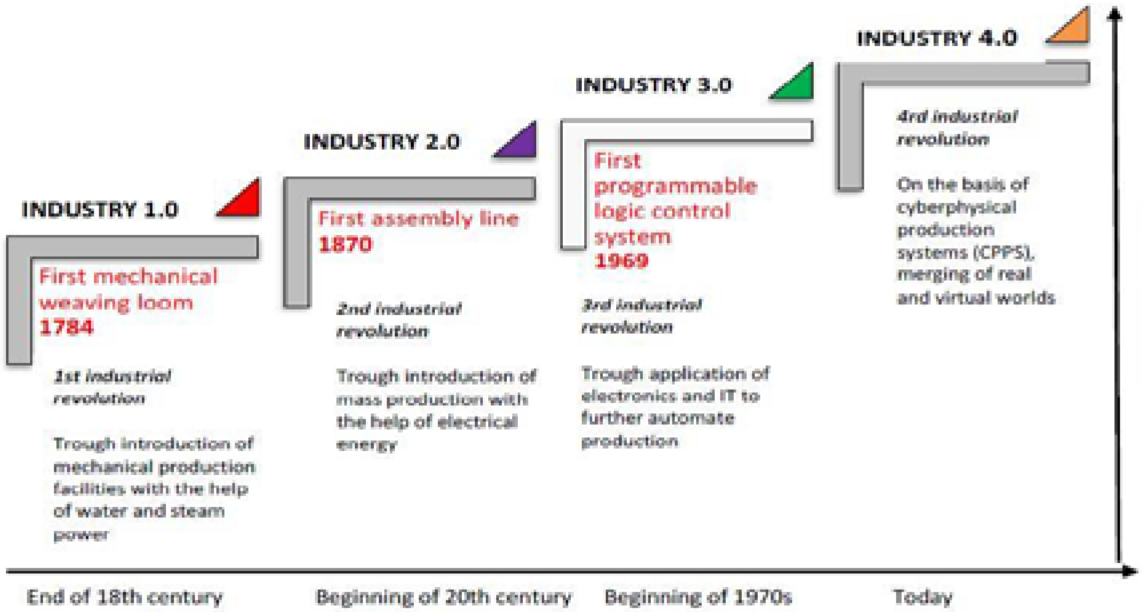
The term Industry 4.0 rejuvenated in 2011 by German federal government after considering the recommendations of working group on Industry 4.0. The term Industry 4.0, shortened to I4.0 or simply I4. Industry 4.0 is expected to impact on four long-term relationship paragon shifts that are going to change the scenery of the global manufacturing industry i.e., **Factory and nature-improvements** in resource efficiency and sustainability of manufacturing systems; **Factory and local communities** through increased geographical proximity and acceptance, customers integration in design and manufacturing processes; **Factory and value chains** through distributed and responsive manufacturing, enabling mass customization of products as well as services and **Factory & humans** through human oriented interfaces and improved work conditions.

In India, central government has established a newly digitized eco-system through the Ministry of Communication and Information Technology, which collectively works with all other concerned ministries, in an attempt to reform the countries service delivery system. Recently Indian government launched Centre for 4th industrial revolution in Mumbai. These Centre will be mainly focussed on Artificial Intelligence and Machine learning during initial period. India becomes 4th country which accepts fourth industrial revolution in world economic forum through massive digital and technological transformation.

Although Industry 4.0 starts with technological manufacturing, the ultimate impact will transfers into other segments including utilities and smart cities-where, at some point, production events will be coordinated to satisfy increased energy demand within the smart grid and other elements of the smart city. Hence, there will be new Information Technology and technology-centric education and employment opportunities, as well as the development of real-time data.

What is Industry 4.0 ?

Industry 4.0 is often described as digitization of physical production or full-scale automation. It is also sometimes defined in relation to emerging technologies – advancements in IoT, big data and data analytics, robotics, autonomous systems, sensors and automation, and production methods, such 3D printing[1]. Industry 4.0 is a term often used to refer the developmental process in the management of manufacturing and chain production.



Industry 4.0 is a paradigm shift from centralized to decentralized smart manufacturing and production. It refers to the computerization of manufacturing and the creation of a smart factory. **Smart Factory** has been defined as fully- integrated, collaborative manufacturing systems that respond in real time to meet changing demands and conditions in the factory, in the supply network and in customer needs.

Industry 4.0 is not a distant vision for the factory of the future. It is here and it is now. Networks of robots are connecting to the cloud and contributing mass amounts of insightful data. Today, manufacturers are using these information pipelines to simplify asset management and maintenance, maximize equipment and process efficiency, and improve product quality. Thus, innovating towards industry 4.0 encompasses digital convergence between industrial and business components, as well as between manufacturing models and internal processes. This process relies on combining data from external and internal sources to improve decision making[2].

Features of Industry 4.0:

- **Fusion of Technologies:** Convergence and integration of emerging technologies that boost each other and providing cognitive power, resulting in a fusion of physical, digital and biological worlds.
- **Exponential pace:** Evolution rate is exponential due to deep inter-connections.
- **Connectivity:** Billions of people connects through technology and the whole society are strongly involved.
- **Technological breakthroughs:** It includes Cyber Physical Systems (CPS), industrial automation, continuous connectivity and information, cyber security, intelligent robotics, semantic technologies, industrial big data and computational vision.

Environment of Industry 4.0

Industry 4.0 will acts as central importance with other smart infrastructures, such as those of smart mobility, smart grid, smart logistics, business web, social web, smart homes and smart buildings. Environment includes:

- **Internet of Things (IoT):** It is a network of devices consist of electronics, software, actuators and connectivity that allows the things to interact, connect and exchange data.

- **Internet of Data:** This aims at organisation of data to be interconnected as network and collect useful information for data identification, data tracing, data visualization and further data analysis.
- **Internet of Services:** Providing of services over the internet through digital web-based infrastructure.
- **Internet of People:** It is an open source and decentralized platform in which data will not be stored in single server or under the control of single person.
- **Internet of Energy:** IoE can be broadly defined as the upgrading and automating of electricity infrastructures, making energy production cleaner and efficient, and empowering the consumer. A suitable setup for an IoE could be a centralized electricity system with large-scale renewables, storage, and flexible back-up power interconnected to a decentralized electricity system with distributed generation, combined heat and power, electric vehicles, smart white goods, etc[3].

Nine pillars of Industry 4.0:

- **Virtual Reality:** Computer generated complex digital environment and Digital world colliding with our physical world. We can travel to anywhere in a heartbeat. Design, visualise, showcase, demonstrate, and customize your products without a physical prototype. We can explore the unknown like never before the un-imaginable could come true. Technology has finally caught up with our imagination.
- **Additive Manufacturing:** For thousands of years manufacturing has been about removing excess materials until we get to the final shape. 3D printing will transform. We can start with nothing and build from bottom up later melted upon larger. Traditionally we join pieces together to form complex structures. 3D printing provides maximum design efficiency less joints reduces weak points with unlimited design flexibility. You could dream it then you could print it.
- **Internet on Things (IoT):** Made up of Omni present networks connected computers ubiquitous sensors on everything. Intelligence on the periphery of network. Connected with manufacturing, defense system, agriculture, retail & business, transport, banks, oil, gas & mining, food, hospitality, health care everything. Tracking behaviour of real time marketing enhanced situational awareness sensor-driven decision analytics process optimisations. Instantaneous response in complex autonomous systems optimised resource consumption. The IoT blurs the boundaries between the real world and the virtual world. It introduces increased programmability, memory storage capacity, and sensor-based capabilities, thus allowing physical world objects to become intelligent and communicate independently, online. This would allow for established, centralized systems to operate in a decentralized and disruptive setting. The IoT goes beyond machine to machine communication, and extends to machine-to-infrastructure and machine-to environment communication[4].

  It is estimated that 10 billion of the 1.5 trillion things are currently connected. This means that more than 99 per cent of physical objects are not yet connected. According to some forecasts, more than 26 billion unit devices will be part of the IoT by 2020, creating incremental revenue in excess of US$300 billion for IoT products and service suppliers[5].
- **Big Data:** Data management repeatable process to build standards for data quality. Data mining pattern discoveries noise filters identify useful information. Predictive analytics statistical logarithms and machine learning to identify predictive analytics statistical algorithms and machine learning to identify future outcomes. In- memory analytics- analyse date from system to gain immediate insights. Big data analytics consists of 6Cs in the integrated Industry 4.0 which comprises of: Connection, Cloud, Cyber, Content/context, Community and Customization.
- **Cloud Computing:** Building intelligence using analytics, automating marketing, customer services, support & order status implement vendor managed inventory(VMI) to give real-time order status. Cloud-based resource management to manage manufacturing globally.
- **Advanced Robots:** Robots can think, Act, and React. A reprogrammable, Multi- functional manipulator designed to move materials, parts, tools or specified devices through various programmed motions for the performance of a variety of tasks. These robots are sophisticated and very expensive.
- **Universal Integration:** Allows communication between different systems. Continuous identification during the production & logistics process with RFID. Machineries from production lines and beyond can be linked up. Remote corporate documentation on the vehicle. To ensure everything run autonomously & smoothly.

- **Cyber Security:** Industry 4.0 is not possible without connections which are secure, vigilant & resilient. There are variety of approaches and concepts to secure information and critical infrastructures .Key concept of a risk management practise known as information assurance.

Challenges in Implementation of 4.0:

- Lack of commitment from top management;
- No clarity on economic benefits on adoption of Industry 4.0;
- Lack of critical machine-to-machine communication (M2M) reliability and stability;
- Requires integrity at production process;
- IT department redundancy threats;
- Creation of protection for industrial knowhow;
- Lack of adequate skill sets for industrial revolution;
- Loss of jobs on implementation of advanced technologies;
- Insufficient skills for employees to cope with industry 4.0

Fourth industrial revolution delivering revenue, cost and efficiency gains[6] :

ADDITIONAL REVENUE FROM	LOWER COST AND GREATER EFFICIENCY FROM
Digitizing products and services within the existing portfolio	Real time inline quality control based on big data analytics
New digital products, services and solutions	Modular, flexible and customer tailored production concepts
Offering big data and analytics as a service	Real time visibility into process and product variance, augmented reality and optimization by data analytics
Capturing high-margin business through improved customer insight from data analytics	Vertical integration from sensors through MES to real-time production planning for better machine utilization and faster throughput times
Increasing market share of core products	Horizontal integration, as well as track-and-trace of products for better inventory performance and reduced logistics.

Conclusion:

Even though Industry 4.0 is based and builds on the technologies and infrastructure of the Third Industrial Revolution, it represents entirely new ways in which emerging technologies become embedded within societies and even human bodies8. These emerging technologies are expected to cause disruption to existing models of governance by introducing cross-cutting economic, legal, regulatory and ethical challenges. In particular, Industry 4.0 is expected to have an impact on labour markets, global value chains, education, health, environment, and many economic and social aspects9. The current legal framework is insufficient. Regulations are comprehensive in some specific areas of emerging modern technology, while weak or non-existent in others technology.

“Not just about technology but how you joins up the technology to work better-more productive, efficient, more insights and information.”

........EEF the Manufacturers Organisation

Foot Notes

1 *https://www.sciencedirect.com/science/article/pii/S235197891730728X*

2 *Source: https://industrie4.0.gtai.de/INDUSTRIE40/Navigation/EN/Topics/The-internet-of-things/internet-ofthings-what-is-it.html*

3 *Source from UNIDO Report on “ACCELERATING CLEAN ENERGY THROUGH INDUSTRY 4.0: MANUFACTURING THE NEXT REVOLUTION”*

4 *https://www.nsf.gov/pubs/2017/nsf17529/nsf17529.pdf*

5 *https://industrie4.0.gtai.de/INDUSTRIE40/Navigation/EN/Topics/The-internet-of-things/cyber-physicalsystems.*

6 *PwC Industry 4.0: Building the Digital Enterprise*

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Industrial Revolution 4.0

Internet of Things is the latest revolution towards how Internet will affect day to day life. It is the change of approach rather than an invention. In the coming era of IE.4 the devices will be able to exchange the information they have captured and will also receive the information from other devices and then based on the collective available information take a decision.

This kind of decision making based on the available information is up till now the monopoly of human kind, but now this decision making skill has cropped in and will slowly but surely be step towards artificial intelligence which will be a back bone in development of IoT.

When we think of the word Revolution immediate reaction in our mind relates to "Big Changes" in the existing system coined as "Revolution".

As we ponder on Industrial revolution the era of changes had been broadly classified into four classification, namely IE.01, IE.02, IE.03 & currently the IE.04

REVOLUTION :- As we know the Invention of Wheel had opened the frontiers of Industrial Revolution & Start of Civilisation. Industrial Revolution was the Transition to new manufacturing Process From 1760 to 1840. It was shift towards use of Powered and special purpose machines with the intention of mass Production of output.

IE.01:- The IE1 refers to use of Mechanisation & use of Power & steam in day to day walks of Life. What before produced threads on simple spinning wheels, the mechanised version achieved eight times the volume in the same time. Steam power was already known. The use of it for industrial purposes was the greatest breakthrough for increasing human productivity. Instead of weaving looms powered by muscle, steam-engines could be used for power. Developments such as the steamship or (some 100 years later) the steam-powered locomotive brought about further massive changes because humans and goods could move great distances in fewer hours.

IE.02 :- The Second Industrial Revolution began in the 19th century through the discovery of electricity and assembly line production. Henry Ford (1863–1947) took the idea of mass production from a slaughterhouse in Chicago: The pigs hung from conveyor belts and each butcher performed only a part of the task of butchering the animal. Henry Ford carried over these principles into automobile production and drastically altered it in the process. While before one station assembled an entire automobile, now the vehicles were produced in partial steps on the conveyor belt—significantly faster and at lower cost.

IE.03 :- The Third Industrial Revolution began in the ’70s in the 20th century through partial automation using memory-programmable controls and computers. Since the introduction of these technologies, we are now able to automate an entire production process—without human assistance. Known examples of this are robots that perform programmed sequences without human intervention.

IE.04 :- Today we are part of Biggest industrial progress called as IoT4 or Internet of things (IoT4) Industry 4.0 – Industrial Revolution

General Electric (GE) released the term 'Industrial Internet' describing how big data analytics is combined with the Internet of Things (IoT) to produce more opportunities for industries. One of the first times the word 'Industry 4.0' was coined by Germany in 2013. A government memo released mentioned a plan to totally computerize the manufacturing industry without much of human involvement.

Industry 4.0 is also known as the 'smart factory'. The connection of computers and automation helps develop the robotics field greatly. Robotics remotely connects to computer systems enabled with machine learning algorithms. Thus it helps in controlling robotics with very less input from the human operators. The 'smart factory' is where cyber-physical systems monitor all the physical processes of an industry. It also takes a decentralized decision with the help of technology, big data, and analytics.

This is characterised by the application of information and communication technologies to industry and is also known as "Industry 4.0". It builds on the developments of the Third Industrial Revolution. Production systems that already have computer technology are expanded by a network connection and have a digital twin on the Internet so to speak. These allow communication with other facilities and the output of information about themselves. This is the next step in production automation. The networking of all systems leads to "cyber-physical production systems" and therefore smart factories, in which production systems, components and people communicate via a network and production is nearly autonomous.

Industry 4.0 significantly interconnects the digital and physical worlds with the help of IoT – Internet of Things. Social media, big data, analytics, cloud storage, sensor networks, everything is interconnected. Industry 4.0 is not a new technology but a determined and notable approach to achieve results that were impossible in history with the help of technological advancements.

Industry 4.0 – A Wave of Developments and Innovations

With the light-bolting progress speed of Industry 4.0, we are experiencing technologies like never before. The world is progressing towards automation, robotics , AR (Augmented Reality), VR (Virtual Reality), gesture and sensor controls, 3 D printing technology and much more. This is the biggest wave of development and progress in the history of Industrial Revolution.

A key benefit of technological developments is the removal of the need for slow, manual processes, enabling accountants to spend more time on adding value to the business. Also, cloud technology has lowered the infrastructure support costs for organisations. New technology allows a greater analysis of business drivers, using insight and actionable analytics to achieve a competitive advantage.

IoT Today

As with many new concepts, IoT's roots can be traced back to the Massachusetts Institute of Technology (MIT), from work at the Auto-ID Center. Founded in 1999, this group was working in the field of networked radio frequency identification (RFID) and emerging sensing technologies. The labs consisted of seven research universities located across four continents. These institutions were chosen by the Auto-ID Center to design the architecture for IoT. It is important to agree on a definition. According to the Cisco Internet Business Solutions Group (IBSG), IoT is simply the point in time when more "things or objects" were connected to the Internet than people.

IoT as a Network of Networks :-

Currently, IoT is made up of a loose collection of disparate, purpose-built networks. Today's cars, for example, have multiple networks to control engine function, safety features, communications systems, and so on. Commercial and residential buildings also have various control systems for heating, venting, and air conditioning (HVAC); telephone service; security; and lighting. As IoT evolves, these networks, and many others, will be connected with added security, analytics, and management capabilities (see Figure 1).. This will allow IoT to become even more powerful in what it can help people achieve.

Sectors Affected due to IoT:-

Many industries are adopting Internet of Things solutions technology to improve their existing systems. Like a health care center used IoT devices to improve their medical outcomes, revealing better products faster with low development and maintenance cost in the manufacturing industry, making shopping experiences more enjoyable by getting accurate suggestions, etc. IoT is playing a big role in today's business system by managing internal processes smoothly and providing much convenience for every task.

Let's consider some of the major industries to understand its needs closely.

In the **transportation industry**, there is a much need for a smart system to manage resources in right ways. Let's consider a smart traffic camera, it can monitor road traffic and keep tracks of accidents, congestions, weather conditions, and communicates with other smart cameras to share this data with them. The overall recorded data is combined and gathered to the city traffic system.

Now if this data is going to be shared with another city's traffic system which is sharing their own data too with the help of their intelligence system, imagine how large will be the system of the system with an incredible amount of data.

Medical industries need to be more advanced and hence they are already using **IoT** based tools. With the help of IoT tools, the doctors can monitor the patient remotely and give drugs on the basis of tracked information. For instance, there is a patient at home, he is in constant life support and all his health issues are being completely recorded in a cloud system. In an emergency situation, doctors could be prepared for the operation as they already have a complete record. Also, the hospital can dispatch the ambulance to the patient's location. Doctors do not require spending much time to understand medical condition of the patient because they are already aware of the required actions which can save a lot of time and efforts.

Other Benefits of IoT are Reducing Emergency Room Wait Times, Remote Health and Monitoring, Ensuring the Availability and Accessibility of Critical Hardware, Tracking Staff, Patients and Inventory, Enhanced Drug Management, Addressing Chronic Disease

Utilities like Fitbit use the IoT to monitor personal health — such information can be shared with a doctor to help solve recurring issues

The idea behind using IoT tools in the **Manufacturing industry** is to attach sensors to their devices and collect data from customers. This data can be used to guide users for predictive maintenance of the assets. The industry can not only analyze how their products are being used but they also determine the usage patterns. Manufacturing industries are adopting IoT tools to increase their efficiency which helps them in their day to day operations and facilitate them to optimize their production quality and offers the high-end safety as well.

Hospitality

In hotels, face detection id is provided to the customers so that hotel staffs can recognize the customer before their arrival. In the near **future of IoT**, there are chances that hotels might get equipped their rooms with sensors and emotion recognition cameras to capture emotions of patrons e.g. if the customer is hungry, it can recommend for meals. If the guest is feeling cold, the room will become warmer on personalization.

Not only these sectors alone but retailers, oil & gas industries, construction sectors, finance sectors are also relying on IoT to make their internal processes smooth and faster. Every business can maximize its revenue by getting quick insights of customer's data to trigger up-sell and cross-sell alerts. These are just some examples of IoT and you can imagine the potential value of IoT with other systems.

Benefits of Adoption

Cost Saving & Reduction

The improved asset utilization, productivity, and process efficiencies can save your expenditures. For example, predictive analytics and real-time diagnostics drive down the maintenance costs.

In today's digital world, it is possible to make phone calls over the Internet, using what is known as Voice over Internet Protocol (**VoIP**). ... As of now, VoIP hasn't entirely replaced the telephone network, but it does have a number of advantages that have led to its rapid adoption.

CNC machines can be fairly pricey. Yet these expenses will likely be recouped by lower labor costs, as this equipment requires minimal human involvement. In the long run, CNC automated machines save money by reducing the need for trained operators.

Skype for Business is an easy-to-use interface that allows users to communicate through text chat, voice calls, video calls and online meetings. You can use Skype for Business from nearly any Windows PC or mobile device (Lync on Macs or mobile devices), on campus or anywhere.

Enhanced Asset Utilization

IoT will improve tracking of assets (equipment, machinery, tools, etc.) using sensors and connectivity, which helps organizations benefit from real-time insights. Organizations could more easily locate issues in the assets and run preventive maintenance to improve asset utilization.

Efficient Processes

Being connected with a maximum number of devices to the internet, IoT allow businesses to be smarter with real-time operational insights while reducing operating costs. The data collected from logistics network, factory floor, and supply chain will help reduce inventory, time to market and downtime due to maintenance.

Improved Safety and Security

IoT services integrated with sensors and video cameras help monitor workplace to ensure equipment safety and protect against physical threats. The IoT connectivity coordinates multiple teams to resolve issues promptly.

Increase Productivity:

Productivity plays a key role in the profitability of any business. IoT offers just-in-time training for employees, improve labor efficiency, and reduce mismatch of skills while increasing organizational productivity.

Increase Business Opportunities

IoT opens the door for new business opportunities and helps companies benefit from new revenue streams developed by advanced business models and services. IoT-driven innovations build strong business cases, reduce time to market and increase return on investments. IoT has the potential to transform the way consumers and businesses approach the world by leveraging the scope of the IoT beyond connectivity.

Adoption of Novel Ideas

Use of drones by audit firms in verifying the inventory which is spread in vast area is the latest example showing changing trends in accounting fields.

Mobile App development :-

Mobile apps are the basic need of today's business. The two most common platforms are – Android and iOS. In order to reduce the workload for developers, cross-platform app development techniques are being used frequently from past few years.

Developers can build apps using HTML5 and hybrid frameworks. With the help of mobile cloud and IoT based tools, they can use shared resources and important data to enhance teamwork and make their practices more effective.

Driverless cars utilize connectivity when updating their algorithms based on user data. These autonomous vehicles require an enormous quantity of data collecting and processing. In this case, through IoT, the driverless car shares information about the road (which has already been mapped out).

Unmanned aerial vehicle (UAV)-enhanced 5G-enabled Internet of Things (IoT) services. Other 5G use cases that are linked to drones involve automation and robotics. ... Accelerometers are used to determine position and orientation of the drone in flight.

Smart city is another powerful application of IoT generating curiosity among world's population. Smart surveillance, automated transportation, smarter energy management systems, water distribution, urban security and environmental monitoring all are examples of internet of things applications for smart cities

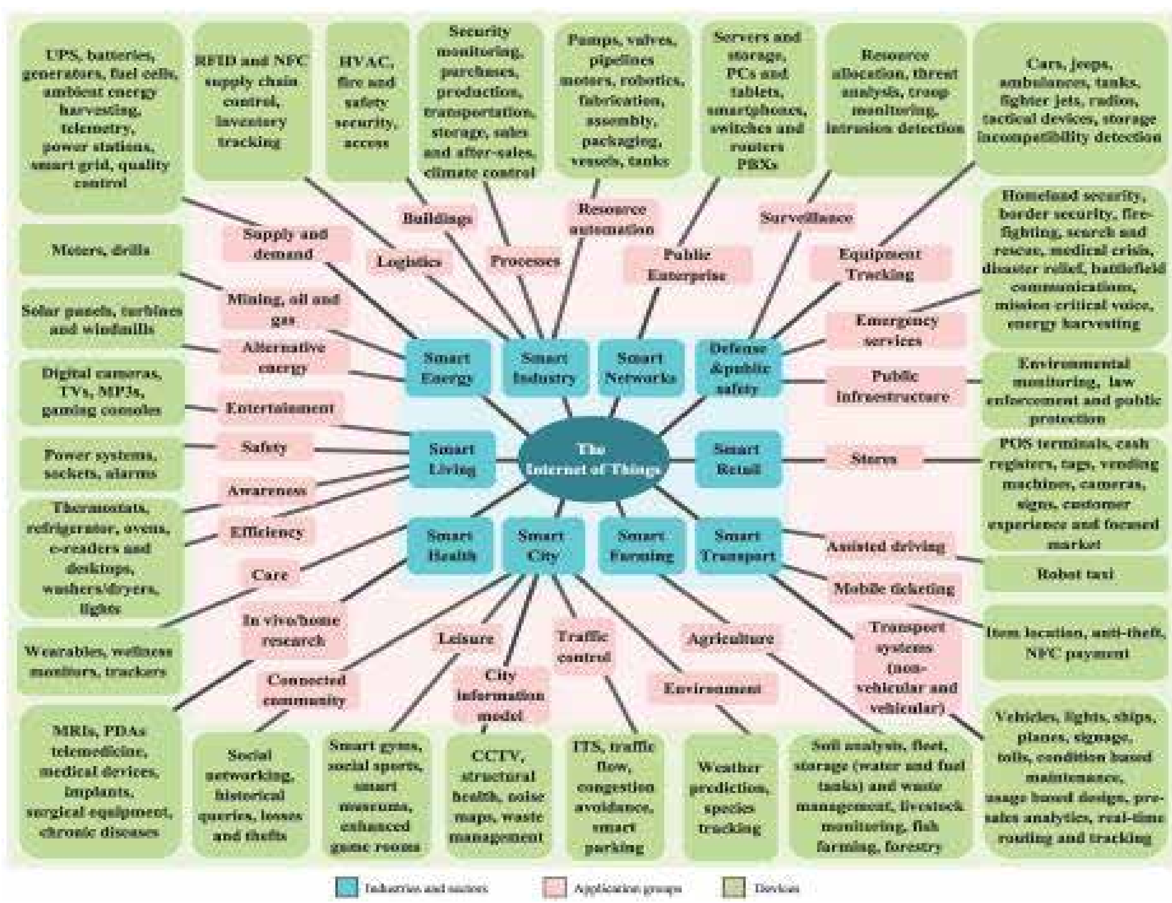
US-based machine-to-machine (M2M) communications company Digi International will today test a program for ***wireless communications*** *within satellites and payloads from the International Space Station (ISS) with NASA.*

Defense and Public Safety *(PS) organizations play a critical societal role ensuring national security and responding to emergency events and catastrophic disasters. Instead of PS, some authors use the term Public Protection Disaster Relief (PPDR) [15] radio communications, defined in ITU-R Resolution 646 (WRC-12) as a combination of two key areas in emergency response:*

Public protection *(PP) radio communication: communications used by agencies and organizations responsible for dealing with the maintenance of law and order, protection of life and property, and emergency situations.*

Disaster relief *(DR) radio communication: communications used by agencies and organizations dealing with a serious disruption in the functioning of society, posing a significant, widespread threat to human life, health, property or the environment, whether caused by accident, nature or human activity, and whether they happen suddenly or as a result of complex, long-term processes.*

Brief scale Showing HOW IoT would affect various Sectors, Linking Application Group with connected Devices at the centre



Accounting Challenges

Accountants are therefore moving away from bookkeeping and stewardship to become strategic business partners. Routine and process-driven roles will decrease while roles which require thinking outside the box will be in demand. Accountants have grasped this “inexorable tide” of technology overall, but the challenge lies in completing day jobs in time to deliver the change of the future. Many people’s daily routines are so hectic, that even thinking about different ways of working is impossible.

Most accountants have come round to the idea that change needs to happen, but the delivery of change is still in its infancy. Some customers also still need persuading that technology is the way forwards. They need to remember that their competitors are using technology to drive growth, so they must too.

With change, comes opportunity

Technology has enabled finance teams to do three key things at pace: produce and create value, shape how it is done, and tell the story of how it is achieved. In the past, finance was focused only on cost, whereas now it can contribute value creation and value preservation.

In particular, accountants can make use of software-as-a-service (SAAS) technology, which allows access

to individual applications and is hosted on the cloud. As well as lowering infrastructure costs, set-up costs are cheaper and the speed of implementation is greatly improved.

Cloud technology is also secure and allows seamless updates to be performed. The level of insight which can be obtained from it far surpasses anything that is possible on an On Premise system and any changes, such as adding new companies, can be almost instantaneous.

Accountants should take time when investing in technology

Before making an investment in technology, accountants must understand how it ties in strategically with their business. They should look at the value proposition and apply this to both their staff and clients. Cost does not bear as much weight as it once did, but it is still a consideration. Resources and time needed for implementation should also come into the mix.

To ensure successful technology implementation, accounting firms should have plans in place and the right kind of partnerships to help with this. The technical side is often well looked-after, but people can

be more of a barrier. The necessary question to ask is are people using the technological platforms in the way they are expected to use them and therefore getting optimum output?

Seamless implementation can only be achieved with a project team who understands what needs to be achieved conceptually and then technical teams and solutions providers working together to make this happen.

Cloud technology is a game-changer for accountants

One tangible benefit of cloud technology specifically is mobile working. People can access their data anytime, anywhere, which has fundamentally changed the way businesses operate.

The ability to perform real-time reporting has also transformed organisations. More information can be pushed directly into the hands of business leaders in the format they want it.

Traditional technology tells you the who and the what, but not the why. Cloud ERP technology works in a totally different way, for example recording people’s names against revenue transactions. The linking of non-financial information into general ledgers means accountants can offer richer services now.

Drivers such as Blockchain, Making Tax Digital, and Open Banking are changing work for accountants, and they need to get ahead of the game and ensure they are not left behind.

AI and machine learning do form part of the future for accountancy, and this is a good thing. There is no need to worry about accuracy. There will always be qualified accountants checking any figures produced by automation and verifying that they are correct.

Accountants should stand back and think very carefully about their objectives around technology. Move quickly, get with this change, and stay agile. This revolution cannot be ignored.

Challanges & Barriers

1. Limitation due to Internet Protocol (4) Capacity to issue Unique IP Address. The Internet Protocol Version 4 (IPv4) is defined by IETF RFC 791. RFC 791 was published in 1981. Initial design of IPv4 did not anticipate the growth of internet and this created many issues, which proved IPv4 need to be changed. The main limitations of IPv4 are listed below. Scarcity of IPv4 Addresses: The IPv4 addressing system uses 32-bit address space. This 32-bit address space is further classified to usable A, B, and C classes. 32-bit address space allows for 4,294,967,296 IPv4 addresses, but the previous and current IPv4 address allocation practices limit the number of available public IPv4 addresses. Many addresses which are allocated to many companies were not used and this created scarcity of IPv4 addresses.

Solution:- NAT (Network Address Translation) to map multiple private IPv4 addresses to a single public IPv4 address. By using NAT (Network Address Translation) we can map many internal private IPV4 addresses to a public IPv4 address, which helped in conserving IPv4 addresses. But NAT (Network Address Translation) also have many limitations.

As a remedy we will shifting to IPV(6).

2. Self Sustained Sensor Energy

For IoT to reach its full potential, sensors will need to be self-sustaining. Imagine changing batteries in billions of devices deployed across the planet and even into space. Obviously, this isn't possible. What's needed is a way for sensors to generate electricity from environmental elements such as vibrations, light, and airflow

3. Standards

While much progress has been made in the area of standards, more is needed, especially in the areas of security, privacy, architecture, and communications. IEEE is just one of the organizations working to solve these challenges by ensuring that IPv6 packets can be routed across different network types.

4. Cyber Security

Security is a major issue. We need to protect software, hardware, and data. With GDPR coming in May, there is also the consideration of permission to access data. There has been carnage with big corporations such as Carillion going bust recently which has led businesses to worry about what will happen if their suppliers go into liquidation. It is important that accountants are aware and prepared for this.

5. National Security & Hacking

We all know personal devices can be hacked, but a whole country's security could be at risk too.

With the rise of the so-called Internet of Things (IoT), and against the backdrop of cyberwarfare, digital surveillance and digital subversion, the risk to national security is increasing. Earlier this year the head of the UK National Cyber Security Centre publicly stated that a major cyber-attack on the country's essential services was a question of "when, not if".

The Trump administration accused Russia of engineering a series of cyberattacks that targeted American and European nuclear power plants and water and electric systems, and could have sabotaged or shut power plants off at will.

6. Training

Training is another challenge. People have a key part to play in technology and they must be taught how to make the most out of it. Time is vital. Not everyone will grasp using new technology overnight and businesses must allow for this. They should empower staff to try it out and eliminate any fears of failure.

7. Trust

Trust is also a barrier. People often lack confidence in new systems, but they will change their minds the more they use it. Getting staff involved in User Acceptance Testing is a good way to tackle this as people are then involved in the technology journey, learning about it while testing it.

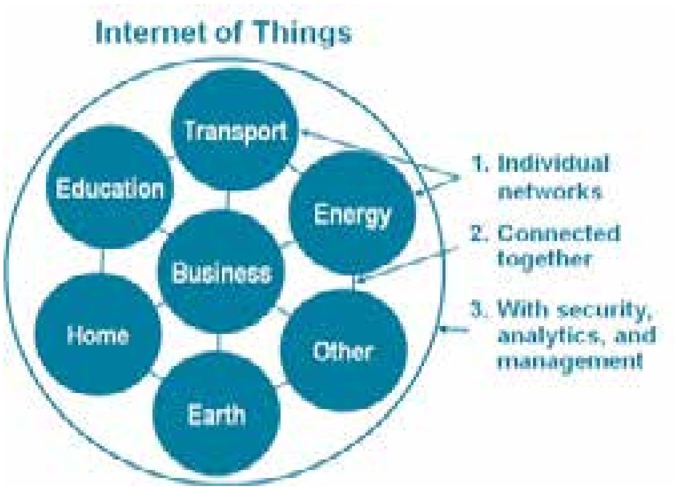
IoT has reached the pinnacle of inflated expectations of emerging technologies. Even though IoT offers great potential value, organizations must overcome some significant challenges like data and information management issues, lack of interoperable technologies, security and privacy concerns, and the skills to manage IoT's growing complexity. However, a professional IoT service provider can overcome these challenges and increase your return on investment.

It is important to note that while barriers and challenges exist, they are not insurmountable.

Given the benefits of IoT, these issues will get worked out. It is only a matter of time.

Sources

» http://customerthink.com/the-internet-of-things-iot-solutions-and-its-benefits/
» https://vmokshagroup.com/blog/6-ways-businesses-can-take-advantage-of-iot/
» https://www.desouttertools.com/industry-4-0/news/503/industrial-revolution-from-industry-1-0-to-industry-4-0
» https://www.accountancyage.com/2018/02/26/fourth-industrial-revolution-impacting-accountancy/
» https://www.cisco.com/c/dam/en_us/about/ac79/docs/innov/IoT_IBSG_0411FINAL.pdf
» https://internetofbusiness.com/nasa-iot-space-wireless/
» https://www.ncbi.nlm.nih.gov/core/lw/2.0/html/tileshop_pmc/tileshop_pmc_inline.html?title=Click%20on%20image%20to%20zoom&p=PMC3&id=5087432_sensors-16-01644-g001.jpg
» http://theconversation.com/internet-of-things-when-objects-threaten-national-security-96962
» https://www.nytimes.com/2018/03/15/us/politics/russia-cyberattacks.html



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Valuation of Distressed Companies

Valuing a business can be hard work. Valuing a distressed business even more so.

When is a company said to be in distress

A company is said to be in distress when the company is unable to meet, or has difficulty paying off, its financial obligations to its creditors, typically due to high fixed costs, illiquid assets, or revenues being sensitive to economic downturns. Such distress can lead to operational distress as increasing costs of borrowings take a toll on the operations of the company as well.

Distress can be broadly categorized into economic and financial distress. Economic distress is broad-based and afflicts most companies operating in the economy at some point and is normally outside the control of the company. Factors causing economic distress include – general economic recession, technological or cultural shifts, and sometimes, wars or other geo-political confrontations. Some of the factors are temporary, while others may bring a permanent change in the business landscape. Economic distress often leads to financial distress.

Firms in financial distress cannot meet, or have difficulty paying off their financial commitments to their creditors. Some of the characteristics of financially distressed companies are stagnant or declining revenue, shrinking margin, high leverage, ballooning interest costs, working capital blockage, high customer and employee attrition, Shrinking or negative margins, Asset divestitures, Lack of confidence in the management.

Distressed companies are businesses that are in risk of, or already have defaulted on their debts. Creditors of a distressed company should know that, although a company may not be making payments on some, or all of its debt requirements, there still may be some value remaining on the instruments they hold. Just because a company cannot make payments on its debt does not mean the company is entirely worthless. Value is typically tied to the company's assets.

Distress may be a).**Potential distress:** All firms are subject to potential distress •Firms in declining industries, bad management decisions or simply bad luck will eventually end up in distress b). **Realized distress** •Firms already in distress may be worth less than their outstanding debt •Their equity still retains value: perhaps the firm will be bought out, it will be turned around, or there will be an equity bail-out

Literature review

Financial Distress as a phenomenon has been a focal point of study in corporate finance since early 70's (Altman, 1971; Altman & Nammacher, 1985) The terms 'financial distress' and 'bankruptcy', have commonly been often used synonymously; however the two situations differ substantially in terms of the fundamental variables related to firm's financial health as well as in the sequence of events. Bankruptcy or insolvency or liquidation is the situation, preceded by financial distress. Platt & Platt (2002) emphasized that financial distress is the late stage of firm decline, which can be followed by the major events such as bankruptcy, liquidation or insolvency. Developing a theory of financial distress, Gordon (1971) suggested that the decrease in the earnings capacity of the firm can result in the possibility of inability of the firm to repay the principal or interest component of debt. Such a state represents the distressed financial condition of the firm. Wruck (1990) also explained “financial distress as a situation, where cash flows are insufficient to cover the current obligations”.

How is valuation of distressed companies different from financially sound companies ?

The definition of value and its proper application has long been debated. “Value is a word of many meanings…It gathers its meaning in a particular situation from the purpose for which a valuation is being made. Valuation is not merely a mathematical formula. Both quantitative and qualitative factors, inputs and adjustments may be used in the valuation process. Furthermore, value may change based on the Premise of Value and the Standard of Value on which the valuation is based. For situations in distress, the Standard of Value and the Premise of Value may shift with the situation and the purpose of the valuation. Valuation of financially sound companies is based on the premise of going concern i.e. the company is expected to continue its operations in the foreseeable future. The conventional valuation methods used may lead to an overestimation of values of distressed companies, since such companies seldom exhibit characteristics of a going concern entity. Distressed companies are more prone to being liquidated and shut down.

The following two factors discuss why conventional methods are not usefully deployed when valuing companies in distress:

• Conventional valuation methods involve the computation of terminal value i.e. the value of the subject going into perpetuity. This may not hold true for companies in distress for which an assumption of perpetuity is not is not practically relevant and feasible

• Discount rates/Multiples used in traditional methods reflect operations of companies which are operationally as well as financially sound. They cannot be used in their pure forms without adjusting them for the probabilities of failures of the companies in case of distressed companies.

Sources of Valuation Uncertainty for distressed companies arise on account of ‘strategic’ and ‘structural factors’. The strategic factors leading to valuation uncertainty arise because those holding senior claims have an incentive to undervalue the company’s business, whereas junior claimants have an incentive to overvalue it. Structural factors leading to uncertainty include exposing the company’s business to the market which might result in its undervaluation if the market is going through a down turn or recession as potential buyers may not looking to expand, or because it is difficult to get together a group of investors, because of reputational reasons, etc.

Approach to Valuation of distressed companies

During a crisis, the going-concern capital value deriving from the plan proposed by management and current owners must be compared with that arising from other feasible options, such as - The going-concern value with new owners (through a change of control) while maintaining the current firm’s asset base, - The going-concern value in combination with other entities (exploiting various forms of synergy), an option realistically coupled with a change in ownership, - The liquidation value, that is, the sale of company assets on an individual basis (bankruptcy value in a strict sense).

By focusing on a distressed company’s going-concern value, the assumptions and outputs of the reorganization plan critically support the estimation of capital value, conceived as the current value of expected future economic flow. To this end, the valuation process can be structured as follows: a) Analysis of the company’s historical financial results and balance sheet at the date of valuation, which reflect the strategy and business model implemented by management, b) Examination and review of the projections forecast by the reorganization plan aimed at overcoming distress, c) Estimation of the firm’s enterprise value (EV) and its variability in light of the scenario analysis, which are essential for a plan that is unavoidably affected by elements of uncertainty, d) Calculation of the debt value (D), based on the plan’s cash flow for the remuneration and reimbursement of creditors (FCD) and their volatility (closely linked to that of EV), e) Computation of the equity value (E)—equal to EV minus D—which, in the event the plan is approved by creditors, benefits from the possibility of realizing EV (in terms of financial feasibility) and could profit from the debt value reduction (compared to the nominal value of debt). The value of E encompasses the equity components devoted to creditors, provided they were activated in the financial maneuvers under the reorganization plan.

Methods of valuation of distressed companies

Even though the fundamentals underlying the valuation of distressed companies remain the same. However, the methods are amended or suitable tweaked and modified to address the practical issues that may arise in the valuation of the distressed company

1. **Modified Discounted Cash flow Valuation**

This method is based on the underlying principles of the discounted cash flow method but adjustment for the risk of default needs to be carried out for cash flows as well as discount rate The same can be done as follows:

A) **Estimating the cash flows**: Cash flows under each scenario (from most optimistic to most pessimistic) have to be estimated with the respective probabilities of each scenario. The expected cash flow for a particular year is: Expected cash flow = SUM (Estimated cash flow under each scenario*Probability of respective scenario) It is important to note that the adjustment for distress is a cumulative one and will have a greater impact on the cash flows in the later years. For example, if the probability of distress is 10% each in year 1 and year 2, there is now only an 81% chance that the firm will generate cash flows in year 3

B) **Estimating the discount rate:** The following approaches may be used for addressing the risk of distress in the discount rate: i.) The bottom up unlevered beta should be used and Re levered using the subject company's current debt to equity ratio and the effective tax rate. Since distress companies usually have high debt to equity ratios and have negligible effective tax rates (since they are loss making), the re levered beta which will be higher will take into account the risk of distress. ii.) Another choice is to estimate a distressed premium which is to be added to the cost of equity calculated using standard measures. One of the ways of computing the distress premium is to compare the company's pre-tax cost of debt to the industry's cost of debt. If the company has a pre-tax cost of debt of 16% and the same for the industry is 8%, the distress premium is 8%.

2. Discounted cash flow valuation plus distress value

Per this method, Value of equity = DCF value of equity on going concern basis (1 – Probability of distress) + Distress sale value of equity (Probability of distress). The mechanics of this approach is as under :

Step 1: Value the business on the basis of going concern assumption using conventional valuation methods

Step 2: Determine the probability of distress.

Step 3: Estimate the distress sale value of equity • Using bond ratings: The historical data of bond defaults can be used as a benchmark to determine the probability of default of the subject company based on the corporate rating applicable to the company. • As a percentage of book value • As a percentage of DCF value of equity on a going concern

However, the valuation of distressed companies includes numerous additional elements of uncertainty as well. Examples include: The ability to retain employees, the ability to reorganize, the structure of the reorganized entity, the ability to divest underperforming assets, Litigation risk resulting from the company's distress, access to capital markets post-reorganization, cost of funds post-reorganization, the possibility that the company may be liquidated.When considering the valuation of distressed companies, a combination of subjective and analytical modifications to traditional valuation methodologies is required.

3. Relative valuation

There are two approaches available for relative valuation :

1. Compare the distressed company's valuation to that of other distressed companies.
2. Compare with healthy companies, but adjust for the distress.

In the first approach the problem may be that there may not always be available enough distressed companies at any given time to be able to make comparisons.

In the second approach, it may be assumed the distressed company would probably become healthy in the future. Accordingly, an estimate is developed based on its future value which is then discounted back to arrive at a going-concern value to which the probability of distress and distress sale proceeds are added to arrive at the final value.

Conclusion

"We are in danger of valuing most highly those things we can measure most accurately, which means that we are often precisely wrong rather than approximately right" - Sir John Banham Director General of the Confederation of British Industry 1987-1992.

Distressed firm valuation is a complex topic in which many traditional assumptions and methodologies of value measurement do not work.Valuation in general is a combination of science and art, more so in the case of distressed companies. Hence, a right mix of assumptions, framework, approach, and methodology should be judiciously used to arrive at the appropriate valuation, which balances the theoretical and practical aspects. Arriving at a reasonable enterprise value is essential for attempting appropriate financial restructuring and to ensure the appropriate pay-offs to secured, unsecured and operational creditors and to equity holders. This, in turn, is critical to achieve the best resolution for the subject business.

References

» *Almeida, H. and Philippon, T. (2006). The risk-adjusted cost of financial distress. The Journal of Finance, 62(6).*

» *Andrade, G. and Kaplan, S. (1998). How costly is financial (not economic) distress? evidence from highly leveraged transactions that become distressed. Journal of Finance, 53:1443–1493.*

» *Brown, D. T., James, C. M., and Mooradian, R. M. (1994). Asset sales by financially distressed firms. Journal of Finance, 1:233–257.*

» *Crosbie, P. and Bohn, J. (2003). Modeling default risk. Technical report, Moody's KMV.*

» *Crystal, M. and Mokal, R. J. (2006). The valuation of distressed companies - a conceptual framework. bepress Legal Series.*

» *Damodaran, A. (1998). Investment Valuation: Tools and techniques for determining the value of any asset. John Wiley and Sons, Inc.*

» *Damodaran, A. (2009). The Dark Side of Valuation: Valuing Young, Distressed, and Complex Businesses, volume 2. FT Press.*

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NPA in Banking Sector and Insolvency and Bankruptcy Code 2016

Earlier winding up and liquidation of corporate companies were governed under Companies Act, 1956/2013. Industrial Sickness cases and their financial restructuring were being handled by Sick Industrial Companies (Special Provisions) Act (SICA), 1985 (BIFR).

The winding up and liquidation/ sickness issues were dealt by High Courts; Sickness of non-corporate bodies: Individual, Partnership Firms, HUFs etc. cases are dealt with under the Presidency Towns Insolvency Act, 1909 and Provincial Insolvency Act, 1920; These will be transferred to DRT when Insolvency and Bankruptcy Code 2016 (IBC 2016 or Code) will be made applicable to them.

Introduction

The Insolvency and Bankruptcy Code (IBC) was introduced in December 2016 to expeditiously resolve claims involving insolvent companies in a bid to tackle the 'bad loan' problem plaguing India's banking system. Two years on, even as it continues to evolve, the legal reform has emerged largely successful. However, it may have had an unintended outcome: shutdown of viable businesses of indebted firms.

Insolvency and Bankruptcy Code 2016 [IBC 2016] has come into effect on 28-5-2016 and Implemented w.e.f. 1st December, 2016 after repealing SICA. The Key objective of the Insolvency and Bankruptcy Code, 2016 is insolvency resolution of corporate persons in a time bound manner for maximization of value of the assets for all stakeholders.

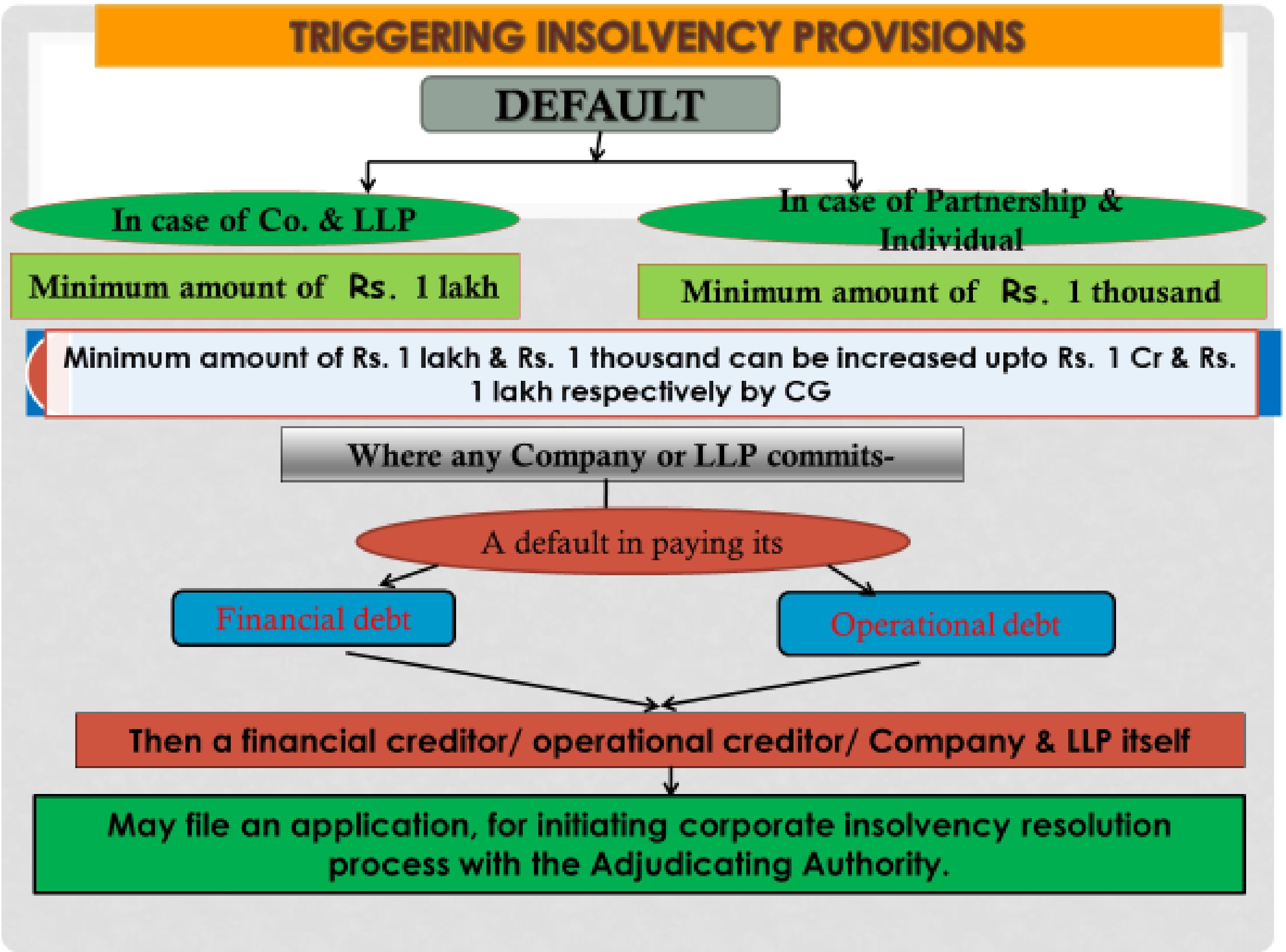
The objective would be achieved only if a resolution process ends up with an acceptable resolution plan that maximises the value of assets of the corporate debtor. Resolution Plan should balance the interest of all stakeholders and avoid the plans which may lead to liquidation. Further, the Resolution plan has been drawn realistically and suggested the desired measures to implement it successfully.

Loan recoveries as consequence of IBC 2016

Loan recoveries have picked up pace with the Insolvency and Bankruptcy Code set in motion in late 2016. As on November, 2018, a whopping 40,712 cases have been registered with the National Company Law Tribunal (NCLT), of which 26,290 have been disposed. While there's no data related to NPAs reduced due to NCLT process, as per data maintained by the Insolvency and Bankruptcy Board of India (IBBI), orders of a resolution against 65 corporate debtors have been issued by NCLT as on October, 2018, with a realisable amount of Rs 60,636 crore.

Significant paradigm shift from the earlier regime

Insolvency process is triggered based on "Default". In place of: SICA- '*erosion of net worth*'. **Companies Act**- '*inability to pay debt*'. From Debtor in possession regime to Creditors in possession regime. Earlier intervention not envisaged- which led to destruction of enterprise/ asset value. Asset Quality Review undertaken by RBI emphasized on early identification of "*incipient stress*". RBI scheme involved reporting on first payment of default, IBC triggers CIRP.



Impact of IBC 2016 on various Stakeholders

(a) Impact on Corporate Debtor

- Corporate Debtors are now adopting strong IT, financial and cash flow monitoring systems to stay current on payments to Trade Creditors, Financial Creditors and other Stakeholders and start identifying if there is any delayed payment to the above parties.
- Disciplined in payments to trade creditors, reaching out to financial creditors to address liquidity issues etc.
- There is no Scope for interference by them; All decisions of Committee of Creditors are on the basis of commercial consideration.
- There is supervision of adjudicating authority.
- Delay in negotiation to settle their dues with financial creditors/ operational creditors not possible.
- Destruction of value of assets is being minimised.
- During moratorium- asset stripping is not possible.
- Due to Section 29A of IBC 2016- existing promoters and related parties cannot buyout their own business at steep discount. However, IBC Amendment Act 2018 provided exemption to MSME u/s 240A of Code to be the Resolution Applicant and bid for their own companies.

(b) Impact on Financial Creditors

- **Pre-loan disbursement-** credit assessment on the basis of cash flow, working capital requirements and payment/ receivable cycle; collateral cover not sole criteria;

- **Post loan disbursement-** monitoring of, and focus on, financial covenants- debt service/ cash flow coverage ratios;
- **Due to Time bound Resolution Process:** Decision on resolution or liquidation is to be made by the Committee of Creditors, which comprises in maximum cases of financial creditors, within prescribed time- dilatory tactics are not possible now;
- **Realistic assessment of viability-** The financial creditors should make realistic assessment of viability of corporate debtor and should be willing to accept haircuts;
- **Timely submission of Claims:** Financial Creditors are aware that even if they don't trigger the corporate insolvency resolution process and initiated by operational creditors or corporate debtor itself, they cannot escape their liability to submit the claims within the time lines prescribed in IBC 2016. Furthermore, now Limitation Act after Amendment in IBC 2016 in 2018, limitation shall be applicable on submission of claims. If they don't submit their claims timely, their claims may expire.
- **High Degree of Preparedness:** Action of other creditors requires a high degree of preparedness by banks, and they are required to act swiftly and file their claims with IRP/RP within prescribed time.
- **Decision has to be aligned with objective**- The Committee of Creditors need to address the main objective of IBC 2016 i.e. Maximization of Value of Assets of Corporate Debtor and balancing of Interest of all the stakeholders.

Rise of Non-Performing Assets in India

The issue of Non-Performing Assets (NPAs) in the Indian banking sector has become the subject of much discussion and scrutiny. The Standing Committee on Finance recently released a report on the banking sector in India, where it observed that banks' capacity to lend has been severely affected because of mounting NPAs. The Estimates Committee of Lok Sabha is also currently examining the performance of public sector banks with respect to their rising problem of NPAs, and loan recovery mechanisms available.

Banks give loans and advances to borrowers:

Based on the performance of the loan, it may be categorized as:

(i) a standard asset (a loan where the borrower is making regular repayments), or

(ii) a non-performing asset.

<u>NPAs are loans and advances where the borrower has stopped making interest or principal repay ments for over 90 days</u>.

Quantum of NPA

*As of March 31, 2018, provisional estimates suggest that the **total volume of gross NPAs in the economy stands at Rs 10.35 lakh crore**.*

- ***About 85% of these NPAs** are from loans and advances **of public sector banks**.*
- *For instance, **NPAs in the State Bank of India are worth Rs 2.23 lakh crore**.*
- ***<u>In the last few years</u>**, gross NPAs of banks **(as a % of total loans)** have **increased from 2.3% of total loans in 2008 to 9.3% in 2017** (Figure 1).*
- *This indicates that an **increasing proportion of a bank's assets have ceased to generate income for the bank**, **<u>lowering</u>** the bank's **profitability and its ability to grant further credit**.*

<u>Escalating NPAs</u> require a bank to make higher provisions for losses in their books, which leads to low profitability. Profitability of a bank is measured by its Return on Assets (RoA), which is the ratio of the bank's net profits to its net assets.

Banks have witnessed a decline in their profitability in the last few years (Figure 2), making them vulnerable to adverse economic shocks and consequently putting consumer deposits at risk.

What led to the rise in NPAs?

Some factors which lead to the increased occurrence of NPAs are:

Figure 1: Gross NPAs (% of total loans)

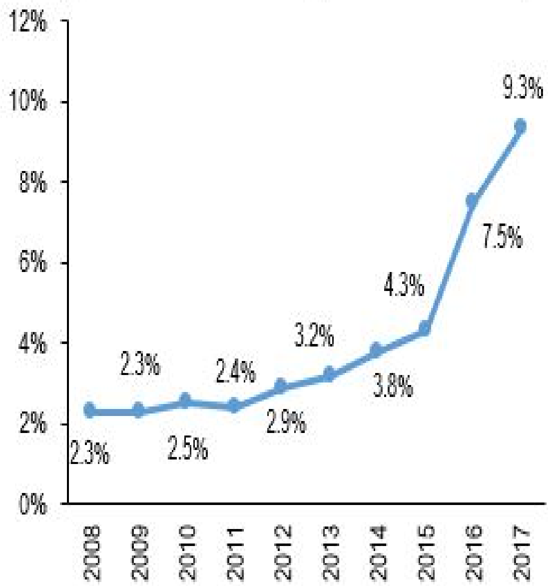


Figure 2: Return on Assets (%)

Source: Reserve Bank of India; PRS.

- **external,** such as **decreases in global commodity prices** leading to slower exports.
- Some are more intrinsic to the Indian banking sector.

• A lot of the loans currently classified as NPAs originated in the mid-2000s, at a time when the economy was booming and business outlook was very positive.

• Large corporations were granted loans for projects based on extrapolation of their recent growth and performance.

• With loans being available more easily than before, corporations *grew highly leveraged*, implying that most financing was through external borrowings rather than internal promoter equity.

• But as economic growth stagnated following the global financial crisis of 2008, the repayment capability of these corporations decreased.

• This contributed to what is now known as India's Twin Balance Sheet problem, where both the banking sector (that gives loans) and the corporate sector (that takes and has to repay these loans) have come under financial stress.

• **Borrowers lost their capability of paying back the bank**.

• Banks at this time took to the practice of 'evergreening', where fresh loans were given to some promoters to enable them to pay off their interest.

• ***This effectively pushed the recognition of these loans as non-performing to a later date, but did not address the root causes of their unprofitability***.

RBI's guidelines to banks with respect to Insolvency

Over the years, the RBI has issued various guidelines aimed at the resolution of stressed assets of banks. These guidelines included introduction of certain schemes such as:

(i) Strategic Debt Restructuring (which allowed banks to change the management of the defaulting company), and

(ii) Joint Lenders' Forum (where lenders evolved a resolution plan and voted on its implementation).

In line with the enactment of the IBC, the RBI, *through a circular in February 2018, substituted all the*

Dismal picture (In %)

Country	NPA
Greece	45.57
Italy	16.35
Portugal	13.30
Ireland	11.46
Russian	10.00
India (Dec 2017)	9.98
Romania	7.96
Spain	4.46
Brazil	3.59
France	3.41
South Africa	3.10
Thailand	3.07
Turkey	2.84
Indonesia	2.56
Argentina	1.84
China	1.74
Germany	1.69
Malaysia	1.55
Singapore	1.40
Japan	1.19
US	1.13
UK	0.81

specific pre-existing guidelines with a simplified, generic, *time-bound framework for the resolution of stressed assets*.

Revised Guidelines of RBI

In the revised framework which replaced the earlier schemes,

- the RBI put in place a strict deadline of 180 days during which a resolution plan must be implemented, failing which stressed assets must be referred to the NCLT under IBC within 15 days.
- The framework also introduced a provision for monitoring of one-day defaults, where incipient stress is identified and flagged immediately *when repayments are overdue by a day*.
- Borrowers whose loans have been classified as NPAs before the release of the circular recently crossed the 180-day deadline for internal resolution by banks.
- Some of these borrowers, including various power producers and sugar mills, had appealed against the RBI guidelines in various High Courts.
- A two-judge bench of the Allahabad High Court had recently ruled in favour of the RBI's powers to issue these guidelines, and refused to grant interim relief to power producers from being taken to the NCLT for bankruptcy.
- All lawsuits against the circular have currently been transferred to the Supreme Court, which has now issued an order to maintain status quo on the same. The hearing by Supreme Court is being held. Accordingly, these cases cannot be referred to the NCLT until the Supreme Court's decision on the circular, although the RBI's 180-day deadline has passed.
- This effectively provides interim relief to the errant borrowers who had moved to court till the matter is decided by the apex court.

Filing of application by Financial Creditors (Banks) before Adjudicating Authority

- Section 7 of the Code provides that a financial creditor either by itself or jointly with other financial creditors may file an application for initiating corporate insolvency process against a corporate debtor before the Adjudicating Authority when a default has been occurred.
- The term 'default' includes a default in respect of a financial debt owed not only to the applicant financial creditor but to any other financial creditor of the corporate debtor;
- The application shall be in Form 1 as prescribed in 'Insolvency and Bankruptcy (Application to Adjudicating Authority) Rules, 2016.
- In case the application is made jointly by financial creditor, they may nominate one amongst them

to act on their behalf.

- Where the applicant is an assignee or transferee of a financial contract, the application shall be accompanied with a copy of the assignment or transfer agreement and other relevant documentation to demonstrate the agreement or transfer.

  The application shall also contain the following documents-

  - record of the default recorded with the information utility or such other record or evidence of default as may be specified;
  - the name of the resolution professional proposed to act as an interim resolution professional;
  - written consent of resolution professional in Form No. 2 accompanied by a certificate confirming the eligibility of the proposed insolvency professional for appointment as a resolution professional;
  - proof for the payment of fees; and
  - any other information as may be specified by the Board.

Form 1: Adjudicating Authority Rules

Form 1

(*See sub-rule (1) of rule 4*)

APPLICATION BY FINANCIAL CREDITOR(S) TO INITIATE CORPORATE INSOLVENCY RESOLUTION PROCESS UNDER THE CODE.

(*Under section 7 of the Insolvency and Bankruptcy Code, 2016 read with Rule* 4 *of the Insolvency and Bankruptcy (Application to Adjudicating Authority) Rules, 2016*)

[*Date*]

To,

The National Company Law Tribunal

[*Address*]

From,

[*Names and addresses of the registered offices of the financial creditors*]

In the matter of [*name of the corporate debtor*]

Subject: Application to initiate corporate insolvency resolution process in the matter of [*name of the corporate debtor*] under the Insolvency and Bankruptcy Code, 2016.

Madam/Sir,

[*Names of the financial creditor(s)*], hereby submit this application to initiate a corporate insolvency resolution process in the matter of [*name of corporate debtor*]. The details for the purpose of this application are set out below:

Part-I

PARTICULARS OF APPLICANT (PLEASE PROVIDE FOR EACH FINANCIAL CREDITOR MAKING THE APPLICATION)		
1.	NAME OF FINANCIAL CREDITOR	
2.	DATE OF INCORPORATION OF FINANCIAL CREDITOR	
3.	IDENTIFICATION NUMBER OF FINANCIAL CREDITOR	
4.	ADDRESS OF THE REGISTERED OFFICE OF THE FINANCIAL CREDITOR	
5.	NAME AND ADDRESS OF THE PERSON AUTHORISED TO SUBMIT APPLICATION ON ITS BEHALF (ENCLOSE AUTHORISATION)	

6.	NAME AND ADDRESS OF PERSON RESIDENT IN INDIA AUTHORISED TO ACCEPT THE SERVICE OF PROCESS ON ITS BEHALF (ENCLOSE AUTHORISATION)	

Part-II

PARTICULARS OF THE CORPORATE DEBTOR		
1.	NAME OF THE CORPORATE DEBTOR	
2.	IDENTIFICATION NUMBER OF CORPORATE DEBTOR	
3.	DATE OF INCORPORATION OF CORPORATE DEBTOR	
4.	NOMINAL SHARE CAPITAL AND THE PAID-UP SHARE CAPITAL OF THE CORPORATE DEBTOR AND/OR DETAILS OF GUARANTEE CLAUSE AS PER MEMORANDUM OF ASSOCIATION (AS APPLICABLE)	
5.	ADDRESS OF THE REGISTERED OFFICE OF THE CORPORATE DEBTOR	

Part-III

PARTICULARS OF THE PROPOSED INTERIM RESOLUTION PROFESSIONAL		
1.	NAME, ADDRESS, EMAIL ADDRESS AND THE REGISTRATION NUMBER OF THE PROPOSED INTERIM RESOLUTION PROFESSIONAL	

Part - IV

PARTICULARS OF FINANCIAL DEBT		
1.	TOTAL AMOUNT OF DEBT GRANTED DATE(S) OF DISBURSEMENT	
2.	AMOUNT CLAIMED TO BE IN DEFAULT AND THE DATE ON WHICH THE DEFAULT OCCURRED (ATTACH THE WORKINGS FOR COMPUTATION OF AMOUNT AND DAYS OF DEFAULT IN TABULAR FORM)	

Part-V

	PARTICULARS OF FINANCIAL DEBT [DOCUMENTS, RECORDS AND EVIDENCE OF DEFAULT]
1.	PARTICULARS OF SECURITY HELD, IF ANY, THE DATE OF ITS CREATION, ITS ESTIMATED VALUE AS PER THE CREDITOR. ATTACH A COPY OF A CERTIFICATE OF REGISTRATION OF CHARGE ISSUED BY THE REGISTRAR OF COMPANIES (IF THE CORPORATE DEBTOR IS A COMPANY)
2.	PARTICULARS OF AN ORDER OF A COURT, TRIBUNAL OR ARBITRAL PANEL ADJUDICATING ON THE DEFAULT, IF ANY (ATTACH A COPY OF THE ORDER)
3.	RECORD OF DEFAULT WITH THE INFORMATION UTILITY, IF ANY (ATTACH A COPY OF SUCH RECORD)
4.	DETAILS OF SUCCESSION CERTIFICATE, OR PROBATE OF A WILL, OR LETTER OF ADMINISTRATION, OR COURT DECREE (AS MAY BE APPLICABLE), UNDER THE INDIAN SUCCESSION ACT, 1925 (10 OF 1925) (ATTACH A COPY)

5.	THE LATEST AND COMPLETE COPY OF THE FINANCIAL CONTRACT REFLECTING ALL AMENDMENTS AND WAIVERS TO DATE (ATTACH A COPY)
6.	A RECORD OF DEFAULT AS AVAILABLE WITH ANY CREDIT INFORMATION COMPANY (ATTACH A COPY)
7.	COPIES OF ENTRIES IN A BANKERS BOOK IN ACCORDANCE WITH THE BANKERS BOOKS EVIDENCE ACT, 1891 (18 OF 1891) (ATTACH A COPY)
8.	LIST OF OTHER DOCUMENTS ATTACHED TO THIS APPLICATION IN ORDER TO PROVE THE EXISTENCE OF FINANCIAL DEBT, THE AMOUNT AND DATE OF DEFAULT

I, hereby certify that, to the best of my knowledge, [*name of proposed insolvency professional*], is fully qualified and permitted to act as an insolvency professional in accordance with the Insolvency and Bankruptcy Code, 2016 and the associated rules and regulations.

[*Name of the financial creditor*] has paid the requisite fee for this application through [*state means of payment*] on [*date*].

Yours sincerely,

Signature of person authorised to act on behalf of the financial creditor
Name in block letters Position with or in relation to the financial creditor
Address of person signing

Instructions

Please attach the following to this application:

Annex I	Copies of all documents referred to in this application.
Annex II	Written communication by the proposed interim resolution professional as set out in Form
Annex III	Proof that the specified application fee has been paid.
Annex IV	Where the application is made jointly, the particulars specified in this form shall be furnished in respect of all the joint applicants along with a copy of authorisation to the financial creditor to file and act on this application on behalf of all the applicants.

Fee payable

The fee payable by the financial creditor is Rs.25,000/-.

Adjudicating Authority to ascertain the existence of default

The Adjudicating Authority shall, within 14 days of the receipt of the application, ascertain the existence of a default from the records of an information utility or on the basis of evidence furnished by the financial creditor.

Admission/rejection of application

Where the Adjudicating Authority is satisfied that-

- a default has occurred and the application is complete, and there is no disciplinary proceedings pending against the proposed resolution professional, it may, by order, admit such application; or
- default has not occurred or the application is incomplete or any disciplinary proceedings is pending against the proposed resolution professional, it may, by order reject such application.

Rectification of application

The Adjudicating Authority shall, before rejecting the application give a notice to the applicant to rectify the defect in his application within 7 days of receipt of such notice from the Adjudicating Authority.

Commencement of process

The corporate insolvency resolution process shall commence from the date of admission of the application.

Communication of order

The Adjudicating Authority shall communicate-

- the order to the financial creditor and the corporate debtor;
- the rejection order to the financial creditor

within 7days of admission or rejection of such application.

Penalty for fraudulent or malicious initiation of proceedings

- If any person initiates the insolvency resolution process fraudulently or with malicious intent for any purpose other than the resolution of insolvency the Adjudicating Authority may impose upon such person a penalty which shall not be less than Rs.1 lakh, but may extend to Rs.1 crore.
- Where any person furnishes information in the application which is false in material particulars, knowing it to be false or omits any material fact, knowing it to be material such person shall be punishable with fine which shall not be less than Rs.1 lakh but may extend to Rs.1 crore.

Conclusion

The banks have been able to recover Rs 48,117 crore against claims of Rs 92,817 crore, the recently released News Letter by the Insolvency and Bankruptcy Board of India, showed.

These four cases include that of Electrosteel Steels, which was bought by Vedanta for Rs 5,320 crore against claims of Rs 13,175. The recovery rate in case of Electrosteel was 40.38 per cent. The second one was that of Bhushan Steel, which was acquired by Bamnipal Steel, a subsidiary of Tata Steel, for Rs 35,571 crore against bankers claim of Rs 56,022 crore, logging a recovery rate of an impressive 63.5 per cent.

A recent central bank report had suggested that the recovery through the IBC was more than three times of that via other routes, including Board of Industrial and Financial Reconstruction (BIFR). However, too much of litigation is delaying the resolution process under the two-year-old IBC (which stipulates a time-bound resolution of stressed assets), "*taking the spirit of the law away*". [Former ICICI Bank Chairman Narayanan Vaghul]. In the Financial Express, Mr. Vaghul highlighted the increasing tendency of bad loan-hit banks to turn risk-averse and improve exposure to the retail segment at the cost of the corporate sector. Given that the economy is showing signs of a recovery and companies need funds for investments, banks should not leave the corporate sector to fend for itself. A new precedent needs to be created for bank lending to the corporate sector, more so when development banking institutions have perished.

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New Delhi
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Spectrum for Wireless Telecom Service - Models / Valuation Approaches

The proliferation of wireless telecom services (mobile and broadband) act as catalyst for the economic development of a country. The exponential growth in wireless telecom services has resulted in excessive demand for the spectrum which has direct bearing on the price of spectrum as input. The spectrum price plays very critical role in proliferation of wireless telecom services and thereby accelerates the development and growth of the national economy. The valuation of spectrum is significant matter for different stakeholders.

The purpose of this reference paper is to apprise with various spectrum valuation approaches in vogue and has been divided into four parts: I- Introduction, II- Need for Valuation of Spectrum, III- Various Valuation Approaches- Opportunity Cost Models (i) Producer Surplus Approach (ii) Production Function Approach, Econometric Approaches (a) Single Variable Correlation Model (b) Multiple Variables Regression Model, Revenue Surplus Model, Economic Efficiency Approach, Technical Efficiency Approach, Achieved Price In Last Auction, Indexation Of Previous Auction Determined Price, International Benchmarking of Spectrum Price and Secondary Market Trading / Resale Price Of Spectrum, and IV- Conclusion

1. INTRODUCTION

Radio Frequency Spectrum is a unique, ubiquitous but finite natural resource shared by a wide variety of services. Unlike many other natural resources, it can be repeatedly reused and hence cannot be depleted however, if not put to use, cannot be stored for future use as it is perishable. It has been considered as a limited even scarce natural resource because, given present technologies, there is only a finite portion available for being put to valuable use at any point of time. Besides its use for wireless telecom service, Radio Frequency Spectrum is also used for other services of national importance such as Broadcasting, Defence Services, Aerospace, Medical etc.

The Radio Frequency Spectrum is both rivalrous and excludable as it has the potential to be reused and reallocated. Its use by one telecom service provider (TSP) entails a smaller amount of spectrum available for another to employ as its availability is limited; hence, it is rivalrous. To ensure interference-free operations by the users under the present state of technology, spectrum has perforce to be excludable. Further the supply of the spectrum is inelastic as the Government is its sole custodian that attributes its overall scarcity.

2. NEED FOR VALUATUION OF SPECTRUM

The valuation of spectrum is very crucial and critical issue but at the same time the valuation of spectrum is required from time to time in order to maximize both economic and social benefits from its varied uses to the sector as well as to the economy as a whole. Valuation of the spectrum is a function of business potential and value addition to the business.

There are numerous exogenous factors that apply differently in each country because of physical or demographic characteristics, state of economy historical, cultural or legal heritage or more pertinently, national government policies and regulations that are crucial to valuation of spectrum.

The valuation of spectrum is a multivariate exercise incorporating whole range of factors on demand, supply side including technical developments and features of specific spectrum bands. It also depends on the assessment of demand for telecom services in all its variants, revenue potential, operating expenses, Investment in Networks, development of Ecosystem and special features of a particular band. It is also determined to a large extent by its demand which depends on the willingness, requirement and ability to pay of the spectrum users who use it as an input in the provision of wireless telecom services.

The demand for spectrum being a scarce natural resource is derived from the demand for final goods and services that require spectrum as an input. The economic valuation of spectrum depends on number of variables and can be indicated in the functional form as under:

V= f (I, T, E)

Where: *V = Value of the spectrum is function of:*

I= available Market Information;

T=Technological Factors; and

E= Macro and Micro Economic factors.

The valuation varies over a period of time, from market to market, different spectrum bands and from transaction to transaction.

The spectrum bands with less regulatory restrictions in use would typically have greater value. The liberalisation of spectrum enhances the value of spectrum by removing technology barriers whereby the user of the spectrum has the option of deploying alternative technologies. Further the different spectrum bands have different propagation characteristics which also have influence on its value.

The determination of valuation of different spectrum bands which represents their fair market value is very tedious and crucial exercise. The valuation of spectrum is dependent upon the availability of relevant information however, the pieces of information would necessarily not result in identical value for different stakeholders. The valuation of spectrum also differs and depends upon the entity that valuing it. The Policy Maker or the Regulator can arrive at a particular value. By using the same information, the user of Spectrum i.e., the Telecom Service Provider can arrive at yet another value based on their respective business plan, business potential and financial capability. Similarly analysts or academics can arrive at different value and even the value arrived at by two analysts or academics cannot be the same. The determination of fair value of spectrum has been always a challenge across the jurisdictions.

There is a need to achieve a fine balance among the three main considerations of spectrum valuation, namely (a) efficient assignment, (b) maximisation of consumer welfare and (c) optimal value for the public natural resource. The valuation of Spectrum depends upon number of factors and is also highly situational. Moreover there is no single valuation is relevant for all situations as the valuation of spectrum is influenced by number of factors.

3. VALUATION APPROACHES

Since spectrum is scarce and essential as input for the provision of telecom services, its valuation is a very significant activity, various approaches used to arrive at spectrum valuation are as under:

1. OPPORTUNITY COST MODELS

Opportunity cost model with respect to spectrum valuation captures the saving in operating cost or earning of additional surplus when the additional spectrum is put to use in place of investment in Network Equipments. Following two opportunity cost models can be used to determine the value of spectrum.

(i) PRODUCER SURPLUS APPROACH

This approach is based on an engineering model for determining the value of spectrum. As per the law of physics, there is an inverse relationship between the quantum of spectrum allocated and the expenditure on Radio Access Network (RAN) required for serving a particular level of demand and consists of Base Transceiver Stations (BTSs), Base Station Controllers (BSCs) and transmission media to connect them. Therefore use of additional spectrum by a TSP will create a producer surplus (i.e. the opportunity

of cost savings (both OPEX & CAPEX) on the RAN due to use of additional Spectrum by the TSP.
The key inputs are projected subscribers, projected traffic (i.e. Voice minutes, Data Usage and other value added services), estimated network demand, estimated number of RAN, existing spectrum holding of the TSP, Licence period as well service region (Licence service area) etc.

The following steps are taken for estimation of producer surplus:

(i) Estimation of Network Demand of the TSP

(ii) Estimation of No. of RANs in the two scenarios

(a) With existing spectrum holding

(b) With existing spectrum holding + 'a' MHz spectrum (i.e. additional spectrum)

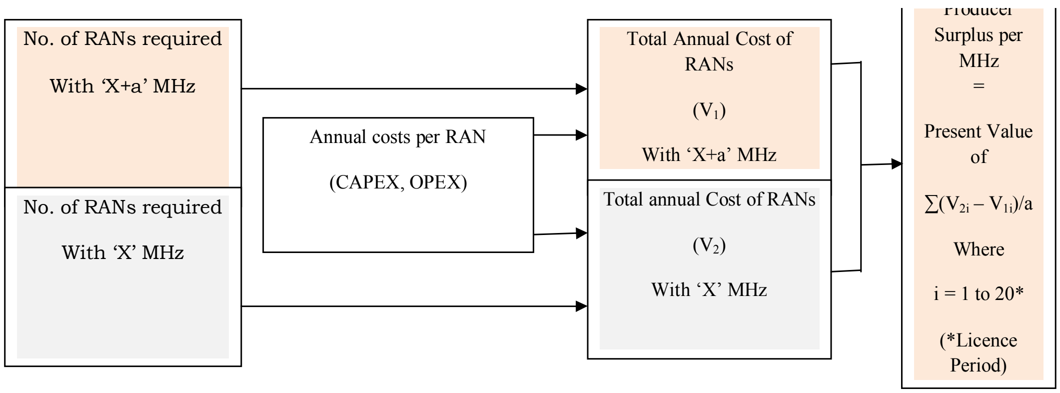
(iii) Estimation of Annual Cost (OPEX and CAPEX) of RANs in the two scenarios

(iv) Producer Surplus with an additional spectrum of 'a' MHz in a LSA is estimated as below:

Producer Surplus = *Present Value of expenditure on RANs with additional spectrum of 'a' MHz* ***Minus*** *expenditure on RANs during the licence period (say next 20 years) without additional spectrum of 'a' MHz.*

The Producer Surplus Model is described in the following schematic diagram:

SCHEMATIC DIAGRAM OF PRODUCER SURPLUS MODEL



The amount of producer surplus (saving in cost) can be used to determine the value of spectrum which a TSP would like to acquire.

(ii) PRODUCTION FUNCTION APPROACH:

Spectrum and Radio Access Network (RAN) are the two essential inputs for the provision of mobile / wireless telecom services and are independent variables in the estimation of a production function to 'produce' mobile traffic (i.e. Voice minutes, Data Usage and other value added services). This model works on the principle that the two inputs i.e. Spectrum and Radio Access Network (RAN) can be substituted for each other over a given range of output.

Valuation under this approach is equal to the savings generated in the form of reduced CAPEX and OPEX on Radio Access Network (RAN) of the TSP when additional spectrum is put to use.

The production function has been specified as a Cobb-Douglas functional form which is widely used to estimate the statistical relationship between inputs & output. The can be denoted by:

$$\mathbf{X = Ay^{\alpha}z^{\beta}}$$

In this equation, **X** (dependent variable) is the Minutes of Usage. The independent or explanatory variables are:

i) **Y** is allocated amount of spectrum and;

ii) **Z** is Number of BTSs deployed by a service provider.

The parameters α and β reflect the change in minutes of usage for a unit change in **Spectrum Holding** and **BTS** respectively.

The key inputs used are existing & projected subscribers, Minutes of Usage, Data Usage, Number of BTS, Useful Life of BTS, Network demand, existing Spectrum Holding of TSPs of particular spectrum bands, Licence period as well service region (Licence service area) etc. Using a panel data set of Minutes of Usage, spectrum allocated and BTSs set up in various LSAs for different TSPs over the given period (Say 5/7years), the coefficients are calculated using statistical technique and then used in the above equation to get the value of per MHz spectrum across LSAs.

Valuation under this approach is equal to the savings generated in the form of reduced CAPEX and OPEX on BTSs to the TSP when additional spectrum is acquired.

2. ECONOMETRIC APPROACHES

Econometric Approaches can also be other alternatives for spectrum valuation based on information revealed from the available market data for a particular spectrum band.

(a) SINGLE VARIABLE - CORRELATION MODEL

This model is used to correlate the past Market Determined Price (MDP) / Auction Determined Price (ADP) using any one relevant variable such as Adjusted Gross Revenue (AGR), Average Revenue Per User (ARPU), Minutes of Usage (MoU), Data Usage, Gross State Domestic Product, Tele-density, Residual Tele-density, Population etc.

Under this approach, the current value of particular spectrum band in the Licensed services areas (LSAs) where spectrum has sold through the auction held in previous year(s) can be estimated by correlating past auction determined price with any one relevant independent variable mentioned above.

For example the current value of spectrum in the LSAs, say in 15 LSAs out of 22 LSAs, where a particular spectrum band was sold in the previous auction, the current value of the spectrum can be estimated by establishing a correlation between the price realised in such 15 LSAs using any one of above-mentioned relevant variables.

(b) MULTIPLE VARIABLES - REGRESSION MODEL

Linear Regression establishes a relationship between a scalar dependent variable denoted as Y and one or more explanatory variables denoted as X. If only one explanatory variable is used, it is called simple linear regression; for more than one explanatory variable, it is called multiple linear regressions.

Multiple Variables Regression is used to predict the price of Spectrum which has been auctioned in the previous year(s) by establishing relationship between a scalar dependent variable denoted as Y (previous auction price) and one or more above mentioned explanatory variables denoted as X.

The linear regression can be used to fit a predictive model to an observed data set of Y and X values. This model can be used to make the forecasting of the value of Y, if an additional value of X is then given without its accompanying value of Y. Multiple regression can therefore be adopted to estimate the value of particular spectrum band for the those LSAs where spectrum has been sold in the previous auction.

The underlying model is used as follows:

$$Yi = \alpha + \beta 1\ X1i + \beta 2\ X2i + \ldots\ldots. + \beta 3\ Xki + \varepsilon i$$

Where,

Yi = Value of spectrum band per MHz for LSAs **i** = 1, 2,....15;

X1, X2,.........,Xk = the possible combination of independent variables (Adjusted Gross Revenue (AGR), Average Revenue Per User (ARPU), Minutes of Usage (MoU), Data Usage, Gross State Domestic Product (GSDP), Tele-density, Residual Tele-density, Population etc);

α= the intercept term;

β1, β2............ βk= partial regression coefficients for the explanatory variables X1, X2,.........,Xk respectively; and

εi is the error term.

The goodness of fit of estimation is given by 'R squared' which is the variation in the value of spectrum that is explained by the variation in the above specified combination of variables e.g. AGR, Residual Tele-density and Population. The R-squared in the estimations should be over 0.75 in each combination of variables. In addition, the coefficient estimates in the regression should be statistically significant (at 15% level of significance) and show that the explanatory variables used have a significant relationship with the value of spectrum.

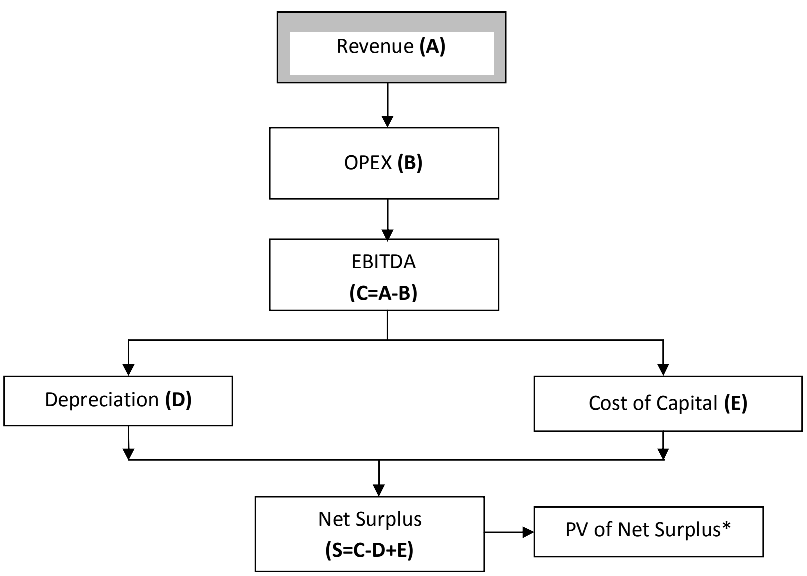
A multiple regression model can be fitted using the observed data set of Y [the achieved prices of spectrum across LSAs where spectrum was sold in the previous auction] and values of X (explanatory variables) and thus the current value of spectrum in the LSAs where spectrum was sold can be determined through the estimated values by the use of coefficients value of the X for those LSAs.

3. REVENUE SURPLUS MODEL

Under this model, the value of spectrum can be estimated from the perspective of a TSP willing to invest in certain spectrum band to realize revenue surplus from the wireless telecom service over the licence period horizon. Revenue Surplus Model can be used to determine the value of a particular spectrum band where financial information and other relevant data are available. This model is based on the hypothesis that the net present value (NPV) of the projected revenue surplus over the licence period (net of all expenses/costs) will potentially represent the maximum amount which a TSP would be willing to pay for acquiring a particular spectrum band.

The key inputs required for this model are projected revenue, operating expenditure, EBITDA margin, rate of depreciation, subscribers, traffic (minutes of usage, data usage and SMSs), projected investment, weighted average cost of capital (WACC) spectrum holding, period of project (licence period) and discounting factor (for NPV) etc. The Revenue Surplus Model can be described through the following schematic diagram:

SCHEMATIC DIAGRAM OF REVENUE SURPLUS MODEL

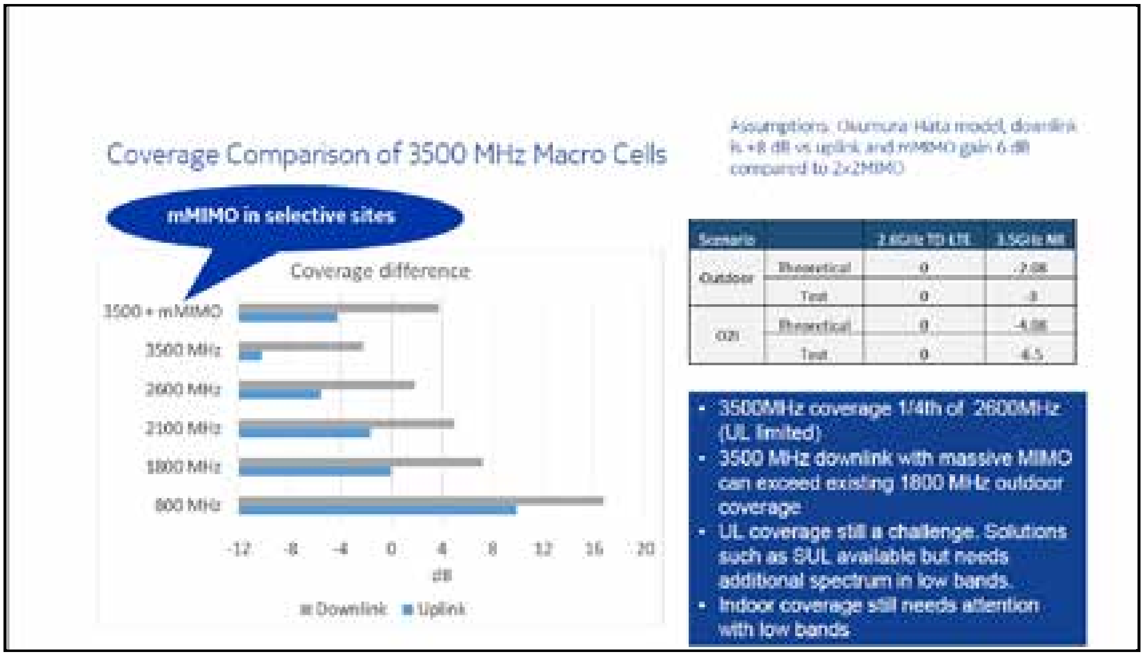


* For the licence period in India i.e. 20 years

Value of spectrum using this approach will be is equal to the net surplus generated by the TSP.

4. ECONOMIC EFFICIENCY APPROACH

As per an ITU report in general, spectrum ranging from about 400 MHz upto 6 GHz will have higher value than spectrum bands at higher frequencies, because it enables greater throughput per megahertz (MHz) at lower investment in infrastructure. This is because the service area covered by a Base Transceiver Station (BTS) is proportionate to the square of the frequency. For example the minimum provision of service over a low population density region will require twice the number of base stations at 1 GHz than at 700 MHz, eight times more at 2 GHz and 14 times more at 2.6 GHz, and the cost of deploying a mobile network in such a region will go up in that proportion. Coverage Comparison can be understood from the following spectrum band-wise analysis:



Since the spectrum with low frequency bands are more efficient and are therefore more valuable than the spectrum with high frequency bands. The intrinsic value of the 900 MHz band as compared to the 1800 MHz band lies in its better propagation characteristics and lower requirement of BTSs for coverage, its economic benefits are most evident in areas where coverage requirements are paramount i.e. where the density of population is lower and the spread of population to be covered is relatively wider.

Based on the theory of above report, if we compare the capacity and coverage with the use of 900 MHz and 1800 MHz spectrum bands, 900 MHz band is technically more efficient than 1800 MHz band and thus using Economic Efficiency Approach captures the reduction in capital expenditure (CAPEX) and operating expenditure (OPEX) requirements in 900 MHz band being a lower frequency band when equated with 1800 MHz spectrum band. This savings in costs plus value of 1800 MHz valuation is the estimated value of 900 MHz spectrum band. Other things being same, the price that a TSP would be willing to pay for a unit of 900 MHz spectrum which shall be less than or equal to the price of a unit of 1800 MHz spectrum plus the additional CAPEX and OPEX costs that the TSP saves by using 900 MHz spectrum instead of 1800 MHz spectrum, which can be denoted as under:

$$\mathbf{V_{900MHz} \leq V_{1800\ MHz} + \Delta\ CAPEX + \Delta\ OPEX}$$

Therefore, the way of deriving a relative valuation for the 900 MHz band from the valuation worked out for the 1800 MHz band is by analyzing the trade-off in costs (CAPEX as well as OPEX) when spectrum in the technically more efficient 900 MHz band is substituted for spectrum in the technically less efficient 1800 MHz band. The additional cost per MHz to the TSP operating in the 1800 MHz band in a way represents the savings to TSP if it switches operations to the 900 MHz band. These savings can be looked on as the premium that the TSP would be willing to pay for acquiring spectrum in the 900 MHz band.

5. TECHNICAL EFFICIENCY APPROACH:

The Radio Frequency Spectrum in different spectrum bands differs in respect of technical efficiency and propagation characteristics. Based on the law of physics, the low-frequency spectrum holds the advantage of wireless signal travelling relatively longer distances and is more efficient as compared to higher frequency spectrum, because former provides enhanced indoor coverage compared to higher frequencies for which additional cell sites / towers would be required to be deployed to gain equivalent levels of coverage and penetration. As a general principle (with other things remaining constant), a network built around a higher frequency spectrum costs more than a network built around a lower frequency spectrum. This is because the strength of the signal of higher spectrum band requires more number of cell sites. Therefore the lower spectrum band provides better coverage and penetration resulting in cost saving and offers better quality of service. The size / width of spectrum band and contiguity are other factors which affect the efficiency of telecom services. In the absence of relevant data for determining the value of such spectrum band, the value of particular spectrum band could be derived based on propagation characteristics / technical efficiency of some other similarly placed spectrum band (ZTE Report2). Under this approach, the technical efficiency relationship and value of one spectrum band are used to determine the value of other similarly placed spectrum band.

For Example: Both 900 MHz and 1800 MHz bands are similarly placed spectrum bands are suitable for GSM but with different technical efficiency. However, the 900 MHz spectrum band intrinsically possesses a greater technical efficiency than 1800 MHz band in terms of cell range and coverage. Therefore the technical efficiency factor of 900 MHz band could lie somewhere between 1.5 times to 2 times of the higher spectrum band i.e. 1800 MHz band. By using this technical efficiency relationship between 900 MHz band and 1800 MHz band, the value of 900 MHz band can be estimated equal to1.5 times to 2 times of the value of 1800 MHz spectrum.

6. ACHIEVED PRICE IN LAST AUCTION

The market price revealed in last auction is taken as one of the possible value of that spectrum band because such price is achieved through the interplay of market forces through demand and supply of spectrum. Since the auction determined price, being representative of market value of spectrum and best available market price, is most recent indicators of the value placed on spectrum by the TSPs. There is a general perception, the spectrum is acquired by those who value it most.

Under this valuation approach, available last auction determined price, being representative of market value of spectrum, is taken as one of probable valuation of a particular spectrum if the valuation is done within one year of auction of Spectrum of that band.

7. INDEXATION OF PREVIOUS AUCTION DETERMINED PRICE

Indexation is done to add the time value of money in the auction determined price that is more than one year old. This approach is used where the previous auction determined price is more than a year old, the same is indexed by using SBI PLR/MCLR for indexing the last auction determined prices and can be one of the possible valuation methodology to determine the value of spectrum band.

However, indexing the value of spectrum for the time gap may not be a correct approach as indexing assumes that the price of spectrum will keep going up, whereas this may not happen in real transactions. Further indexing historic price to estimate current price will give wrong results as the value of spectrum is based on number of other factors.

8. INTERNATIONAL BENCHMARKING OF SPECTRUM PRICE

While carrying out the valuation of certain spectrum band, in the absence of empirical data from previous auctions, one option can be to estimate the value of spectrum in India could be based on the international prices realized in auctions of similar frequency bands held in other countries in the recent times.

Benchmarking with the price in other countries can provide a basis for comparison with price fixed or to be fixed in our country. There are two commonly accepted benchmarking approaches:

1. Absolute approach i.e. use of the actual achieved market price,
2. Relative approach i.e. use of the achieved market price after adjusting with country specific parameters

Although this could be a good practice to analyse spectrum prices based on international benchmarking using above two approaches for comparison of prices but both the approaches do not take into account country diffence. Further each country has its own process of determining spectrum prices depending upon the market conditions and other factors discussed in detail in forgoing paras. The advantage of using international benchmarking approach is that real market determined prices entail fewer assumptions and is restricted to a minimal set of standard parameters. However, the risks involved in such comparisons are that it is difficult to account for inter-country differences and variations over time. The data for international spectrum prices can be adjusted for ARPU and PPP differences between the sample country and India to arrive at a per MHz rate for India.

Sometimes 'International Price Benchmarking' can be taken as an approach to check the value of spectrum determined in the country using other approaches of valuation. The international comparison is premised on the underlying principle that two goods or services of the same quality sold in a similar time-frame should inherently be valued at a similar price, given broad similarity in market and economic conditions. Inspite of large number of variables impacting the value of spectrum still the comparison of International spectrum prices are being done across different spectrum band and different markets. The most common comparison base is - Price Per MHz PoP which is derived as under:

Price Per MHz Per PoP = Total Auction price / (No. of MHZ* Population Covered* Licence Period).

For example, Total Auction price is Rs. 340,00,00,000 for licence period of 10 years, Quantum of spectrum is 20 MHz and Population Covered is 1,00,00,000 people.

Price Per MHz Per PoP (per year) = 340,00,00,000/(20*1,00,00,000*10) i.e. Rs. 17

The comparison of the international prices, realised in various countries, in spite of the risks involved, can be used as a "sense check" for the valuation arrived at, rather than a benchmark for its value.

The main challenge in comparing the international prices is to identify the factors that influence spectrum value in each country and account for inter-country differences in value of spectrum as it may not be feasible to capture each and every factor. These may range from measurable, quantitative factors such as income levels, size of population, age group or subscriber base etc. to highly qualitative, intangible features such as the state of governance, policy framework etc. Some major variables that may impact the value and for which data is available, are population, Gross Domestic Product (GDP), GDP per capita, tele-density, subscriber base, data & voice usage and ARPU. Further apart from glaring disparities in the values of the key variables as in Indian context such as GDP, GDP per capita, and ARPU, market conditions are really not comparable with those in the sample countries for which data is available. India is a low-ARPU high-subscriber market; the size of the market is large, yielding higher revenues in spite of lowest ARPU in the world.

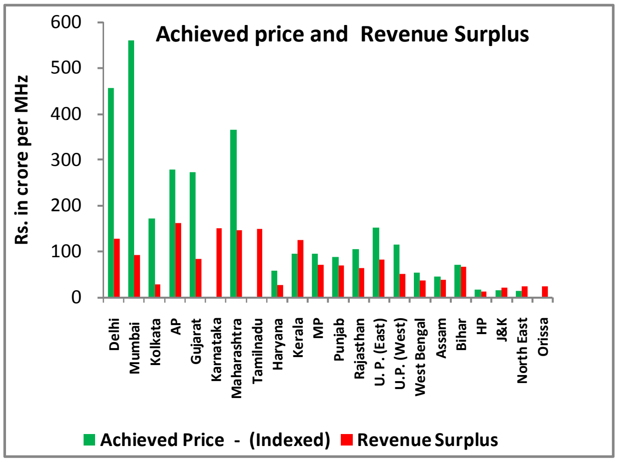
9. SECONDARY MARKET TRADING / RESALE PRICE OF SPECTRUM

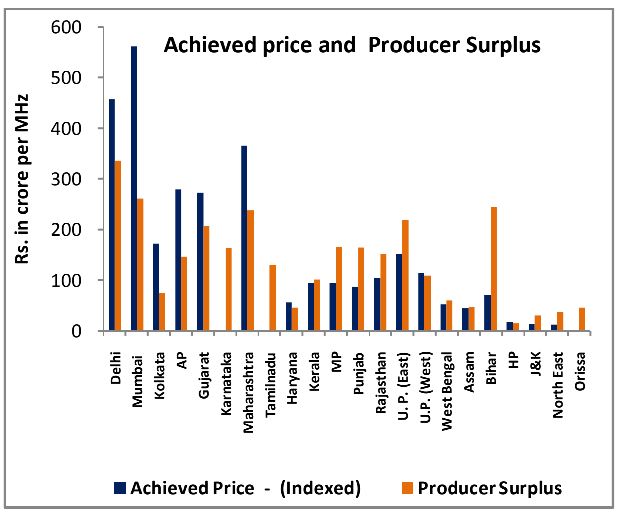
Licensed spectrum is not available for trade in the open market and even if in certain spectrum bands in certain LSA, the spectrum traded price are available, the same cannot be used for pricing of other spectrum bands in the same band but in different LSAs.

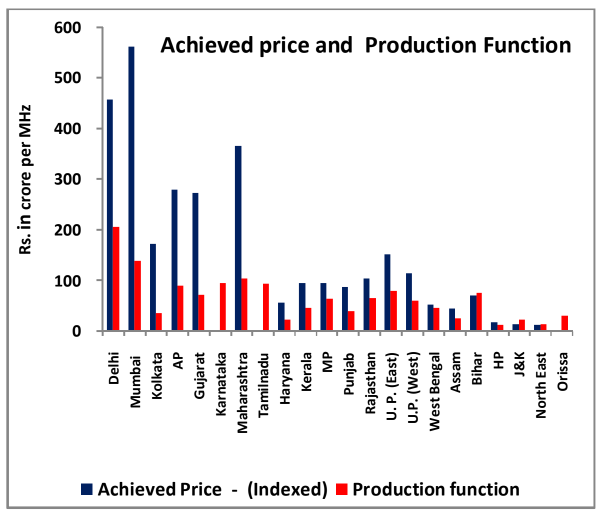
Wireless spectrum licenses can be acquired through either in primary market or in secondary market. The transactions in the primary market occur by means of periodic auctions. However, the transactions in the secondary market occur between private parties. Secondary market transactions are allowed only if the parties involved conform to certain restrictions on the spectrum licenses in terms of swapping or reselling. The price for spectrum can fluctuate significantly, because of the limited availability, competition in the sector, area of allocation of spectrum licence, type of spectrum band, band placing and regulatory restrictions on the use of spectrum besides related price volatility in transactions—regardless of whether they take place in the primary or secondary market—may not provide meaningful evidence of current market value.

To illustrate the spectrum valuation using some of above valuation methodologies arrived at and TRAI has used in its “Recommendations on Auction of Spectrum in 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz, 2500 MHz, 3300-3400 MHz, 3400-3600 MHz bands dated 1st August 2018. A comparative Analysis of various values arrived at using different valuation approached has been depicted below:

COMPARISON OF ACHIEVED PRICE WITH VALUES DETERMINED USING VARIOUS APPROACHES







Note: Data used in the graphs is from ‘Recommendations on Auction of Spectrum 01_08_2018’

IV- CONCLUSION

The value of various spectrum bands vary substantially due to the propagation characteristics of different spectrum bands, geographical areas, existing spectrum holdings by different entities, business environment, device ecosystem and numerous other factors. A reasonable valuation obtained from an appraisal of the results of different models, which has a high probability of realisation in the actual world.

It would be appropriate that various approaches /models can be adopted to arrive at the proper value of spectrum rather than depending upon any one particular methodology of valuation, as it cannot be deterministically said that any one valuation is the ‘right’ valuation approach. The valuation arrived at by using each approach is not identical and there is wide variation in the value arrived at by various approaches. However, it is evident that each approach methodology has certain strengths as well as limitation and some of the valuation methodologies better capture intrinsic technical features while others are more strongly grounded in economic and market realities. However, it is quite clear that no one model completely captures every variable- technical, economic, sectoral, geographic and regulatory- that influences the valuation of spectrum. However again it depends upon the stakeholder's mandate and the purpose of valuation. The valuation varies from market to market, across different spectrum bands, with time span and affected by economical and political aspiration of the Government.

Foot Notes :

1 'Exploring the value and economic valuation of spectrum' – ITU 2012

2 ZTE-LTE-APT-700MHz-Best Choice for Nationwide Coverage

3 'Recommendations on Auction of Spectrum 01_08_2018'

Sources :

» *http://www.trai.gov.in*

» *http://dot.gov.in*

» *https://www.gsma.com*

» *https://www.itu.int/ITU-D*

» *https://trai.gov.in/sites/default/files/RecommendationsAuctionofSpectrum01082018.pdf*

» *5G Mobile Networks – booster of digitalization*

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A Root Cause of Risks in Banking Sector

(A Research Article on Risk Management in Banks)

"Managerial Control implies the measurement of accomplishment against the standard and the correction of deviations to assure attainment of objectives according to plans".

- **Koontz And O'Donnell**

Controlling is an important function of management which ***all the managers are required to perform***. In order to contribute towards achievement of organizational objectives, a manager is required to exercise effective control over the activities of his subordinates.

Thus, controlling can be defined as a managerial function to ensure that activities in an organization are performed according to the plans. Controlling also ensures *efficient and effective use of organizational resources* for achieving the goals. Hence, it is a *goal oriented function*.

Importance of Controlling

Controlling helps in comparing the actual performance with the predetermined standards, finding out deviation and taking corrective measures to ensure that the activities are performed according to plans. Thus, it helps in achieving organizational goals.

Controlling checks the working of employees ***at each and every stage of operations***. Hence, it ensures effective and efficient use of all resources in an organization with barest minimum deviations. Controlling helps in reducing the dishonest behaviour of the employees and in creating order and discipline in an organization.

In Banking Industry control function is established at all levels. Division Manager is controller for the division / department of the Branch, Branch Manager is the controller of Branch, and Regional Manager is the controller for all Branches of Region. Zonal Manager is the controller for Regions under his Control, General Manager is the controller for Zones under his Control. In the similar manner Chief General Managers, Executive Directors, MD & CEO (including Board of Directors) are controllers to the Bank as a whole.

If control function is missing or diluted in any business organizations, then different ***Types of Risks will start / arise / crop up****. Risk is inversely proportionate to control function. If control function is not effective, risk will increase vice versa. In Banking Industry at all levels Controllers are placed to strengthen overall Banking System. The role of controllers is to mitigate various risks that are arising from time to time in their area of operation and take suitable solutions / strategies or remedial steps. Even though so many controllers are placed at different levels in Banking System i.e., from Division of the Branch at Branch level* ***to*** *Top level of the Bank, there are three important risks in Banking System i.e., Credit, Market and Operational Risks are on increasing trend year-on-year. Hence, the* ***Root Cause*** *of increase in Risks in Banking Industry is dilution of* ***CONTROL function.*** *If control function not effective from lower level management to top level management of the Banking System, then risks will crop up. So increase in efficiency of control function or control systems in banks reduces the various RISKS of banks. So controlling function is an* ***important tool*** *in "Risk Management Process" of the Banking System, whether to mitigate Credit or Market or Operation Risk.*

Credit Risk: A **Credit Risk** is the **Risk** of default on a debt that may arise from a borrower failing to make required payments. In the first resort, the **Risk** is that of the lender and includes lost principal and interest, disruption of cash flows, and increased collection costs etc.

Market Risk: Market Risk is the possibility of an investor experiencing losses due to factors that affect the overall performance of the **financial markets**. Market Risk, also called "Systematic Risk," cannot be eliminated through diversification, though it can be hedged against.

Operational Risk: Operational Risk is the prospect of loss resulting from **inadequate or failed procedures, systems or policies**, Employee errors, Systems failures, Fraud or other criminal activity. Any event that disrupts business processes.

Need to Mitigate Risk: *High Operational Risk Results in higher provisions and higher Capital requirements. In addition, it leads to provide provisions and capital requirements for Credit and Market Risks also. These THREE Risks are interrelated and effective control measures are required to mitigate these three risks.*

Expected vs. Unexpected Losses (EL/UL)

Provisions should cover **Expected losses (EL)**.

Conceptually a Capital Charge for Credit, Market and Operational Risks should cover **Un-expected losses (UL)**.

However, accounting rules in many countries do not appear to allow a robust, comprehensive and clear approach to setting provisions, especially for Operational Risk.

Capital Requirements for Operational Risk vs. Other Risks including Profit / Loss of the Public Sector Banks (PSBs) for the financial year ending 2018.

Name of the Bank	Capital Adequacy Requirements as on 31.03.2018						TOTAL Capital Required (Rs. in Crs.)	Profit / Loss as on 31.03.18 (Rs. in Crs.)
	Credit (Rs. in Crs.)	% in Total Capital	Market (Rs. in Crs.)	% in Total Capital	Operational (Rs. in Crs.)	% in Total Capital		
State Bank of India	135,025.34	78.22	19,614.55	11.36	17,971.97	10.41	172,611.86	-6,547
Allahabad Bank	12,609.90	79.94	1,545.90	9.80	1,618.70	10.26	15,774.50	-4,674
Andhra Bank	13,800.00	83.58	1,333.06	8.07	1,377.24	8.34	16,510.30	-3,412
Bank of Baroda	39,301.13	86.01	2,679.44	**5.86**	3,714.11	8.13	45,694.69	-2,432
Bank of India	23,862.65	82.58	2,325.19	8.05	2,708.33	9.37	28,896.16	-6,074
Bank of Maharashtra	7,239.60	85.65	511.26	6.05	702.05	8.31	8,452.90	-1,146
Canara Bank	32,549.36	84.66	2,947.07	7.67	2,948.68	7.67	38,445.11	-4,222
Central Bank of India	12,833.50	81.82	1,719.50	10.96	1,131.80	7.22	15,684.80	-5,105
Corporation Bank	11,915.04	87.16	862.74	6.31	892.88	6.53	13,670.66	-4,054
Dena Bank	5,050.99	81.16	621.67	9.99	551.17	8.86	6,223.83	-1,923
IDBI Bank	19,655.29	84.59	1,892.62	8.15	1,686.75	7.26	23,234.65	-8,238
Indian Bank	13,487.55	85.35	1,380.19	8.73	935.64	5.92	15,803.38	**1,259**
Indian Overseas Bank	9,446.44	79.77	1,215.15	10.26	1,180.71	9.97	11,842.30	-6,299
Oriental Bank of Commerce	12,976.70	85.21	1,176.35	7.72	1,075.45	7.06	15,228.50	-5,872
Punjab & Sind Bank	4,800.89	82.63	620.22	10.68	388.65	6.69	5,809.76	-744
Punjab National Bank	35,495.94	83.96	3,619.54	8.56	3,159.45	7.47	42,274.93	**-12,283**
Syndicate Bank	16,528.37	83.01	1,643.89	8.26	1,738.88	8.73	19,911.14	-3,223
UCO Bank	7,123.77	**71.87**	1,677.48	**16.92**	1,110.41	**11.20**	9,911.66	-4,436
Union Bank of India	21,714.89	85.76	1,750.00	6.91	1,855.31	7.33	25,320.20	-5,247
United Bank of India	6,910.21	84.69	650.56	7.97	599.06	7.34	8,159.83	-1,454
Vijaya Bank	9,003.44	**88.00**	651.09	6.36	576.17	**5.63**	10,230.70	**727**
TOTAL	**451,331.00**	**82.11**	**50,437.46**	**9.18**	**47,923.40**	**8.72**	**549,691.86**	**-85,399**

Analysis

- Out of the Total Capital Requirements (CRAR) of PSBs in India, Credit Risk Capital requirements percentage is in the range of **71.87% to 88.00%**, Market Risk percentage is in the range of **5.86% to 16.92%** and Operational Risk percentage is in the range of **5.63% to 11.20%**.
- All most all public sector banks have incurred loss for the financial year ending 2018 except TWO Banks i.e., Indian Bank and Vijaya Bank.

Side Effects

- Market value of shares of PSBs are dipped, decrease in credit rating and less or no dividends for the shareholders of PSBs.
- Difficult to mobilize additional capital from the market on account decrease in the financial health position. Acceptance of Letters of Credit by International Banks issued by PSBs to their Import customers may pose a problem due to lower CRAR / CAR or decrease in financial strength of PSBs.
- Financial strength weakness of banks may lead to increase in attrition rate of Staff of PSBs (happening in some PSBs), thereby experienced manpower may have lost and increase in manpower cost for recruitment and slow pace of learning curve and productivity levels.
- Due to Bad financial position of the banks, customers may shift to other banks, thereby Asset Liability Management (ALM) may pose a problem and it leads to higher borrowing of funds with high cost to fill-up the GAP of ALM mismatches.
- Expectations of shareholders who contributed Capital is "Share Capital should be Risk Free". If their share capital is earmarked to Credit, Market and Operational Risks by banks ***nothing is available to the shareholder*** in case bank is in financial crisis or liquidation. In such a situation it is not a good investment proposal from shareholder's point of view.
- The minimum expectation of shareholders is assured dividends year-on-year basis, reasonable appreciation in market value of the share and secondary market for liquidity purpose. If banks are incurring losses, neither he will get dividends nor appreciation in market value of the share. Decrease in market value of shares leads no further investments made by the prospective shareholders in share capital to banks in case banks are going to mobilize additional capital through IPO.

Capital Requirements for Credit Risk and Provisions made by debit to profit and loss account for the Risk Weighted Assets of Public Sector Banks (PSBs) for the financial year ending 2018.

Name of the Bank	Data as on 31.03.2018 (Rs. in Crs.)				
	Loans & Advances (Rs. in Crs.)	Capital Requirement for Credit Risk (Rs. in Crs.)	% of Capital in Loans & Advances	Provisions made for Credit Risk (Rs. in Crs.)	% of Provision in Total Loans & Advances
State Bank of India	1,934,880	135,025	6.98	112,572.76	5.82
Allahabad Bank	166,436	12,610	7.58	14,308.10	8.60
Andhra Bank	164,535	13,800	8.39	15,443.77	9.39
Bank of Baroda	427,432	39,301	9.19	32,997.76	7.72
Bank of India	341,380	23,863	6.99	15,197.19	4.45
Bank of Maharashtra	94,645	7,240	7.65	8,662.34	9.15
Canara Bank	381,703	32,549	8.53	18,763.71	4.92
Central Bank of India	177,484	12,834	7.23	19,601.31	11.04
Corporation Bank	119,868	11,915	9.94	7,929.68	6.62
Dena Bank	74,239	5,051	6.80	8,480.08	11.42
IDBI Bank	171,739	19,655	**11.44**	26,923.12	**15.68**
Indian Bank	162,726	13,488	8.29	5,558.04	3.42
Indian Overseas Bank	175,888	9,446	**5.37**	17,333.78	9.86
Oriental Bank of Commerce	148,206	12,977	8.76	11,753.58	7.93

Punjab & Sind Bank	66,569	4,801	7.21	3,154.18	4.74
Punjab National Bank	433,735	35,100	8.09	37,611.82	8.67
Syndicate Bank	223,346	16,528	7.40	12,341.30	5.53
UCO Bank	123,989	7,124	**5.75**	15,090.61	12.17
Union Bank of India	313,860	21,715	6.92	13,499.84	4.30
United Bank of India	68,692	6,910	10.06	6,201.57	9.03
Vijaya Bank	118,677	9,003	7.59	2,442.64	**2.06**
TOTAL	**5,890,029**	**450,935**	**7.66**	**405,867.18**	**6.89**

Analysis

- Capital requirement for Credit Risk is due to increase in Risk Weighted Assets year-on-year basis i.e., for **Un-expected losses (UL)**.
- Credit Risk capital requirements percentage in Total Advance in the range of **5.75% to 11.44%**, UCO Bank is lowest and IDBI Bank is highest.
- With regard to provisions for **Expected losses (EL),** the percentage in the range of **2.06% to 15.68%** in Total Advances. The lowest is in Vijaya Bank and highest in IDBI Bank.
- Capital Requirements for Credit Risk in total capital of all Banks is almost more than 80%, which needs **more attention** to be paid by the Banks to minimize the Credit Risk.

Side Effects

- Poor Credit Management leads to increase in provisions and capital requirements. PSBs are having good training system, Standard Operating Procedures (SOPs) for credit products, Risk Focused Internal Audit (RFIA) system for Credit, Market and Operations Risks, Good appraisal system for career development, still advances are turning bad, the reason is due to increase in Operational Risks.
- If credit process like pre-sanction, sanction and post-sanction are not effectively implemented, Operational Risk arises which leads to Credit Risk. If 90% of credit guidelines strictly implemented at root level i.e., at credit processing centers / branches, slippage of loan accounts will reduce drastically. Credit Risk due to economy slow down or government policies is to some extent acceptable. As this is not under banks control.
- Increase in Credit Risk leads to increase in recovery costs, thereby it reduces spreads and bottom-line of the banks. Due to high credit risk, bank manpower has spent more time / cost on NPA Management instead of new loans i.e., manpower spent more time on recovery process like attending DRT Cases follow-up, initiation of SARFAESI Act, implementation of IBC, 2016 for large advances, compromise proposal, writing-off loss assets etc. these costs eats away the spreads of the bank, thereby making lending activity of banks **not economically viable**.
- Narrow Banking is one measure to control high credit risk banks. Narrow Banking reduces spreads, underutilization of manpower and infrastructure created by the banks for lending activity.
- ALM & Liquidity Management is a big challenge due to increase in credit risk. To maintain fine liquidity and minimize ALM mismatches, banks are forced to borrow funds from money market with higher cost.
- Bank play vital role in economic development of the country through lending process. Due to increase in Credit Risk, banks are forced to stop further lending and focus / attention on recovery process. Thereby it affects the economic growth of the country.

Capital Requirements for Market Risk and Depreciation provide by debit to profit and loss account for Investments of Public Sector Banks (PSBs) for the financial year ending 2018.

Name of the Bank	Data as on 31.03.2018 (Rs. in Crs.)				
	Investments (Rs. in Crs.)	Capital Requirement for Market Risk	% of Capital in Total Investments	Depreciation made for Investments	% of Depreciation in Total Investments
State Bank of India	1,060,986.71	19,614.55	1.85	10,206.45	0.95
Allahabad Bank	67,714.02	1,545.90	2.28	1,322.09	1.92

Andhra Bank	64,770.30	1,333.06	2.06	1,391.56	2.10
Bank of Baroda	163,184.53	2,679.44	1.64	1,847.29	1.12
Bank of India	137,111.11	2,325.19	1.70	1,468.64	1.06
Bank of Maharashtra	43,622.80	511.26	**1.17**	540.06	1.22
Canara Bank	142,753.32	2,947.07	2.06	2,359.34	1.63
Central Bank of India	102,631.61	1,719.50	1.68	2,663.07	2.53
Corporation Bank	70,349.76	862.74	1.23	1,139.02	1.59
Dena Bank	37,609.55	621.67	1.65	430.01	1.13
IDBI Bank	91,606.06	1,892.62	2.07	4,602.54	**4.78**
Indian Bank	71,397.77	1,380.19	1.93	594.56	0.83
Indian Overseas Bank	68,645.94	1,215.15	1.77	1,617.20	2.30
Oriental Bank of Commerce	69,902.27	1,176.35	1.68	954.69	1.35
Punjab & Sind Bank	32,981.76	620.22	1.88	115.05	**0.35**
Punjab National Bank	200,305.98	3,547.27	1.77	3,104.11	1.53
Syndicate Bank	80,354.23	1,643.89	2.05	1,223.35	1.50
UCO Bank	70,792.15	1,677.48	**2.37**	1,687.83	2.33
Union Bank of India	125,510.71	1,750.00	1.39	1,559.99	1.23
United Bank of India	50,401.80	650.56	1.29	293.43	0.58
Vijaya Bank	39,511.66	651.09	1.65	595.95	1.49
TOTAL	**2,792,144.04**	**50,365.19**	**1.80**	**39,716.23**	**1.40**

Analysis

- Capital requirement for Market Risk is due to increase in interest volatility and market prices of various scrips of investments made by the banks from time to time and in the range of **1.17% to 2.37%**. Lowest is in Bank of Maharashtra and Highest in UCO Bank.
- In addition to capital requirement for Market Risk, banks have to provide depreciation on investment in the range of **0.35% to 4.78%** (Lowest in Punjab & Sindh Bank and Highest in IDBI Bank)

Side Effects

- Credit vs. Investment ratio is High in Vijaya Bank (**75:25**) and Low in United Bank of India (**58:42**). Among PSBs Vijaya Bank Credit portfolio is High when compare to Investments and United Bank of India is Low. In United Bank of India, investments percentage ratio is more when compare Credit vis-à-vis with other PSBs. Low Credit Portfolio reduces / losing interest income, as yield on investments is lower than yield on advances.
- Depreciation on Investments provided by IDBI Bank is more i.e., **4.78%** in investment portfolio and Punjab & Sindh Bank is low **0.35%**. While investing surplus funds in Money Market instruments by Treasury Department of Banks, more analytical study is required on Interest rate volatility and market price trends of both SLR and Non-SLR investments. Thereby depreciation provisions on investments will reduce.
- More depreciation on investments provided by the banks means quality of investments are not up to the mark. One side the bank is losing interest on these investments on the other side degree of risk is high i.e., in getting back the principal amount on maturity date.
- While investing surplus funds by the banks, cardinal principles of investment is to be followed i.e., Liquidity, Profitability and Safety. Every investment in Investment Basket should satisfy these cardinal principles of investments, thereby it mitigates the Market Risk.
- Strict follow-up of RBI and FIMMDA guidelines on Treasury Operations of the Banks mitigates the Market Risk.

Capital Requirements for Operational Risk and Manpower Costs of Public Sector Banks (PSBs) for the financial year ending 2018.

Name of the Bank	Data as on 31.03.2018 (Rs. in Crs.)				
	Manpower	Capital Requirement for Operational Risk	Per Employee Operational Risk Capital Requirement	Manpower Costs per annum	Average Manpower Cost
State Bank of India	264,041	17,972	0.0681	33,178.68	**0.1257**
Allahabad Bank	23,967	1,619	0.0675	2,158.10	0.0900
Andhra Bank	19,921	1,377	0.0691	1,857.79	0.0933
Bank of Baroda	55,662	3,714	0.0667	4,606.87	0.0828
Bank of India	48,680	2,708	0.0556	4,903.27	0.1007
Bank of Maharashtra	12,932	702	0.0543	1,618.06	**0.1251**
Canara Bank	58,855	2,949	0.0501	5,444.10	0.0925
Central Bank of India	36,843	1,132	**0.0307**	3,983.37	0.1081
Corporation Bank	19,419	893	0.0460	1,592.82	0.0820
Dena Bank	13,613	551	0.0405	1,587.50	0.1166
IDBI Bank	17,475	1,687	0.0965	1,781.08	0.1019
Indian Bank	19,843	936	0.0472	2,100.25	0.1058
Indian Overseas Bank	27,936	1,181	0.0423	2,994.15	0.1072
Oriental Bank of Commerce	21,977	1,075	0.0489	1,756.63	0.0799
Punjab & Sind Bank	9,321	389	0.0417	1,123.00	0.1205
Punjab National Bank	74,897	31,034	**0.4144**	9,168.80	0.1224
Syndicate Bank	35,011	1,739	0.0497	3,605.21	0.1030
UCO Bank	23,943	1,110	0.0464	1,841.82	**0.0769**
Union Bank of India	37,587	1,855	0.0494	3,332.17	0.0887
United Bank of India	14,814	599	0.0404	1,712.59	0.1156
Vijaya Bank	16,079	576	0.0358	1,607.36	0.1000
TOTAL	**852,816**	**75,798**	**0.0889**	**91,953.62**	**0.1078**

Analysis

- **BIA**-Basic Indicator Approach method followed by more PSBs to arrive capital requirements for Operational Risk i.e., Average Gross Income of previous 3 years multiplied by 15%.
- **Per Employee Operational Risk Capital Requirement** is High in **0.4144** Crs. in Punjab National Bank and Low in **0.0307** Crs. in Central Bank of India. Higher per employee Operational Risk Capital denotes more Operational Risk to meet the un-expected losses of Operational Risks in the bank.
- **Average Manpower Cost** is High in **0.1257** Crs. per annum in State Bank of India followed by Bank of Maharashtra **0.1251** Crs. per annum. Whereas it is low in **0.0769** Crs. in UCO Bank. Manpower cost and operational risk are interrelated, when the manpower cost is increasing, it denotes the bank is hiring / having skilled and experienced manpower by offering higher salaries & perks, thereby the Credit, Market and Operational Risk should be within control.

Side Effects

- More Operational Risk leads not only increase in Credit Risk but also Market Risk. *Credit and Market Risk is inversely proportionate to Operational Risk.* As Operational Risk at the broadest level includes the breakdown by **four** causes:
    - People
    - Process
    - Systems and
    - External factors

- Due to decrease in growth rates of Interest Spreads, Net Interest Income and Non-Interest Incomes (i.e., Exchange, Commission and Discount) of Banks, Capital requirement for Operational Risk as per BIA ***may not be sufficient to cover the future un-expected losses***.
- **"Credit-Market-Operational Risks are interdependent"**. Once, Banks are giving more focus / attention in controlling Operational Risks areas, automatic impact will be there in reduction of Credit and Market Risks of Banks. Hence, banks should give more focus on Operational Risk and in particular on **PEOPLE, PROCESS AND TECHNOLOGY** risk aspects. These **THREE** contribute substantial amount in mitigation of Credit and Market Risks.

Examples

- People in the Organization have to adhere to the laid down systems and procedures in respect to all operations of the Bank. For example, in credit process (pre-sanction, sanction and post-sanction formalities are very important), if these are not properly followed by people working in Credit Department, it not only increases the Operational Risk of the Bank but also Credit Risk.
- Processes in the organization should support for increase in the quality of lending, productivity and cost effective, if credit processes are not standardized or streamlined, then it leads to poor quality of credit with primary impact on Operational Risk and Secondary Impact on Credit Risk and Market Risk of the Bank simultaneously.
- Error Free, speedy Technology support are available in delivery of credit to the customers. If proper technology systems are not in place in the Credit System, then it leads to Operational Risk and in turn leads to Credit Risk of the Bank.
- The same type of strategies are applicable for "Treasury Operations" of the Bank. Quality Personnel, Trained and Good Skill set People are to be placed in the "Treasury Operations" of the Bank, it will not only decrease the Operational Risk of the Bank but also Market Risk of the Bank.

Challenges in identifying Operational Risks

- Credit and Market risks are relatively easy to predict when compare to operational risk.
- Defined rules and systems were placed to quantify the credit and market risks and not for Operational Risk.
- Banks were equipped with good technology systems, processes in identification and quantifying credit and market risks and for Operational Risk it is missing.
- Operational Risk scope is wider than credit and market risks. Quantifying in monetary terms of Operational Risk is not that easy of credit and market risks.
- More money, time and efforts are required to control the operational risk areas.
- Train the people of the bank in 'Operational Risk Management Modules' requires more funds and time and more over extra focus on Operational Risk Management dilutes core activities of the bank.
- Incremental Cost is more than incremental benefit in implementation of mitigating measures of some operational risks.
- Full-fledged IT tools in identifying or quantifying operational risk are not available in banking industry and it is difficult to develop IT systems and it requires lot of expertise and skills for both to IT developers and bank domain experts.
- As research and development in Operational Risk areas in the banks are in the initial stages, it requires some more time to develop full-fledged IT tools in this regard.
- Historical data requires quantifying the operational risks of banks at least past five to ten years i.e., type of operational risk and its loss to the bank.

Strategies to mitigate the Operational Risks in Banks

- Standardization of Internal Checks for critical processes in the Bank (Due to high volumes of business in banks, operating staff are diluting the laid down norms, thereby frauds are increasing).
- 100% Adherence of Systems and Procedures designed by the Bank to be followed by operating staff.
- Strengthening "All Types of Audit" and in particular "Risk Focused Internal Audit - RFIA.

- Train the Staff on Risk Mitigation Areas along with product, process, marketing Training.
- Invite suggestions from Staff on 'Operational Risk Mitigation Areas'. Take feedback from the operational level staff from time to time in respect of risk mitigation measures and tighten the processes / systems.
- Focus on High Risk Areas and Processes. Risks are to be classified through **VED Analysis** based on Risk Profile (**V**=Vital, **E**=Essential and **D**=Desirable) and develop suitable systems to mitigate the same.
- Develop matrix for quantifying the risks for various operational risk areas.
- Implement the best risk mitigation practices implemented by other banks both domestic and international banks i.e., Inter-firm or Intra-firm studies are required.
- Implement the Rewards and Punishments in High Risk prone processes.
- Develop suitable system of Annual Appraisal Report of the Personnel to access the capabilities and skills of the people in mitigating the various risks in their area of operations.

Conclusion

Systematic and proactive identification, assessment, measurement, monitoring, mitigation and reporting of the operational risks are need of hour in Banking Industry. Following are important aspects in mitigating Operational Risks in Banks.

- People working in Audit Department of the Bank are **best source** in identifying operational risks areas and failure of control systems. Audit Department should fully involve in risk identification and mitigation process of Operational Risks of the Bank. Based on the audit reports and also feedback of auditors, banks can develop good risk profiles and develop strategies to mitigate the same.
- Job family concept has to be introduced in Audit Department of the Bank. **NO** 'Job Rotation' of Auditors i.e., from Audit to General Banking Department or other departments. This system contributes to increase the skills sets of the audit staff, thereby they can contribute in identifying operational risks areas in the banks. As they are the better judges to quantifying the Operational Risk in Bank Branches.
- Operational Risk areas can be mitigated through coverage of suitable Insurance Policies for certain high risk operational areas. This is an opportunity to insurance companies in India to develop innovative insurance products to the banks for various operational risks. Thereby banks need not provide higher capital requirements for operational risks and General Insurance Companies in India are having good knowledge on various Operational Risk areas and they can provide good suggestions and strategies to mitigate the various Operational Risks of Indian Banks.

Arriving Capital Requirements for Credit, Market and Operational Risk is not difficult task and it requires less human intervention, IT systems will calculate the Capital Requirement amounts if we provide formulae. But **role of the personnel** in the bank is to devise control / mitigate mechanism / measures for these three important risks and manage the "Bank Business Show" with the help of existing capital (as capital rationing exist in the economy).

Efficient control function is the **primary tool to mitigate the various risks of the bank**.

Providing provisions and Capital requirements is secondary to set-off the losses arise due to various risks of the bank.

Finally, successful implementation of **Primary Tool is sufficient to mitigate the various risks of the bank** i.e., ***CONTROL Function in Banks*.** Hence, control systems are to be strengthened from Branch to all levels management to mitigate the various risks in Banking Industry in India.

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Blockchain – For Achieving Excellence in Accountancy

Preamble

World is passing through a very dynamic era where, everyday technology is improving to improve life of human being. What looked impossible 10 years back has become life of a common people today. Highly complex issues are getting simplified, however more and more complexity is created in different areas. None of the profession can escape from it including accounting profession which is considered as the alternate name of trust and blockchain offers the trust to every transaction.

Everyone is striving for Excellence and aiming for Safe, Reliable and Compliant and Secured transactions.

Excellence is achieved when Technical System and Human capabilities are pulled in tandem, high performance culture evolves which engages all minds on board for continuous improvement. I consider following six pillars forExcellence in Accounting and /or Finance. Viz.

1. Transparency
2. Accuracy
3. Security
4. Incorruptible and /or integrity
5. Customer value and
6. Total stakeholders Involvement

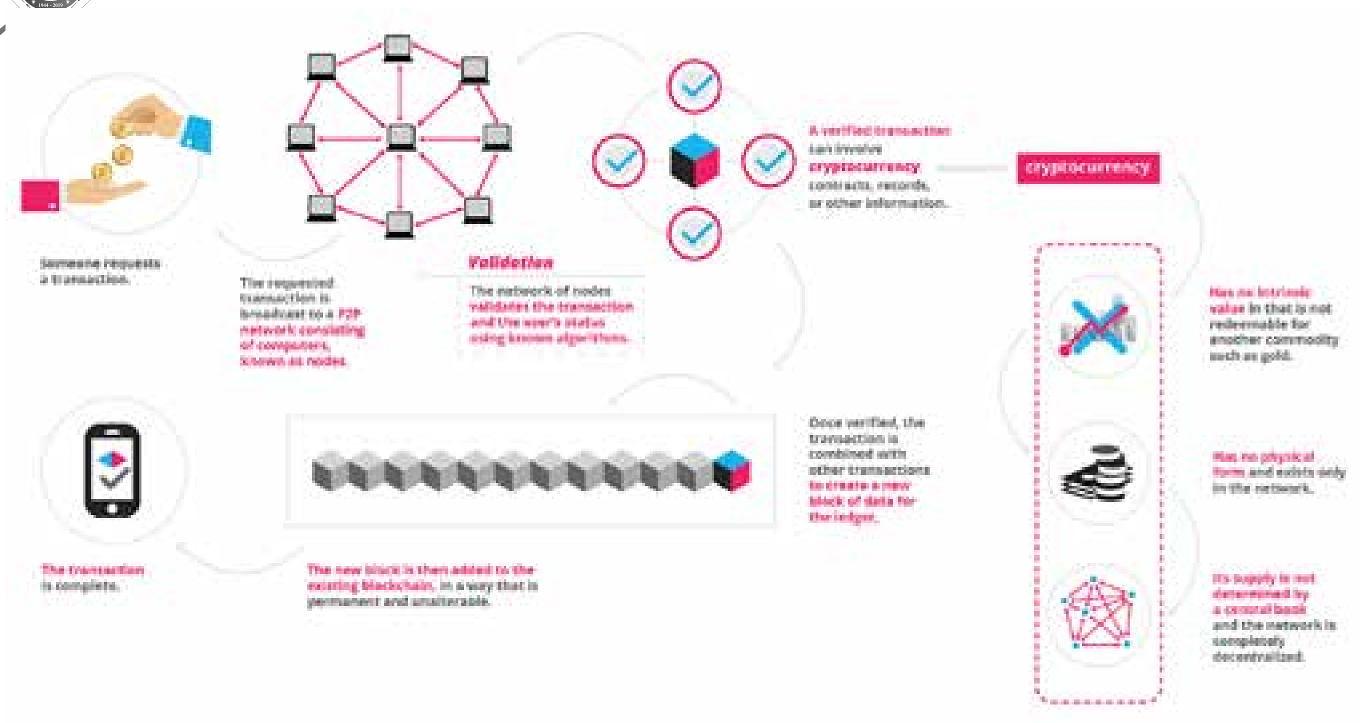
Blockchain is expected to bring excellence in accountancy profession and drive the safe and secured transaction without any error and pushing human capabilities for value added work.

Introduction

The Blockchain is definitely ingenious invention – the brainchild of a person or group of people known by the pseudonym, Satoshi Nakamoto. But since then, it has evolved into something greater, smarter, reliable technology solution.

By allowing digital information to be distributed but not copied, Blockchain technology created the backbone of a new type of transactions. Originally, it was devised for the **digital currency**, Bit coin,the tech community is now finding other potential uses of the technology.

In simple terms, Blockchain is a distributed database which is designed to update and reconciled regularly and continuously. The Blockchain database isn't stored in any single location, meaning the records it keeps are truly public and easily verifiable. No centralized version of this information exists for a hacker to corrupt. Hosted by millions of computers simultaneously, its data is accessible to anyone on the internet.



Don & Alex Tapscott, authors Blockchain Revolution (2016) defined that The Blockchain is an incorruptible digital ledger of economic transactions that can be programmed to record not just financial transactions but virtually everything of value.

Blockchain technology has a built-in robustness. By storing blocks of information that are identical across its network, the Blockchain cannot:

1. Be controlled by any single entity.
2. Has no single point of failure.

Ian Khan, TEDx Speaker | Author | Technology Futurist explained that

"As revolutionary as it sounds, Blockchain truly is a mechanism to bring everyone to the highest degree of accountability. No more missed transactions, human or machine errors, or even an exchange that was not done with the consent of the parties involved. Above anything else, the most critical area where Blockchain helps is to guarantee the validity of a transaction by recording it not only on a main register but a connected distributed system of registers, all of which are connected through a secure validation mechanism."

Blockchain: Transparent, incorruptibleand decentralised network of nodes

The blockchain network lives in a state of consensus, one that automatically checks in with itself every ten minutes. A kind of self-auditing ecosystem of a digital value, the network reconciles every transaction that happens in ten-minute intervals. Each group of these transactions is referred to as a "block". Two important properties result from this:

1. **Transparency** data is embedded within the network as a whole, by definition it is public.
2. **It cannot be corrupted** altering any unit of information on the blockchain would mean using a huge amount of computing power to override the entire network. Therefore integrity of Data is very high.

Every computer connected to the blockchain network using a client that performs the task of validating and relaying transactions gets a copy of the blockchain, which gets downloaded automatically upon joining the blockchain network.

Every node is an "administrator" of the blockchain, and joins the network voluntarily (in this sense, the network is decentralized). However, each one has an incentive for participating in the network.

Together they create a powerful second-level network, a wholly different vision for how the transaction can function.

Blockchain's transparency gives visibility to all transactions for approved users, and this may decrease auditors' work with sampling and validating transactions.

By design, the blockchain is a decentralized technology.

Anything that happens on it is a function of the network as a whole. By creating a new way to verify transactions aspects of traditional commerce could become unnecessary. Stock market trades become almost simultaneous on the blockchain, for instance — or it could make types of record keeping, like a land registry, fully public. And decentralization is already a reality.

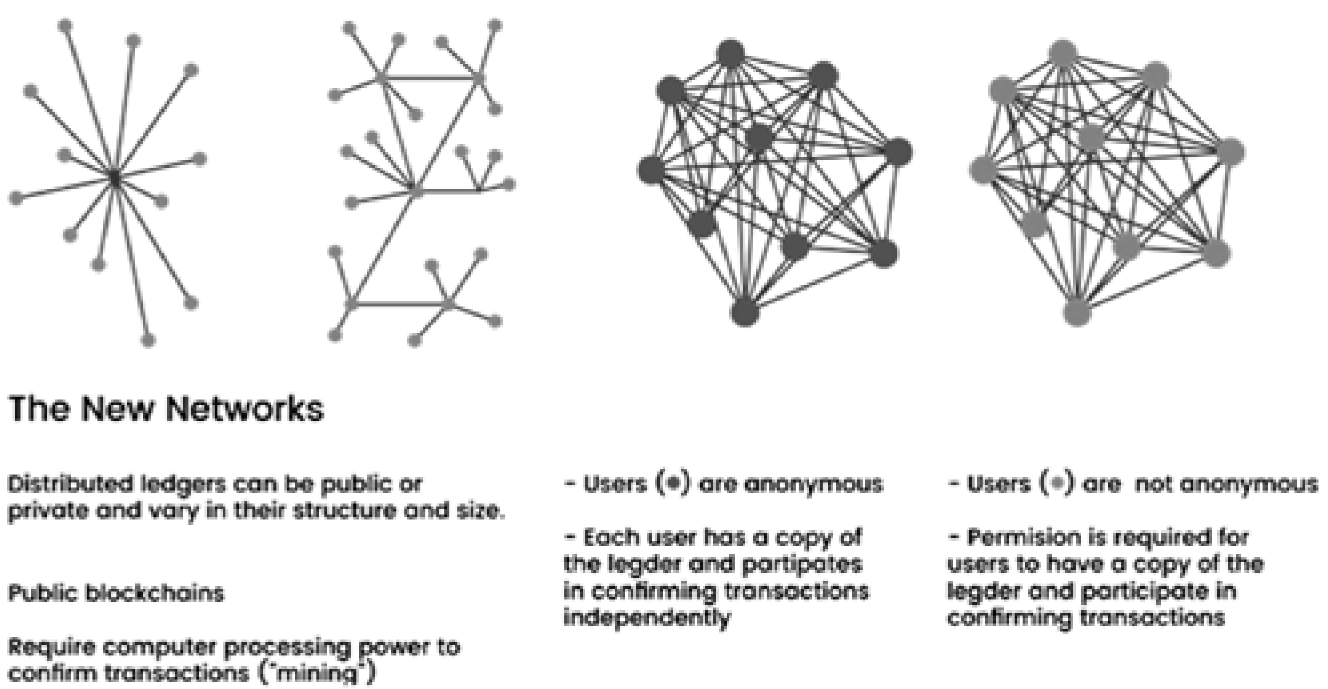
Decentralization means the network operates on a user-to-user (or peer-to-peer) basis. The forms of mass collaboration this makes possible are just beginning to be investigated.

Currently, finance offers the strongest use cases for the technology. e.g. international remittance, wallet apps, banking transactions, insurance etc.Other areas being explored are listed in Annexe 1.

Goldman Sachs believes that blockchain technology holds great potential especially to optimize clearing and settlements, and could represent global savings of up to $6bn per year.

Technology can be represented graphically as follows.

Centralised Decentralised Distributed Ledgers



Thus Blockchain is a trustless, distributed ledger that is openly available and has negligible costs of use. The use of the Blockchain for accounting use-cases is hugely promising. From simplifying the compliance with regulatory requirements to enhancing the prevalent double entry bookkeeping, anything is imaginable.

Blockchain: Accuracy

Modern financial accounting is based on a double entry system. Double entry bookkeeping revolutionized the field of financial accounting during the Renaissance period; it solved the problem of managers knowing whether they could trust their own books. However, to gain the trust of outsiders, independent public auditors also verify the company's financial information.1 Each audit is a costly exercise, binding the company's accountants for long time periods.

In a blockchain-based accounting system, manipulation or falsification of data is impossible. Data is posted only once after validation for every type of transactions as well as application, therefore human error have very little scope and thereby increase accuracy. The math and system symbols will not match making the data of highest level of accuracy.

Blockchain: Enhanced security

The entire accounting system is built, such that forgery is impossible or at least very costly. To achieve this it relies on mutual control mechanisms, checks and balances.

By storing data across its network, the blockchain eliminates the risks that come with data being held centrally.

Its network lacks centralized points of vulnerability that computer hackers can exploit. Today's internet has security problems that are familiar to everyone. We all rely on the "username/password" system to protect our identity and assets online. Blockchain security methods use encryption technology.

The basis for this is the so-called public and private "keys". A "public key" (a long, randomly-generated string of numbers) is a users' address on the blockchain. Transactions/ Bitcoin sent across the network gets recorded as belonging to that address. The "private key" is like a password that gives its owner access to their Transaction / Bit coin or other digital assets. Store your data on the blockchain and it is incorruptible. This is true, although protecting your digital assets will also require safeguarding of your private key by printing it out, creating what's referred to as a paper wallet.

Blockchain: Customer Value and Stakeholders Involvement

Blockchain is inarguably one of the most discussed technologies of 2018, and there's a reason for that. As a sort of indestructible and incorruptible ledger, it offers a new way to store and share data in such a way that it's simultaneously interoperable. This could reduce the need for accountants to store data in disparate locations with no way to consolidate and validate it all.

Blockchain technology may represent the next step for accounting. Instead of keeping separate records based on transaction receipts, companies can write their transactions directly into a joint register, creating an interlocking system of enduring accounting records. Since all entries are distributed and cryptographically sealed, falsifying or destroying them to conceal activity is practically impossible. It is similar to the transaction being verified by a notary – only in an electronic way. The companies would benefit in many ways: Standardisation would allow auditors to verify a large portion of the most important data behind the financial statements automatically. The cost and time necessary to conduct an audit would decline considerably. Auditors could spend freed up time on areas they can add more value, e.g. on very complex transactions or on internal control mechanisms.In fact, you could argue that blockchain itself is an accountancy-based technology. After all, while it's mostly known to people as the technology that underpins bit coin and other crypto currencies, it underpins them by reconciling accounts. When it comes to other industries such as real estate and the automotive industry, it's mostly used to track ownership of assets and the values at which they're bought and sold.

That's why blockchain has so much potential for the accountancy industry. It can provide a much more transparent and durable framework for us to track and measure assets. It could make it easier than ever to understand what assets are available in real-time, along with their values and any other commitments that could affect cashflow in the future.

Thus the technology address the customer's need as well as involve all stakeholders including supplier, employee, customer, society as well as legal authorities for every transaction and reduces work of auditor such that the finance profession can focus on more value added work including analysis, making and revising standards and practices, incident investigation as well as supporting customers for their benefits.

The role of Accountants in blockchain technology

The good news is that the technical and implementation side of things will always be carried out by specialist developers. The bad news is that accountant will still be expected to have a thorough understanding of what blockchain is and what the technology itself has to offer us.

That's why more and more accountancy schools are starting to offer courses and certifications on blockchain technology. At the same time, demand is growing slowly but surely, especially as more and more vendors are starting to use blockchain technology in the products that they're offering. We could all soon be using blockchain-based systems to file our tax returns, even if we don't necessarily know it.

Sure, there's been a certain amount of discussion about whether blockchain technology will make accountants redundant. But the same discussions seem to pop up about every new technology, and very few of those predictions have turned out to be accurate. The truth is that blockchain's impact on the accounting industry is likely to be similar to that of the development of the personal computer. It might change the way that we carry out individual tasks, but it won't get rid of our jobs completely.

Conclusion

Blockchain is coming to disrupt everything, literally. Wherever data is stored, there's an opportunity for blockchain to come along and take over things, but that becomes even truer when it comes to industries where interoperable data is required. For accountancy, blockchain-based records systems will keep accountancy firms on their toes by increasing transparency and making it easier for people to switch providers at the drop of a hat. They will also make it easier for auditors to step in and to make sure that everything's in order.

Still, this increased transparency is a good thing for clients and providers alike, and the only people who are likely to lose out are the ones who are cutting corners or whose services aren't quite up to scratch. Those who are fully compliant and who are quick to react to and adopt new technologies like blockchain are those who will come out on top.

Ultimately, blockchain is going to be game changer in accounting and bring Excellence in all aspects of Transparency, Accuracy, Security and Reliability. It also addresses Customers value as well as involves all stakeholders for validation of data before transaction is complete.

References:

1. What is Blockchain Technology? A Step-by-Step Guide For Beginners by Blockgeeks
1. Blockchain : A game changer in accounting by Delloite
2. Blockchain and future of Accountancy by ICAEW
3. How Blockchain is Disrupting the Accounting Industry by James Paine

Annexe 1 : Areas where use of Blockchain is in advance stage or being explored.

Sr. No.	Area of application
1	Finance Services, e.g. Asset Management, Insurance, Cross boarder payments, Bit coins
2	Smart Property, e.g. Property registers, money lending, car and smart phone security,
3	Internet of Things, e.g. smart appliances, supply chain sensors,
4	Health care, e.g. personal health records, managing healthcare supply
5	Intellectual Property, e.g. ownership rights, royalty,
6	Government, e.g. smart contracts, self-management,
7	Identity management, e.g. Pass port, birth, death certificate, driving license, Voting card
8	Diamond, e.g. Digital pass port to each diamond
9	Energy, e.g. Production, trading, consumption and Billing

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Robotics Process Automation (RPA)

Today's age is automation age, automaton has changed world completely and made our life easy. Few years back one innovations landed on the earth, introduction of the Humanoid robot "SOPHIA". She was introduced in 2016 and made a public appearance in the same year. According to manufacturer Sophia uses Artificial Intelligence, virtual data processing and facial recognition. Other development in this area is "Automated Journalism" where robots read the news in newsroom.

Robotic Process Automation (RPA)is another step forward in finance world. RPA an advanced technology can be used at multiple industries that automates huge quantities of redundant tasks by applying artificial intelligence (AI). RPA software known as "Software Robots" which can handle the repetitive tasks like processing transactions in ERP system, manipulating data, triggering responses and communicating with other digital systems. RPA applications can be used in multiple industries like insurance claims processing, invoice processing, customer feedback analysis, onboarding of employees, HR operations etc. Though the name is Robotics Process automation but there is no actual robot involves which we can see in Manufacturing or heavy industries, RPA are known as software robots.

Every word in RPA has some meaning

- **Robotics: -** it is a machine which can work on behalf of human being without any error
- **Process: -** Process is a series of steps to perform meaningful activity
- **Automation: -** Automation is any process that can be performed by robot without any human interference.

In the coming future we can say that around 50 % of the existing finance sector jobs will be performed by RPA. This is because todays financial world requires accuracy, cost efficiency, extraordinary levels of speed which may not be possible by a human being. That is a reason now a days finance world is looking for RPA and artificial intelligence(AI) to drive the automation to transform their business.

To understand RPA in detail we will take one case study of accounting process and discuss pre-RPA scenario and post RPA scenario.

Mr. Amitabh in working in accounts department as Accounts Payable Clerk. The PRE RPA-accounting process is as follows: -

- Mr. Amitabh is working in ERP environment, daily he receives multiple invoices in PDF from vendors in his outlook
- He pulls vendor data (Name, Address, Invoice Amount and Invoice Number) from the invoice received in outlook in PDF format
- He pasts data into excel for reporting & approval purpose
- Once approval is received he uploads the data in ERP
- Finally, he processes payment in ERP and ERP interface with bank software will send the payment

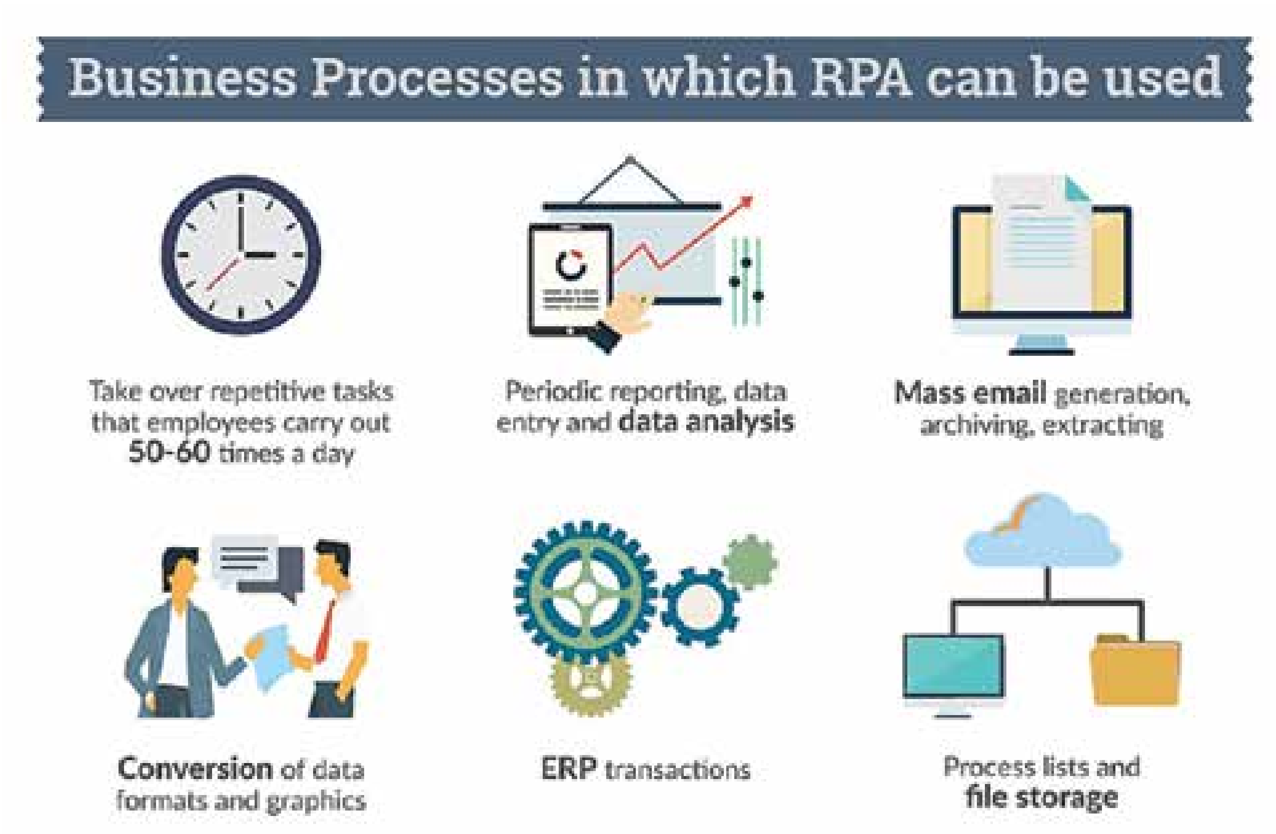
details to bank for making payment

We can make Mr. Amitabh's life easier by introducing RPA. The Post RPA scenario is as follows: -

- Mr. Amitabh will start RPA application
- RPA will Automatically save the invoice file from outlook to desired location
- RPA will open a PDF file and copy the required data and paste into excel and send a mail for reporting and approval purpose
- Once approval is received Mr. Amitabh will again start RPA process
- RPA will automatically process the payment in ERP. Once this activity completes RPA will Inform Mr. Amitabh with the status of the payment Job

By Introducing RPA Mr. Amitabh saved almost 80% of his time for invoice processing and he can utilize the same for different activities.

The RPA can be used in various business processes like multiple data entry, migration activity, report monitoring and generation, ERP system job monitoring and reporting the results, validation of the information and so on. In case of finance specific functions RPA can be implemented for Account receivable functions, Controller function, Financial cost allocation, financial close and reporting, accounting reconciliation etc.



<u>Following are the benefits of the RPA Implementation: -</u>

- The benefits of RPA can include, improved accuracy, quicker processes, and management of peak workloads.
- Robots are programed to enhance the accuracy, it does not make any mistake as it perform the tasks in the manner in which they are guided
- RPA also helps to reduce the processing time of the operations, it can work 24/7, we can expect around 50 to 75% of time saving

- With the help of RPA we can implement scalable solutions which fits into current setup
- It is very user friendly, RPA runs on the top of existing IT infrastructure. It is integrated with all the ERP system
- A well implement RPA can provide good return on investment

Following are the disadvantages of RPA implementation: -

- Potential Job Losses is one of the biggest concern with introduction of robotics automation. Robot can perform at faster and consistent rate then there may be a situation human may not be required at all
- Initial investment cost is one of the biggest hurdle to decide to invest in RPA, or wait until a later stage. Before implementing a detailed study of cost benefit analysis is suggested
- RPA is user friendly software but still it requires a minimum training, successful implementation still require a effective coordination between departments
- Availability of skilled staff, getting skilled resource for specialized role is a challenge to the companies. Introduction of RPA may add another layer to that as robot requires a programming and knowledge to operate them, so existing employees need to extend their knowledge & own the required skill set. Implementing company will help with the initial installation and setup processes, but in long term right skilled person is required to run the show

Following are the RPA Opportunities: -

RPA is a growing field in the market, many organizations are coming up with multiple ways to implement and use the RPA. A person with RPA skill have multiple opportunities, following are few areas where one can work

- **Developer: -** This is a complete technical position. A functional knowledge will be added advantage. A developer will write the code to develop the RPA solution
- **Project Manager: -** This position can be claimed by functional as well as technical resource. Project manager is responsible for overall project. Cost accountants can work as a project manager
- **Solution Architect: -** Solution Architect is responsible for the design of one or more application or services within organization. Cost accountants can work as a Solution Architect
- **Business Analyst: -** Business Analyst is involved in the design or modification of the system, he interacts with the business stake holders and SME to understand their problems and need. Cost accountants can work as Business Analyst

Robotics process automation can be carried out with the help of various tools some of the tools are

I strongly believe that robotic AI automation is the wave of the future for global finance world. It's crucial that we explore what we can do today to position our self for success tomorrow.

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Future of IBC – Role of CMA

IBC 2016 started two years ago and is in the process of settling itself in a slow and steady manner. This legislation has been identified as one of the most powerful and effective economic legislation in the country and has received the award from GRR. India won the prestigious GRR Award for the Most Improved Jurisdiction in a glittering ceremony held in Banking Hall, London on 26th June, 2018. This award recognises the jurisdiction which improved its restructuring and insolvency regime the most over the last year. Other jurisdictions shortlisted for this award included the European Union and Switzerland. The award is given by the Global Restructuring Review (GRR), an online daily news service and magazine on cross-border restructuring and insolvency law. The GRR introduced global awards in nine categories in 2017. One of the nine award categories is the Most Improved Jurisdiction. The winner is selected on the basis of a rigorous global nomination process. Singapore won the award in Most Improved Jurisdiction category in 2017 and India in 2018.

In other words the very objective of the IBC is two fold – recovery of money from the non-performing assets and bringing a resolution for the sick entities which have been suffering from the financial burden. In these two years a new profession of Insolvency Resolution Professionals has emerged and more than couple of thousands of professionals have been registered with the IBBI and more than half of them are engaged in various corporate insolvency resolution processes at different levels.

In the present set up only corporate insolvency resolution process has been notified and what is covered is the companies and LLP being regulated by the Ministry of Corporate Affairs. For the administration and implementation of the IBC, IBBI with 12 National Comapany Law Tribunals, more than 2000 Insolvency Resolution Professionals, Insolvency Professional Agencies as well as Insolvency Professional Utilities are involved. In many of the NCLTs, the benches are not having the technical members and number of cases are piling up for want of disposal. Necessity has been felt for enhancement of more number of benches as well as opening of more number of Tribunals in order to meet the growing admission of various cases. Besides the initiation of cases by the banks, good number of operational creditors are showing interest in getting their money through this channel in preference to the other established channels of SARFAESI and DRT. The highlight of the code being stipulated time schedule to be followed vis-à-vis the long standing disposal of cases prevailing in the erstwhile system.

While the other professionals of CA, CS, Advocates, Bankers and others are allowed, our CMAs are also recognised to be a part of insolvency profession. What differentiates the Cost Accountants from the rest is their cost consciousness as well as the conservatism that has been imbibed into their blood right from the beginning. Cost control, cost benefit analysis and cost reduction being the main motto of our profession, our members play a vital role in not only administering the code but also to keep the costs under control. They strive all along to ensure that the corporate insolvency costs are kept at the barest minimum since the company has already been crippled by heavy burden of unbearable amounts of interest and other costs. The fundamental principles that have been taught that the cost of implementation of costing system or cost control and cost reduction should not be a prohibitive cost will play a very important role not only in deciding the professional fees payable to the IRP/RP but also in the entire resolution process till end. The empathy towards the sick company, compassionate attitude and approach towards the corporate involved in the process would drive the Insolvency Resolution Professional to sacrifice a portion of his fees also and to accept a very reasonable or slightly lower fees than the approach that *'let go' the other costs, I should be benefited in the process*. Instances are noticed by way of legal cases filed at different courts in different parts of the country by the operational creditors that despite the proposal is approved by the Committee of Creditors, assignments at a very high cost should not be given to the Big four/five entities or their associated LLPs. The main driving force in their arguments is that CIRP cost to be kept at as low as possible and extraneous expenditure under the head of forensic audit etc should not be undertaken, unless extremely necessary in those organisations who can afford to bear the expenditure to the tune of about Rs. 40-50 lakhs. The fear of the operational creditors that if the resolution applicant is taking care of the financial creditors, then their slice would be drastically reduced to a greater extent. In these areas, the role of Cost & Management Accountant would be more apt, helpful and effective. One of the quality required on the part of the insolvency professional is that he is not biased, transparent, treats all the stakeholders with uniform measure, law abiding and discharges his duties without any fear or favour. In respect of many of the cases filed by corporate creditors seeking replacement of the IRP/RP, courts have examined and evaluated to find out whether he is discharging his duties legally under the code or not than whether he could please the members of the committee of creditors. Many of the qualities required for an insolvency professional are by default adopted, nurtured and practiced by the cost accountants .over the years, as a matter of the best practices of the profession and as such CMA is most suited in IBC.

Presently some of the provisions of the IBC like Cross Border Insolvency, Insolvency Resolution of individuals and firms have yet not been notified by the Government. For the purpose of notification of IBC provisions for individuals and firms, we need lot of infrastructure in establishment of DRTs as well as DRATs throughout the country and they need to be strengthened and monitored thoroughly. Over a period of time, may be after the general elections in this year, when a new Government establishes and takes over, they may notify the said provisions for individuals and partnership firms in which case, the requirement of insolvency professionals would be huge. It will spread from cities to districts also and the volume of work that would be required to be handled would be enormous. Even if all the existing practicing members of our Institute qualify and enter this profession of insolvency and bankruptcy, it would not be sufficient to meet the demand. There is a requirement of estimate of more than a lakh of resolution professionals when all the provisions of the IBC are notified.

The complexities of the IBC would be further aggravated by notifying the cross boarder transactions by the Government. For the purpose, what is necessary is that our country need to enter into bilateral agreements with each country for the reciprocal arrangements of proceeding against the economic offenders who leave the country and feel they have been escaping from the arms of law. For this the insolvency professionals need to understand the laws of the land of the other countries, their systems and practices. In this area which can be termed as a 'creamy layer' lot of efforts would be required by senior members of our profession, as their revenue would be in terms of Dollars and Pounds and their dedicated efforts in resolving the issues as well as the realisation of the assets would bring lot of relief to the Banks/Financial Institutions and other creditors and credibility to the profession.

Cost Accountants – not correct – Cost & Management Accountants only need to manage the affairs of the corporate debtor under the provisions of the code. It is a challenge for the IRP/RP and also an opportunity to prove to the society/economy that he had managed the company in an appreciable/profitable way during the corporate insolvency resolution process period and when compared his performance as against that of the corporate debtor for the same period earlier, he can prove his managerial and administrative capabilities to run the company.

Besides that as against all the professionals entitled to join the profession of insolvency and bankruptcy, Cost Accountants only has a special quality by virtue of his nature of working and skill development. Be it Chartered Accountant or Company Secretary the reporting requirements like Statutory Audit Report or Secretarial Audit Report would not undergo any change be it textile, jute, cement, telecom or any other industry. Whereas Cost & Management Accountant need to have specialised knowledge in respect of each of the industries he is associated with, since his cost audit report would be varying with reference to the industry and there cannot be any uniform approach to be adopted. This gives a special skill, knowledge and deliverables to the Cost & Management Accountant to effectively and efficiently discharge his duties. This experience only would be looked into and invited and searched by the creditors while the assignments under IBC are allotted. The advertisements by the Banks, bear a testimony, to the above statement that the IRP/RP need to have specialised skill and knowledge in that area/industry and it is only the Cost & Management Accountants who could play a vital role.

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Casual Taxable Person Under GST

<u>Section 2(*20*) of CGST Act, 2017</u>: **"casual taxable person"** means a person who occasionally undertakes transactions involving supply of goods or services or both in the course or furtheranceof business, whether as principal, agent or in any other capacity, in a State or a Unionterritory **where he has no fixed place of business**.

As per Section 2(77) of the said Act, **"Non-resident taxable person"** means any person who occasionally undertakes transactions involving supply of goods or services or both, whether as principal or agent or in any other capacity, but who has no fixed place of business or residence in India;

A casual taxable person (other than those making supply of specified handicraft goods) making taxable supply in India has to compulsorily take registration. There is no threshold limit for registration. **Casual Taxable persons making supply of specified handicraft goods need to register only if their aggregate turnover crosses Rs. 20 Lakhs** (Rs. 10 lakhs for in case of Special Category States (i.e. Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Himachal Pradesh, Uttarakhand, other than the State of Jammu and Kashmir). A casual taxable person cannot exercise the option to pay tax under composition levy. He has to apply for registration at least five days prior to commencing his business in India

<u>COMPULSORILY REGISTRATION</u>

<u>Section 24 of CGST Act, 2017</u>: Notwithstanding anything contained in sub-section (*1*) of section 22, the following categories of persons shall be required to be registeredunder this Act,–

(*i*) Casual taxable persons making taxable supply

(ii) Non-resident taxable person making taxable supply

A. **<u>Registration-</u>**

- A casual/non-resident taxable person has to apply for registration **at least five days prior to the commencement of business**. There is no special form to register as a casual taxable person. The normal **FORM GST REG-01** which is used by other taxable persons can be used for obtaining registration by casual taxable person also. A casual/non-resident taxable person, before applying for registration, should declare his Permanent Account Number, mobile number, e-mail address, State or Union territory in Part A of **FORM GST REG-01**on the common portal, either directly or through a Facilitation Centre notified by the Commissioner.
- **In case of Non-resident taxable person, (Form REG-09 attached herewith) If PAN is not available, the registration can be obtained based on their Passport Number and Tax identification number or unique number on the basis of which the entity is identified by the Government of that country. Also, an authorized signatory needs to be appointed in case of foreign exhibitors who can act on their behalf so as to make compliance of provisions of GST. The NAME, PAN, MOBILE NO. & E-MAIL ADDRESS of authorized**

signatory needs to be furnished at the time of obtaining casual registration for foreign exhibitors.

- The casual/non-resident taxable person can make taxable supplies only after the issuance of the certificate of registration.

TIME LIMIT FOR OBTAINING REGISTRATION

Section 25 of CGST Act, 2017:(*1*) Every person who is liable to be registered under section 22 or section 24 shall apply for registration in every such State or Union territory in which he is so liable within thirty days from the date on which he becomes liable to registration, in such manner and subject to such conditions as may be prescribed.

Provided that a casual taxable person or a non-resident taxable person shall apply for registration at least five days prior to the commencement of business.

VALIDITY OF REGISTRATION CERTIFICATE & ADVANCE DEPOSIT OF GST

Section 27 of CGST Act, 2017.

(*1*) The **certificate of registration** issued to a casual taxable person or a non-residenttaxable person shall be valid for the **period specified in the application forregistration or ninety days from the effective date of registration, whichever is earlier** andsuch person shall make taxable supplies only after the issuance of the certificate of registration.

Provided that the proper officer may, on sufficient cause being shown by the saidtaxable person, extend the said period of ninety days by a further period not exceedingninety days.

(*2*) A casual taxable person or a non-resident taxable person shall, at the time of submission of application for registration under sub-section (*1*) of section 25, make an advance deposit of tax in an amount equivalent to the estimated tax liability of such person for the period for which the registration is sought.

Provided that where any extension of time is sought under sub-section (*1*), such taxable person shall deposit an additional amount of tax equivalent to the estimated tax liability of such person for the period for which the extension is sought.

(*3*) The amount deposited under sub-section (*2*) shall be credited to the electroniccash ledger of such person and shall be utilised in the manner provided undersection 49.

Invoice

The casual/non-resident taxable persons need to issue a tax invoice in accordance with Section 31 of CGST Act, 2017(Read with Rule 46 of CGST Rules, 2017) for each and every supply made by them. Also, HSN Code up to 4 digits needs to be mentioned on tax invoice.

Input Tax Credit-

In respect of goods or services received by the casual taxable persons, the input tax credit can be availed where all the following conditions are satisfied-

- Possession of a tax invoice or debit note or document evidencing payment.
- Receipt of goods and/or services.
- The Supplier of Goods or services must have made the payment of tax to the credit of Government.
- Furnishing of a return.

- **However, as per section 17(5)(f) of CGST Act, 2017, Non-resident Taxable person is not eligible to avail input tax credit on goods or services received except on goods imported by them.**

Applicability of Custom Provisions on Import of Goods for the purpose of Exhibition Cum Sale-

With respect to import of goods in India for the purpose of payment of Custom duty, if the goods specified in schedule-I of Notification No. 8/2016 Customs (Attached herewith) dated 05-02-2016(Read with Earlier Notification 157/90-Customs dated 28-03-1990 and Custom Procedure dated 07.06.2012) are imported in India for the purpose of **display** in the event specified in Schedule II and is sponsored or approved by the Government of India or **India Trade Promotion Organization (ITPO), the same shall be exempted from payment of custom duty subject to conditions as prescribed in the notification.**

<u>Returns</u>

The casual/non-resident taxable person is required to furnish the following returns electronically through the common portal, either directly or through a Facilitation Centre notified by the Commissioner:

- **a) FORM GSTR-1** giving the details of outward supplies of goods or services to be filed on or before the tenth day of the following month.
- **b) FORM GSTR-2**, giving the details of inward supplies to be filed after tenth but before the fifteenth day of the following month.
- **c) FORM GSTR-3** to be filed after fifteenth day but before the twentieth day of the following month.
- **d) FORM GSTR-3B** to be filed before the twentieth day of the following month.

<u>Note</u>:- Presently only FORM GSTR-1 and FORM GSTR-3B is required to be filed. However, where the aggregate turnover of such person does not likely to exceed Rs. 1.5 crore rupees in the current financial year, then such person may opt an option to file GSTR-1 quarterly.

<u>ANNUAL RETURN</u>

<u>Section 44(1) of CGST Act, 2017:</u> Casual Taxable Person is not required to furnish annual return under GST.

<u>REFUND</u>

<u>Section 54(*13*) of CGST Act, 2017</u>: Notwithstanding anything to the contrary contained in this section, the amountof advance tax deposited by a casual taxable person or a non-resident taxable person undersub-section (*2*) of section 27, shall not be refunded unless such person has, in respect of theentire period for which the certificate of registration granted to him had remained in force, furnished all the returns required under section 39.

Summary

1. Any person making taxable supply in India, where it doesn't have any fixed place of business makes it liable to seek for registration as a Casual Registration Person.
2. There is no special form to register as a casual taxable person. The normal form GST REG-01 can be used for registration by casual taxable person
3. The registration must be obtained at-least 5 days prior to commencement of business.
4. The registration can be sought for a maximum period of 90 days from the effective date of registration
5. All the tax liability needs to be deposited in advance at the time of seeking registration in Form GST REG-01. Such liability is to be deposited with the help of challan containing TRN generated after successful validation of Mobile and E-mail credentials.
6. After deposit of tax in advance, an acknowledgement in Form GST REG-02 will be reflected on the common portal.
7. Further extension of registration period (Maximum 90 days) can be sought before the expiry of original period. Also, estimated tax needs to be deposited for extended period.
8. GST returns to be filed as usual. The tax deposited in advance will be adjusted with the tax liability arising in the returns. No Annual return under GST is to be filed.
9. Any refund of the balance unutilized will be eligible for refund only after expiry of above period and due filing of returns

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Internal Financial Controls

Impact On Ultimate Reporting

Introduction

To understand internal financial control just answer me some questions.

A distance of about 300 km is covered in a car byDriver A in 2 hours and Driver B in 5 hours. Which driver will you prefer?

The obvious answer that I heard was driver A but let me put some additional condition

'Car of Driver A' Had no brakes (Akin to Absence of Control)

Or

- The brakes are beyond the reach of 'Driver A' (Control Design is not proper)

Or

- Brakes were there in the car but 'Driver A' never applied them (Akin to Control not being operated effectively)

Now if the same question is asked, answer is definite to change

All rational persons would certainly not prefer 'Driver A and his car' and would go with the car driven by 'Driver B' after asserting that the brakes in his car are there and are being applied effectively.

As auditors, we were in the past required to report only true and fair view of FinancialStatements (akin to time taken & the distance covered in the above case) but now the auditors are required to comment on the adequacy of internal financial control and its operating effectiveness (akin to whether the brakes are present in the car, the design of the brake is proper and they are operating effectively).

Meaning

After understanding the importance of control we need to get quickly through 3 important terms

A. Internal Control

B. Internal Financial Control

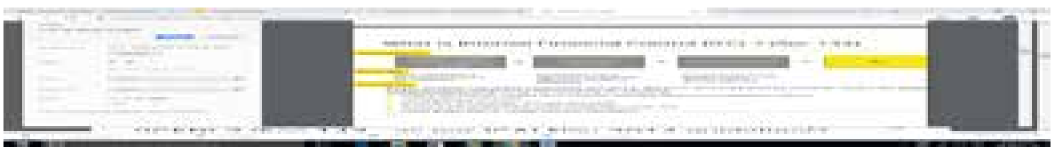
C. Internal Financial Control over financial reporting

As defined by The Committee of Sponsoring Organizations of the Treadway Commission (COSO)

*"**Internal control** is a process, effected by an entity's board of directors, management and other personnel designed to provide reasonable assurance regarding the achievement of objectives relating to operations, reporting and compliance. "*

As per Section 134 of the Companies Act 2013, the term '**Internal Financial Controls'** means

"the policies and procedures adopted by the company for ensuring orderly and efficient conduct of its business, including adherence to company's policies, safeguarding of its assets, prevention and detection of frauds and errors, accuracy and completeness of the accounting records, and timely preparation of reliable financial information."



As per guidance note **internal financial control over financial reporting (ICFR)**

"is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles."

Reporting Requirements

The 2013 Companies Act marks a major step towards raising the bar on corporate governance in India. The Act has re-emphasized the importance of a robust internal controls environment by introducing the term 'Internal Financial Controls', and by casting specific responsibilities on the Board, Audit committee, Management as well as the Auditors.

Particulars	**Responsible Person**	**Responsibility**
Section 134	Director's Responsibility Statement	Directors In the case of a listed company, the Directors' Responsibility states that directors, have laid down IFC to be followed by the company and that such controls are adequate and operating effectively.
Rule 8	Directors	The Board of Directors of all companies to state the details in respect of adequacy of IFC with reference to the financial statements
Section 143	Auditor Report	The auditor's report should also state whether the company has adequate IFC with respect to financial statements system in place and the operating effectiveness of such controls

Section 177	Audit Committee	Audit committee may call for comments of auditors about internal control systems before their submission to the Board and may also discuss any related issues with the internal and statutory auditors and the management of the company
Schedule IV	Independent Directors	The independent directors should satisfy themselves on the integrity of financial information and ensure that financial controls and systems of risk management arerobust and defensible.

You can have a complete snapshot of reporting requirement through this image at one place

Recent amendments

There has been recent changes w.r.t. reporting requirements in Companies act 2013

The major change brought by amendment was in section Sec 143(3)

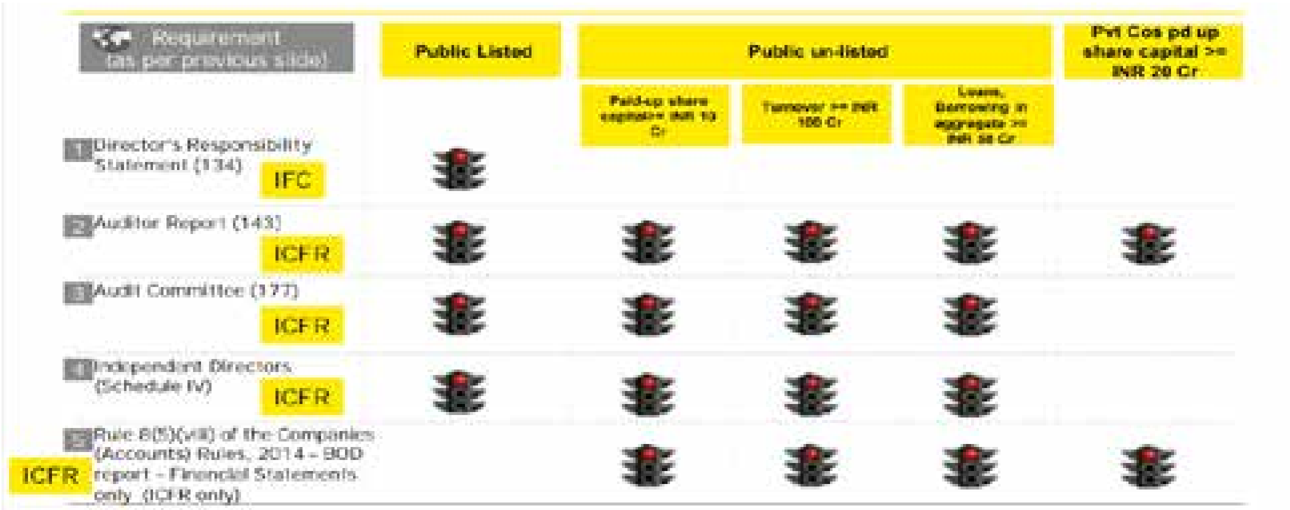
Section 143 (3) of the Companies Act, 2013 provided as follows-

"The auditor's report shall also state -

Whether the company has adequate internal financial controls system in place and the operating effectiveness of such controls"

it is clarified as "**internal financial controls** with reference to financial statements" i.e. this amendment limits the scope of **Internal Financial Reporting**

But practically this amendment has not brought any change but has only clarified the situation as guidance note for reporting on internal financial control has stated to report oninternal financial



controls with reference to financial statements

Another amendment in the same provision is for providing **exemption** from Internal Financial Controls to following private companies which is

- one person Company (OPC) or a Small Company; or
- Which has turnover less than Rs. 50 Crores
- Which has aggregate borrowings from banks or financial institutions or any body-corporate at any point of time during the financial year less than Rs. 25 Crore.
- (Only if a private company which has not committed a default in filing its financial statements or annual return)

Case Study Punjab National Bank Scam

Let us analyze 11400 cr. PNB scam one of the biggest in Indian banking sector

- Niravmodi wanted to import diamonds to design high end jewellery collection he approached PNB and asked for letter of undertaking
- LOU is a bank guarantee that allows the customer to raise money from another bank's foreign branch in the form of short term loan
- It enables the payment of customer's offshore suppliers in foreign currency. If the importer fails to make the payment on the due date the bank has to honour the commitment.
- The LOU is issued by PNB to foreign bank through swift messages
- Swift is a messaging network for securely transmitting instructions for all financial transactions through a standardised system of codes
- Normally the bank issuing the LOU asks for cash margin – usually 100%. In this case there was no scheduled credit limit and no margin was demanded
- The entries in respect of LOUs issued were not recorded in the PNBs core banking system
- Colluding officials sent Swift messages from one of PNB's Mumbai branches to overseas banks offering unauthorised LOUs
- Generally swift messages has to pass through 3 layer security system maker checker and verifier
- In PNBs case LOUS had been issued by the branch officials through SWIFT without the approval of the competent authorities and the necessary document of imports
- PNBs failure to integrate the Swift and CBS allowed stand alone messages to be sent out without matching entries in the CBS
- Under RBI guidelines buyers credit for import of gems should not exceed 90 days from the shipment date; in this case however they were rolled over repeatedly

- Not knowing NiravModi or his credit history the overseas bank extend the credit based entirely based on PNBs LOU. In case of default, PNB will have to make good this amount to the overseas bank
- Overseas bank remits the funds to Nostro account of PNB, backed by the LOU
- In the normal course PNB should have remitted the fund on due date and recovered from NravModi

Let see who are responsible

PNBs auditor for negligence, Overseas branch of Allahabad bank, Union bank of India, Axis bank for overlooking the nostro account, RBI for gross negligence and not implement the stricter norms, employees of PNB

Other similar cases like Sahara scam, Satyam scam, Kingfisher scam, 2G spectrum scam, Colgate scam were failure of internal financial control and failure to report has led to such scams. Thus practical importance of this topic is much bigger than theoretically it can be discussed

What we can do as auditors?

As companies act 2013 has already cast the responsibility to report on IFC FR thus we need to audit IFC FR

Since the SAs do not address the auditing requirements for reporting on IFC, though certain portions of the SAs may still be relevant, the Guidance Note provides supplementary procedures that would need to be considered by the auditor for planning, performing and reporting in an audit of IFC – FR under Section 143(3)(i) of 2013 Act

The *guidance note has recommended top down approach* which you can have look in the following diagram which can be studied in 4 steps

Step – 1 Planning: Under the planning stage, the auditor is required to establish an overall audit strategy that sets the scope, timing and direction of the audit

Step – 2 Design and implementation: The auditor should test the design effectiveness of controls by determining whether the company's controls, if they are operated as prescribed by persons possessing the necessary authority and competence to perform the control effectively.

Step – 3 Operating effectiveness: Operating effectiveness of a control is tested by determining whether the control is operating as designed and whether the person performing the control possesses the necessary authority and competence to perform the control effectively.

Step – 4 Reporting: Where there are deficiencies that, individually or in combination, result in one or more material weaknesses, the auditor should evaluate the need to express a modified opinion i.e. qualified or adverse on the company's IFC – FR, unless there is a restriction on the scope of the engagement in which case the auditors should either disclaim the opinion or withdraw from the engagement.

Conclusion:

Companies should not wait for Government rules or law to be enforced but by themselves should initiate action plans for implementing and for assuring operating effectiveness of IFC as it is for their safety and betterment. It would help them for having competing edge and implementing strategic plans

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Lean Manufacturing: Effective Way for Cost Optimization in the Modern Era

In today's volatile and utmost competitive market environment, where numerous transactions get generated in a fraction of time at a click of a button and where new and varied business models mushroom up and successfully replace the age old existing set ups and business models in a very short span, it is a prime necessity for the businesses to respond promptly to customer needs and to provide merchandise and services with almost no loss of time and with minimal wastage.

To eliminate wastages, either in terms of materials or in terms of time and to achieve increased process efficiency and flexibility, Lean Manufacturing can be applied.

Why Lean:

Lean is a word that can be interpreted as " just what is necessary". In current business scenario to mitigate the challenges of increased pressure to reduce COGs and to obtain the capability to do more with less, Lean will be helpful.

What is Lean Manufacturing:

Lean manufacturing is a methodology that focuses on minimizing wastages within manufacturing systems while simultaneously maximizing the productivity.

The Lean approach is based on the Toyota Production System and was coined in 1990 - 1991 by researchers from the Massachusetts Institute of Technology (MIT), USA.

Principles of Lean Manufacturing:

Since the time Lean systems were found, its principles have profoundly influenced manufacturing concepts within manufacturing industries as well as service industries like healthcare, IT and the like. Measurable benefits of the Lean include reduced lead times, reduced operating costs and improved product quality, to name a few. The principles laid down in Lean for the company's better functioning are: value, the value stream, flow, pull and perfection. These are now used as the basis for lean implementation.

1. Identify Customer's Value : The value of a product or a service is the one which is perceived by the customer and not the one that is created by the producer or provider. So, it is important to understand how the customer values the company's product and/or service and what a customer is willing to pay for that. The company must try to eliminate waste, reduce the waiting time to arrive at an optimal cost such that the pricing can be done in a way that maximum customers are willing to buy the product or service at such price, thereby helping in increasing the company's top line and bottom line.

2. Value Stream Mapping : The second principle advises to carefully identify the processes that a product or service has to undergo from the initial stage of the production process to delivering the final product or service to the customer. The central idea behind this is to identify the waste (waste is known as "muda" in Japanese language) and eliminate the process, operation or material that does not add any value to the product or in the production process.

3. Create Flow : Based upon the findings of the above step, eliminate functional barriers and identify ways to improve lead time to ensure the processes are smooth from the time an order is received through to delivery. Flow is critical to the elimination of waste. Lean manufacturing relies on preventing interruptions in the production process and enabling a harmonized and integrated set of processes in which activities move in a constant stream.

4. Allowing clients to elicit the value from the producer : The fourth principle focuses on establishing a pull system. Under this, the company should start new production only upon the demand from the customer. This principle contrasts with the push approach used by Material Resource Planning (MRP), wherein inventory needs to be ascertained in advance to meet the production as per forecasts. Implementing such a principle may not always be easy as it heavily relies on flexibility, time bound availability of input materials & services and effective communication.

5. Striving for excellence : Lean manufacturing rests on the concept of continually striving for perfection, which entails targeting the root causes of quality issues and ferreting out and eliminating waste across the value stream.

These five principles do not stand alone. Rather, there is a considerable overlap in their implementation. For example, without near-perfect production, including very high-quality shipments received from suppliers, value cannot flow smoothly through the plant. Out-of control processes will create problems. The search for waste and wasteful processes enables improvisation of the quality of products and assists in the search for perfection, just as efforts towards continuous improvement will help identify waste. Both these principles help the product (value) flow more smoothly through the plant.

As described earlier, a major guiding principle of lean manufacturing is the removal of various forms of waste from the manufacturing process. For example, one major source of waste is the inefficient movement of parts throughout the factory. The entire time the part is in the plant, being moved from place to place and not being worked upon, is classified as waste. Seven types of waste have been identified at Toyota: waste from overproduction, waste of waiting time, transportation waste, processing waste, inventory waste, waste of motion, and waste from product defects. The eighth type of waste is the waste created by underutilization of employees' skills and capabilities or simply waste of unused talent and ingenuity. Implementation of lean manufacturing requires the identification and removal of these forms of waste but, more importantly, requires making the ongoing identification of this waste a critical activity. This underlies attempts at a continuous improvement.

Lean Manufacturing – Tools & Concepts:

As it follows from the discussions above, continuous improvement lies at the heart of lean manufacturing. In the process to achieve elimination of waste, Lean relies on certain concepts named as below;

Heijunka : A methodology of process improvement that helps organizations match unpredictable customer demand patterns and eliminate manufacturing waste by leveling the type and quantity of production output over a fixed period of time.

Kanban : It literally means a signboard in the Japanese language. A signal -- either physical, such as tag or empty bin, or electronically sent through a system -- used to streamline processes and create just-in-time delivery.

Jidoka : Jidoka is one of the two pillars of the Toyota Production System along with just-in-time. Jidoka highlights the causes of problems because work stops immediately when a problem first occurs. This leads to improvements in the processes that build in quality by eliminating the root causes of defects.

Andon : A visual aid, such as a flashing light that alerts workers to a problem.

Poka-yoke : A poka-yoke is a mechanism in any process that helps an equipment operator avoid mistakes. Its purpose is to eliminate product defects by preventing, correcting, or drawing attention to human errors as they occur.

5S : A set of practices for organizing workspaces to create efficient, effective and safe areas for workers and which prevent wasted effort and time. 5S emphasizes organization and cleanliness. These are five Japanese words starting from S, which are : (1) ***Seiri***. The English word for *Seiri* is **Sort**. It stands for clearly separating necessary from unnecessary and removing the unnecessary.(2) ***Seiton.*** The English word for *Seiton* is **Set** (in order). It emphasises on visually arranging and identifying items for ease of use and retrieval. (3) ***Seiso***. The English word for *Seiso* is **Shine and Check or Clean and Check**. It says to keep the workspace clean to allow problems to be identified. (4) ***Seiketsu.*** The English word for *Seiketsu* is to **Standardise**. It emphasises continuous monitoring of the level of clearing, organising and cleaning. The last one is (5) ***Shitsuke***. *Shitsuke*, in English means to **Sustain**. It aims at working towards a shared set of values regarding clearing, organising and cleaning and sustainably maintaining it.

Implementation of Lean and the role of a Cost Accountant:

The benefits of implementing Lean are long lasting, but it takes considerable efforts in the successful implementation of Lean. Here a Cost Accountant can play a pivotal role in the implementation of Lean, aimed at elimination of waste and increased efficiency.

In large organisations there may be a dedicated team duly certified in such areas and can drive the implementation of Lean and later continually monitor the progress post implementation . The below are the steps on how to begin implementing Lean, especially at a manufacturing site.

(1). Creation of a suitable team : A team comprising cross-functional participation be constituted and a coordinator be identified. Here a Cost Accountant can be a coordinator as he/she has an overall exposure to the entire functioning and coordinates for various tasks (e.g. Budget exercise, MIS, Audits, etc.).

(2). Do a Gemba Walk: ***Gemba*** is a Japanese term which means real place (where actual work is being done). The team should visit the shop floor, whether it be production area or quality testing lab or warehouse and observe carefully and minutely all the processes and man and material movements.

(3). Value Stream Mapping: Based on the observations made through above stage, identify various activities and create a process flow chart for the actual activities. Once this is identified, the next step is to identify the non-value added and non-essential activities in the entire process flow. Once this is done the next step is to brainstorm on the ways and manner on how to improve the existing process flow to eliminate waste for gaining optimization in operations. This step requires detailed efforts, time and above all a team spirit aligned to a common objective of achieving optimization. Here, it is also important to note that the changes or modifications identified for waste elimination and optimization should be in conformity to the Quality and Safety norms.

(In the picture above, it is seen that the team is brainstorming on ways to reduce the wastages from the process flow).

(4) Regular Monitoring: Based on the above three steps the KPIs (Key Performance Indicators) which need to be improved for better productivity and efficiency should be identified. Routine monitoring should be done to access the challenges faced and to chalk out sustainable solutions to achieve the desired improvements. A short and quick meeting on daily basis within each department and at company/factory level will help foresee challenges and bring out proactive and

sustainable solutions aimed at increased efficiency.

(Above picture depicts the regular monitoring through +QDCI (Safety, Quality, Delivery, Cost and Implication) dashboard for specific indicators/KPIs, identified earlier).

Conclusion: Lean is a system which includes a continuous improvement in the state of mind !

Note: *Reports and write ups on Lean, available on different websites have been referred to and relied upon, along with my exposure on Lean implementation gained during my employment with Sanofi India Ltd. for writing this article.*

References:

(1)http://leanmanufacturingtools.org/wp-content/uploads/2015/05/What-is-5S-Presentation.pdf

(2)https://searcherp.techtarget.com/definition/lean-production

(3)https://www.bracu.ac.bd/sites/default/files/newsletter/assets/Is sue%202.pdf

Picture courtesy: *https://www.geneesmiddelendebat.nl/wp-content/uploads/2017/05/Sanofi_Manufacturing_System_May_2017.pdf*

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Corporate Social Responsibility (CSR)

Corporate Social Responsibility is the social responsibility of the corporates towards the people, society, country and the world in alignment with the business goals in the form of social investments and social expenditures for public welfare and development programmes for the underprivileged, underdeveloped and marginalized population with corporate social responsibility policies, plans, charters, codes, standards, programs, projects and laws with resource economic development, environmental protection, social reforms, science and technologies, disaster management and responsibility in implementing programs eradicating corruption, extortion, bribery, scams, frauds, cybercrimes for the development of the people and the country.

Corporate Social Responsibility is the responsibility of the corporates to make social investments and incur social expenditures in the interest of the underdeveloped, underprivileged and marginalized society, environmental protection programs, economic growth, resource development, educational facilities, healthcare and sanitation, anti-poverty programs, eradicating hunger and malnutrition, safe places, safe drinking water, employments, vocational education and skill training programs, promoting gender equality, women empowerment, old age homes and women's hostels, day care centers for senior citizens, development of socially and economically backward people, technology incubation centers, slum area development, rural area development and other public welfare programs in a sustainable manner.

During the financial year 2017-18, companies in India spent Rs.7537 Crores on Corporate Social Responsibility (CSR) activities, a rise of 50% over previous year 2014-15. The cumulative expenditure on Corporate Social Responsibility (CSR) activities by top 100 companies from 2014-15 to 2017-18 is about Rs 27,000 crores. The average amount spent on Corporate Social Responsibility (CSR) activities per company has gone up to Rs 76 crores as compared to Rs 59 crores during 2014-15, up by 29 per cent. Energy and power sectors have spent the highest amount towards on Corporate Social Responsibility (CSR) activities at Rs 2,500 crores followed by BFSI at Rs 1,400 crores, customer products at Rs 635 crores, IT consulting and software at Rs 1,100 crores and mining and metal at Rs 647 crores. The number of companies that have spent less than 2 per cent on Corporate Social Responsibility (CSR) activities has substantially come down by 37 per cent to 33 companies in 2017-18 from 52 in 2014-15. Indian companies spending on Corporate Social Responsibility (CSR) activities crossed Rs 10,000 crores in 2017-18, led by Reliance Industries and Oil & Natural Gas Corporation. Spending on corporate social responsibility projects increased 11% to Rs 10,030 crores in 2017-18. The number of companies that spent on Corporate Social Responsibility (CSR) activities increased to 1,016 in 2017-18 from 931 (92%) in 2016-17. The top 10 companies together accounted for 36% of the total spending on Corporate Social Responsibility (CSR) activities.

Corporate Social Responsibility Governance are the principles and responsibilities of the corporate houses which are as follows:

1. CSR Responsibility Governance (CSRRG)
2. CSR Accountability Governance (CSRAG)
3. CSR Transparency Governance (CSRTG)

4. CSR Disclosure Governance (CSRDG)
5. CSR Ethics Governance (CSREG)
6. CSR Environmental Governance (CSREG)
7. CSR Globalisation (CSRG)
8. CSR Social Behaviour & Social Responsiveness (CSRB&SR)
9. CSR Law and Governance (CSRLG)
10. CSR Brand Equity Reputation (CSRBER)
11. CSR Stakeholders Governance (CSRSG)
12. CSR Morality (CSRM)
13. CSR Integrity (CSRI)
14. CSR Global Best Practices (CSRGBP)
15. CSR Sustainability (CSRS)
16. CSR Strategic Planning & Development (CSRSPD)
17. CSR Value and Value Addition (CSRV&VA)
18. CSR Natural Justice (CSRNJ)
19. CSR Arbitration (CSRA)
20. CSR Audit (CSRA)
21. CSR Democratic Board Management CSRDBM)
22. CSR Segmental Reporting (CSRSR)
23. CSR Standards (CSRS)
24. CSR Trusts (CSRT)
25. CSR Ratings (CSRR)

The Ministry of Corporate Affairs has notified Section 135, Schedule VII to the Companies Act 2013 as well as the Companies (Corporate Social Responsibility Policy) Rules, 2014 w.e.f April 1, 2014. MCA further issued Circular No. 21/2014 and 36/2014 with regard to the applicability of the Corporate Social Responsibility as per the Companies Act 2013. Notifications with further amendments in Schedule VII was issued on August 204 and Companies (Corporate Social Responsibility Policy) Amendment, Rules 2015 in January 2015.

Corporate Social Responsibility has been mandatory for companies vide the Companies Act 2013 in India which fulfils the following criteria's :

1. Companies having net worth of Rs. 500 Crores or more, or
2. Companies having turnover of Rs. 1000 Crores or more , or
3. Companies having a net profit of Rs. 5 Crores or more

Net worth, turnover and net profit is are to be computed in terms of section 198 of the Companies Act 2013 as per the profit and loss statement and balance sheet statement prepared by the company in terms of section 381(1)(a) and section 198 and schedule III of the Companies Act 2013. It is mandatory to disclose CSR budget and activities undertaken as in schedule VII of the Companies Act 2013 in the Board's Report of the Annual Report of the Company. The CSR Rules have been widened for compliance obligations to include the holding company and subsidiary companies as well as foreign companies whose branches or project offices in India, fulfilling the criteria's as mentioned above.

Companies complying the aforementioned conditions must constitute a CSR Committee of the Board of Directors to formulate and monitor the CSR policy of the company. Section 135 of the Companies Act 2013 requires the CSR Committee to consist of at least three directors, including one independent director. CSR Committee of foreign company shall comprise of atleast two persons wherein one or more persons should be resident in India and the other person nominated by the foreign company. CSR Rules have exempted unlisted public companies and private companies that are not required to appoint an independent director as a part of their CSR Committee. CSR Rules have relaxed the requirement regarding the presence of three or more directors on the CSR Committee of the Board of Directors. In private companies having two directors CSR Committee can be constituted with just two directors. The Board report shall disclose the composition of the CSR Committee.

The CSR Committee shall formulate and recommend to the Board a CSR Policy indicating the activities under Schedule VII as specified in the Companies Act 2013, which should include:-

1. A list of CSR projects or programs which accompany plans to undertake falling within the purview of the Schedule VII of the Companies Act 2013 specifying details of the implementation of the project or programs with modalities and monitoring CSR projects with disclosure on the company's website. The surplus arising out of CSR projects or programs or activities shall not form part of the business profit of a company.
2. The Board of every such company shall ensure that the company spends, in every financial year, at least 2% of the average net profits made during the 3 preceding financial years termed as CSR expenditure and shall not include profit from overseas branches and dividends from other companies.
3. The Board shall specify in its report the reason for not spending on CSR budget expenditures.
4. The Board can also form registered Trust or society or a company under section 8 of the Companies Act for CSR budget expenditures.
5. The company cans also collaborate with other companies or trust or society or section 8 company for CSR budget expenditures.
6. CSR project has to be undertaken in India only, preferably in local area of the company's operations.
7. CSR project is not meant for the benefit of employees of the company.
8. CSR activities are also not meant for contribution to political parties.
9. Companies may build CSR capacities of their own as well as those of their implementing agencies through institutions with established track record of atleast 3 financial years including administrative overheads shall not exceed 5 % of total CSR budget expenditures of the company in one financial year.
10. Events like awards/charitable contribution/advertisements/sponsorships of TV programs/ marathons/sports do not qualify as CSR expenditures which are one time activities.
11. Expenses like statutory charges and tax payments do not qualify as CSR expenditures.

Companies have to mandatorily disclose in the Board of Directors Report in Annual Report at AGM, the report of CSR activities undertaken during the financial year along with the financial statements the following:

(a) CSR Policy Outline, including overview of projects or programs in the website of the company

(b) CSR Composition of the Board of Directors'

(c) Average net profit of the company for the preceding 3 financial years

(d) CSR budget expenditures

(e) CSR expenditures spent during the year along with surplus, if any

(f) The company shall give reasons for failing to spend CSR expenditures, if any

(g) A responsibility statement of the CSR Committee that the implementation and monitoring of CSR Policy, is in compliance of the CSR objectives and policy of the company

Corporate Social Responsibility - Companies Act 2013

(Notified Date of Section: 01/04/2014)

Every public company having net worth of rupees five hundred crore (Rs.500 Crores) or more, or turnover of rupees one thousand crore (Rs. 1000 Crores) or more or a net profit of rupees five crore (Rs.5

Crores) or more during any financial year shall constitute a Corporate Social Responsibility Committee of the Board consisting of three or more directors, out of which at least one director shall be an independent director.

As per Section 135 of the Companies Act 2013

(1) Every company having net worth of rupees five hundred crore or more, or turnover of rupees one thousand crore or more or a net profit of rupees five crore or more during any financial year shall constitute a Corporate Social Responsibility Committee of the Board consisting of three or more directors, out of which at least one director shall be an independent director.

(2) The Board's report under sub-section (3) of section 134 shall disclose the composition of the Corporate Social Responsibility Committee.

(3) The Corporate Social Responsibility Committee shall, -

(a) formulate and recommend to the Board, a Corporate Social Responsibility Policy which shall indicate the activities to be undertaken by the company as specified in [1],[2] Schedule VII;

(b) recommend the amount of expenditure to be incurred on the activities referred to in clause (a); and

(c) monitor the Corporate Social Responsibility Policy of the company from time to time.

(4) The Board of every company referred to in sub-section (1) shall, -

(a) after taking into account the recommendations made by the Corporate Social Responsibility Committee, approve the Corporate Social Responsibility Policy for the company and disclose contents of such Policy in its report and also place it on the company's website, if any, in such manner as may be prescribed; and

(b) ensure that the activities as are included in Corporate Social Responsibility Policy of the company are undertaken by the company.

(5) The Board of every company referred to in sub-section (1), shall ensure that the company spends, in every financial year, at least two per cent of the average net profits of the company made during the three immediately preceding financial years, in pursuance of its Corporate Social Responsibility Policy:

Provided that the company shall give preference to the local area and areas around it where it operates, for spending the amount earmarked for Corporate Social Responsibility activities:

Provided further that if the company fails to spend such amount, the Board shall, in its report made under clause (o) of sub-section (3) of section 134, specify the reasons for not spending the amount.

Explanation - For the purposes of this section "average net profit" shall be calculated in accordance with the provisions of section 198.

1. Clarification related to Schedule VII -Dated 18.06.2014. (Point (iv) has been Omitted - Refer Clarification Dated-17.09.2014)
2. Clarification related to above Clarification Dated-17.09.2014.

Corporate Social Responsibility - Schedule VII

(The Companies Act 2013 - Section 135)

Activities which may be included by companies in their Corporate Social Responsibility Policies Activities relating to :

[1][(i) Eradicating hunger, poverty and malnutrition, [2]["promoting health care including preventive health care"] and sanitation [4][including contribution to the Swach Bharat Kosh set-up by the Central Government for the promotion of sanitation] and making available safe drinking water.

(ii) promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects.

(iii) promoting gender equality, empowering women, setting up homes and hostels for women and orphans; setting up old age homes, day care centres and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups.

(iv) ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agro forestry, conservation of natural resources and maintaining quality of soil, air and water [4][including contribution to the Clean Ganga Fund set-up by the Central Government for rejuvenation of river Ganga].

(v) protection of national heritage, art and culture including restoration of buildings and sites of historical importance and works of art; setting up public libraries; promotion and development of traditional art and handicrafts;

(vi) measures for the benefit of armed forces veterans, war widows and their dependents;

(vii) training to promote rural sports, nationally recognised sports, paralympic sports and olympic sports

(viii) contribution to the prime minister's national relief fund or any other fund set up by the central govt. for socio economic development and relief and welfare of the schedule caste, tribes, other backward classes, minorities and women;

(ix) contributions or funds provided to technology incubators located within academic institutions which are approved by the central govt.

(x) rural development projects]

[3][(xi) slum area development.

Explanation.- For the purposes of this item, the term `slum area' shall mean any area declared as such by the Central Government or any State Government or any other competent authority under any law for the time being in force.]

<u>Amendments</u>

1. Substituted by Notification Dated 27th February, 2014. - Original Content

2. Substituted by Notification Dated 31st March, 2014.- For the words "promoting preventive health care" read "promoting health care including preventive health care".

3. Inserted by Notification Dated 7th August, 2014.

4. Inserted by Notification Dated 24th October, 2014.

<u>Corporate Social Responsibility</u>

<u>Calculation of Net Profits - Companies Act 2013</u>

(Notified Date of Section: 01/04/2014)

<u>Net Profit Computation as per Section 198 of the Companies Act 2013</u>

(1) In computing the net profits of a company in any financial year for the purpose of section 197, -

(a) credit shall be given for the sums specified in sub-section (2), and credit shall not be given for those specified in sub-section (3); and

(b) the sums specified in sub-section (4) shall be deducted, and those specified in sub-section (5) shall not be deducted.

(2) In making the computation aforesaid, credit shall be given for the bounties and subsidies received from any Government, or any public authority constituted or authorised in this behalf, by any Government, unless and except in so far as the Central Government otherwise directs.

(3) In making the computation aforesaid, credit shall not be given for the following sums, namely:

(a) profits, by way of premium on shares or debentures of the company, which are issued or sold by the company;

(b) profits on sales by the company of forfeited shares;

(c) profits of a capital nature including profits from the sale of the undertaking or any of the undertakings of the company or of any part thereof;

(d) profits from the sale of any immovable property or fixed assets of a capital nature comprised in the undertaking or any of the undertakings of the company, unless the business of the company consists, whether wholly or partly, of buying and selling any such property or assets:

Provided that where the amount for which any fixed asset is sold exceeds the written-down value thereof, credit shall be given for so much of the excess as is not higher than the difference between the original cost of that fixed asset and its written down value;

(e) any change in carrying amount of an asset or of a liability recognised in equity reserves including surplus in profit and loss account on measurement of the asset or the liability at fair value.

(4) In making the computation aforesaid, the following sums shall be deducted, namely:—

(a) all the usual working charges;

(b) directors' remuneration;

(c) bonus or commission paid or payable to any member of the company's staff, or to any engineer, technician or person employed or engaged by the company, whether on a whole-time or on a part-time basis;

(d) any tax notified by the Central Government as being in the nature of a tax on excess or abnormal profits;

(e) any tax on business profits imposed for special reasons or in special circumstances and notified by the Central Government in this behalf;

(f) interest on debentures issued by the company;

(g) interest on mortgages executed by the company and on loans and advances secured by a charge on its fixed or floating assets;

(h) interest on unsecured loans and advances;

(i) expenses on repairs, whether to immovable or to movable property, provided the repairs are not of a capital nature;

(j) outgoings inclusive of contributions made under section 181;

(k) depreciation to the extent specified in section 123;

(l) the excess of expenditure over income, which had arisen in computing the net profits in accordance with this section in any year which begins at or after the commencement of this Act, in so far as such excess has not been deducted in any subsequent year preceding the year in respect of which the net profits have to be ascertained;

(m) any compensation or damages to be paid in virtue of any legal liability including a liability arising from a breach of contract;

(n) any sum paid by way of insurance against the risk of meeting any liability such as is referred to in clause (m);

(o) debts considered bad and written off or adjusted during the year of account.

(5) In making the computation aforesaid, the following sums shall not be deducted, namely:

(a) income-tax and super-tax payable by the company under the Income-tax Act, 1961, or any other tax on the income of the company not falling under clauses (d) and (e) of sub-section (4);

(b) any compensation, damages or payments made voluntarily, that is to say, otherwise than in virtue of a liability such as is referred to in clause (m) of sub-section (4);

(c) loss of a capital nature including loss on sale of the undertaking or any of the undertakings of the company or of any part thereof not including any excess of the written-down value of any asset which is sold, discarded, demolished or destroyed over its sale proceeds or its scrap value;

(d) any change in carrying amount of an asset or of a liability recognised in equity reserves including surplus in profit and loss account on measurement of the asset or the liability at fair value.

Computation of Net Profit for Corporate Social Responsibility (CSR) contribution as per Section 198 of Companies Act, 2013

(Illustration]

Particulars **Financial Year: 2018-19**

Net profit after tax* as per Profit & Loss Account

[In compliance of section 197 and schedule V to the Companies Act 2013]

Add : Allowed Credits [Section 198(2)]

1. Subsidies or bounties received from Government or Public Authority

Less : Credits Disallowed [Section 198(3)]

1. Profits, by way of premium on shares or debentures of the company, which are issued or sold by the company;

2. Profits on sales by the company of forfeited shares;

3. Profits of a capital nature including profits from the sale of the undertaking or any of the undertakings of the company or of any part thereof;

4. Profits from the sale of any immovable property or fixed assets of a capital nature comprised in the undertaking or any of the undertakings of the company, unless the business of the company consists, whether wholly or partly, of buying and selling any such property or assets:

[Provided that where the amount for which any fixed asset is sold exceeds the written-down value thereof, credit shall be given for so much of the excess as is not higher than the difference between the original cost of that fixed asset and its written down value];

[Profit on sale of immovable property i.e excess being higher of (Sale Value of Immovable Property – Original Cost) and/or (Original Cost – WDV of Immovable Property)]

5. Any change in carrying amount of an asset or of a liability recognised in equity reserves including surplus in profit and loss account on measurement of the asset or the liability at fair value.

[Surplus in P&L on measurement of asset or liability at fair value]

Less : Expenses Allowed [Section 198(4)]

1. All the usual working charges;
2. Directors' remuneration;
3. Bonus or commission paid or payable to any member of the company's staff, or to any engineer, technician or person employed or engaged by the company, whether on a whole-time or on a part-time basis;
4. Any tax notified by the Central Government as being in the nature of a tax on excess or abnormal profits;
5. Any tax on business profits imposed for special reasons or in special circumstances and notified by the Central Government in this behalf;
6. Interest on debentures issued by the company;

7. Interest on mortgages executed by the company and on loans and advances secured by a charge on its fixed or floating assets;
8. Interest on unsecured loans and advances;
9. Expenses on repairs, whether to immovable or to movable property, provided the repairs are not of a capital nature;
10. Outgoings inclusive of contributions made under section 181 [Registered Charitable Trust];
11. Depreciation to the extent specified in section 123;
12. The excess of expenditure over income, which had arisen in computing the net profits in accordance with this section in any year which begins at or after the commencement of this Act, in so far as such excess has not been deducted in any subsequent year preceding the year in respect of which the net profits have to be ascertained [Prior Period Items];
13. Any compensation or damages to be paid in virtue of any legal liability including a liability arising from a breach of contract;
14. Any sum paid by way of insurance against the risk of meeting any liability such as is referred to in clause 13;
15. Debts considered bad and written off or adjusted during the year of account.

<u>Add</u> : <u>Expenses Disallowed</u>   [Section 198(5)]

1. Income-tax and super-tax payable by the company under the Income-tax Act, 1961, or any other tax on the income of the company not falling under clauses (d) and (e) of sub-section (4) of section 198;
2. Any compensation, damages or payments made voluntarily, that is to say, otherwise than in virtue of a liability such as is referred to in clause (m) of sub-section (4) of section 198;
3. Loss of a capital nature including loss on sale of the undertaking or any of the undertakings of the company or of any part thereof not including any excess of the written-down value of any asset which is sold, discarded, demolished or destroyed over its sale proceeds or its scrap value;
4. Any change in carrying amount of an asset or of a liability recognised in equity reserves including surplus in profit and loss account on measurement of the asset or the liability at fair value.

<u>Less</u>: <u>Extraneous Items (Rule 2(f) of The Companies (Corporate Social Responsibility Policy) Rules, 2014)</u>

1. Any profit arising from any overseas branch or branches of the company, whether operated as a separate company or otherwise; and

2. Any dividend received from other companies in India, which are covered under and complying with the provisions of section 135 of the Act:

[***Provided*** that net profit in respect of a financial year for which the relevant financial -statements were prepared in accordance with the provisions of the Companies Act, 1956 (1 to 1956) shall not be required to be re-calculated in accordance with the provisions of the Act:

Provided further that in case of a foreign company covered under these rules, net profit means the net profit of such company as per profit and loss account prepared in terms of clause (a) of sub-section (1) of section 381 read with section 198 of the Act]

[*See* Rule 2(f) of The Companies (Corporate Social Responsibility Policy) Rules, 2014]

<u>Net profit after tax</u>   [Section 198(1)(a)&(b)]

[Net Profit for Corporate Social Responsibility (CSR) contribution as per Section 198 of Companies Act, 2013]

* Net profit after tax is taken as base and accordingly the adjustments need to be considered.

Penalty under section 134(8) of the Companies Act 2013

If a company contravenes the provisions of this section, the company shall be punishable with fine which shall not be less than **fifty thousand rupees but which may extend to twenty-five lakh rupees** and every officer of the company who is in default shall be punishable with imprisonment for a term which may extend to **three years** or with fine which shall not be less than **fifty thousand rupees** but which may extend to **five lakh rupees**, or with both.

Corporate Social Responsibility - Tax Implications

The tax implications on Corporate Social Responsibility are as follows:

1. Identification and alignment of CSR expenditure with the business goals of the company in compliance with provisions of Companies Act, 2013 and Income Tax Act, 1961
2. Computation of net profit as per section 198, section 135, section 381(1)(a) to determine CSR contribution
3. Compliance of Schedule V and section 197 of the Companies Act 2013 in computation of net profit and overall managerial remuneration
4. Obtain tax exemptions (e.g. section 11, 12 of Income-tax Act, 1961) for registrations as Trusts and Societies etc.
5. Drafting of trust deed / constitution/ memorandum documents as required for societies
6. Tax Planning & Compliances of the entity set up for CSR activities
7. FCRA implications, if any
8. Compliance of Schedule VII to the Companies Act 2013 for tax exemption
9. Compliance of The Companies (Corporate Social Responsibility Policy) Rules, 2014 for tax compliance
10. Compliance of section 134 of the Companies Act 2013 for tax compliance
11. Compliance of section 123 of the companies Act 2013 with regard to depreciation of assets
12. Compliance of Outgoings inclusive of contributions made under section 181 of the Companies Act 2013 for tax compliance of registered charitable trust
13. Compliance of Contribution of any amount directly or indirectly to any Political Party as per section 182 of the Companies Act 2013
14. Compliance of section 30 to section 36 and section 37 being general deduction of expenses of the Income Tax Act 1961
15. Compliance of Section 35 of the Income Tax Act 1961 with regard to Deduction of Expenditure on Scientific Research, Capital as well as Revenue Expenditure.
16. Compliance of Section 35AC of the Income Tax Act 1961 with regard to Expenditure on Eligible Projects or Schemes
17. Compliance of Section 35CCA of the Income Tax Act 1961 with regard to Payments to Association & Institution for Carrying out Rural Development programmes
18. Compliance of Section 35CCD of the Income Tax Act 1961 with regard to Expenditure on skill development project notified by the board
19. Compliance of Section 36(1)(ix) of the Income Tax Act 1961 with regard to Applicable to Company who incurs expenditure on promotion of family planning amongst employees, Revenue as well as capital expenditure
20. Compliance of Section 80G of the Income Tax Act 1961 with regard to Donation to certain Funds & Institutions
21. Compliance of Section 80GGA of the Income Tax Act 1961 with regard to Deduction in respect of donation to scientific research or rural development section
22. As per income tax, Contribution to *Swach Bharat Kosh 80G (2) (iiihk)* of the Income Tax Act 1961 & *Clean Ganga Fund 80G (2) (iiihl)* of the Income Tax Act 1961 must be other than CSR u/s 135 of

Companies act.

23. It has been explained by the CBDT in the *circular no. 1/2015 Dated 21/1/2015*:

"*CSR expenditure, being an application of income, is not incurred wholly and exclusively for the purposes of carrying on business. As the application of income is not allowed as deduction for the purposes of computing taxable income of a company, amount spent on CSR cannot be allowed as deduction for computing the taxable income of the company. Moreover, the objective of CSR is to share burden of the Government in providing social services by companies having net worth/turnover/profit above a threshold. If such expenses are allowed as tax deduction, this would result in subsidizing of around one-third of such expenses by the Government by way of tax expenditure.*"

24. The Book Profit to be computed under section 115JB of the Income Tax Act 1961 should not be increased by the expenditure incurred on CSR implying no adjustment for CSR under section 115JB of the Income Tax Act 1961 [MAT]

Income Tax Laws on CSR - Case Studies

Any expenditure on public welfare or any contribution to public welfare fund which directly connected / related with the carrying on business or which results in benefit to the business is allowable u/s 37(1) of the Income Tax Act 1961

1. ***Sri Venkata Satyanarana Rice Mills Contractors Co. v. CIT***:

   Payment to welfare fund established by the district collector

2. ***Krishna Sahakari Sakhar Karkhana Ltd v CIT***:

   Payment to an Education Fund of the State Federal Society as required u/s 68 of the Maharashtra Co-operative Society Act

3. ***CIT v Madras Refineries***:

   Provided funds for establishing drinking water facilities to residents in the vicinity of refinery and also provided aid to school run for benefit of children of those local resident.

4. ***CIT v Andhra Bank***:

   Spent on Andhra Bank Rural Development Trust which is engaged in conducting several training for providing self employment to rural youth and after the training, the bank also provided finance to rural youth.

5. In the Case of ***CIT v. Infosys Technologies Ltd*** :

   Allowed the expenditure incurred for installing traffic signal by company under social initiative by the reason of the said signal used by its employee relate to business activity hence allowed u/s 37(1) of the Income Tax Act 1961

6. In the Case of ***CIT v. Wipro Ltd*** :

   Expenditure for community development near its factory, the court does not find any nexus for its business activity hence disallowed such expenditure u/s 37(1) of the Income Tax Act 1961

7. ***NMDC Ltd v Joint CIT***:

   Donation to a Medical College, though not related to business of the assessee, having been incurred in furtherance of a corporate responsibility and hence allowable as deduction

8. In the case of ***CIT v DTTDC ltd:***

   Where the income is utilized for self-imposed obligation, it signifies "Application of Income" whereas obligation where money flows out of an independent title signifies "Diversion of Income." However, ***Explanatory Memorandum*** to the Bill it is stated that CSR expenditure is an application of Income.

Here, whether one can claim the deduction of CSR u/s 37(1) of the Income Tax Act 1961 up to the amount which is necessarily required to be spent u/s 135 of Companies Act, 2013, on the ground that it is a diversion of income by successfully substantiating that the same has been expended because of mandate by the Companies Act 2013 and not by itself.

9. CIT v Imperical Chemical Industries Ltd :

Held, that burden of proof for relevance documentation in respect to allowance of deduction u/s 37(1) of the Income Tax Act 1961 that particular expenditure has been laid out or incurred wholly and exclusively for purpose of business is entirely on assessee.

10. CIT vs Rajasthan Spinning & Weaving Ltd- CSR

11. CIT v Mehsana District Co-operative Milk Producer's Union Ltd- CSR

12. Surat Electricity Co. Ltd v ACIT-CSR

13. CIT v Malayalam Plantations Ltd-CSR

Financial Accounting - CSR Expenditure

CSR expenditure shall include all expenditure including contribution to corpus, or on projects or programs relating to CSR activities approved by the Board on the recommendation of its CSR Committee, but does not include any expenditure on an item not in conformity or not in line with activities which fall within the purview of Schedule VII of the Act.

1. Where a company receives a grant from others for carrying out CSR activities, the CSR expenditure should be measured net of the grant.
2. CSR expenditures are to be disclosed as a note to the statement of profit and Loss with breakups of various expenses under different heads, as per schedule III to the Companies Act 2013 and in the Board's Report as a separate item in the Annual Report as CSR Expenditure net of Grant.
3. The notes to accounts relating to CSR expenditure should contain the following:

   (a)Gross CSR amount required to be spent by the company during the year.

   (b)CSR amount spent during the year on:

	In cash	Yet to be paid in cash	Total
(i)Construction/acquisition of any asset			
(ii) On purposes other than (i) above			

   The above disclosure, may also be made in the notes to the cash flow statement.

   (c) Details of related party transactions, e.g., contribution to a trust controlled by the company in relation to CSR expenditure as per Accounting Standard (AS) 18, Related Party Disclosures.

   (d) Where a provision is made, the same should be presented as per the requirements of Schedule III to the Companies Act, 2013, any movements in the provision during the year should be shown separately.
4. CSR expenditure is charged to the statement of profit and loss as CSR expenditure and treated as an expense for the financial year.
5. Any asset transferred for CSR expenditure by the company will not disclose it under it's business asset and/or for depreciation for accounting and tax purpose. If it is transferred back to the company then it's future economic benefits' has to be evaluated and then accounted for by the company as a business asset.
6. Any surplus arising out of CSR project or programme or activities shall be recognised in the statement of profit and loss and since this surplus cannot be a part of business profits of the company, the same should immediately be recognised as liability for CSR expenditure in the balance sheet and recognised as a charge to the statement of profit and loss as per generally accepted principles of accounting. Such surplus would not form part of the minimum '2% of the average net profits of the company made during the three immediately preceding financial years in pursuance of its Corporate Social Responsibility Policy'

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Industrial Sickness – Causes and Remedies – Efficacy of IBC 2016

Industrial sickness is a global phenomena and not only in India. Every country irrespective of developed, developing and underdeveloped have been facing this problem. Time to time efforts have been made by nations to tackle industrial sickness by resorting to statutory provisions, structural changes and revival processes to plug the trend but many a occasions such efforts have been found to be abortive and series of industries have gone under liquidation resulting in loss of employment, social tensions, political ramifications and industrial unrest. Industrial sickness have therefore become a national problem all over the world and posing considerable concern to the policy makers and economic planners. It is putting a severe strain on bank finance also. Sickness is more prevalent in private sector as far as India is concerned. 90% of pending cases before the erstwhile BIFR were related to private companies.

Various symptoms are perceptible before an industrial unit becomes sick. Reserve Bank of India (RBI) defines a sick unit as a unit which have suffered cash loss for the year of its operation and as per judgement of the financing bank may sustain cash loss in the current year and also in the following year. A steady decline in the debt-equity ratio is also an indicator of sickness causing considerable damage to its financial health. When an industry cannot generate its own resources through its normal operation and continue to operate below break-even-point, it resorts to external source of fund for survival. If such state of affairs persist for a considerable period, burden of borrowing goes beyond tolerance limit and the industry becomes unviable.

Causes

Industrial sickness can be attributed broadly to various causes - promotional, technical, financial, political and managerial. Some of them are internal and the rests are external.

Let us examine the causes in details -

i) **Faulty Project Feasibility Report with too much optimistic assumptions** – It has been observed that while preparing and approving the feasibility report, several assumptions are made which are either imaginary in nature or something nigh impossible to achieve. This is done to make the investment attractive. For example, metal content in ores of a mining project if shown high in the feasibility report in comparison to actual content, actual metal extraction will be much less than that projected and as a consequence, cost of conversion becomes abnormally high in relation to metal price thereby resulting in perennial loss, gradual erosion of net worth and finally liquidation of the entity. Similarly if discharge data in respect of a hydro power project is shown optimistically in the feasibility report against actual situation, project design may become faulty and ultimately cost of generation would be high in comparison to power tariff resulting in loss. Thus is the importance of realistic project feasibility reports.

ii) **Faulty Project Design and Lay-out –** When construction of a project is undertaken on the basis of faulty feasibility report, the design and lay-out of the project is also bound to be faulty. Construction planning as well as structural design are drawn considering the projection made in the feasibility report.

If the projections are not realistic, design and lay-out would be mismatching to the actualnecessity resulting in inordinate capital cost, cost and time overrun. Cost of production /generation would also be high as a resultant effect.

iii) **Failure on commitment to develop desired infrastructure by concerned authorities –** When a project is taken up, state government / local authorities commit to develop basic infrastructures to facilitate the early and timely execution of the project like construction of approach road to the construction site or stone quarry, extension of construction power facility, laying of water line etc. However it is often experienced that once mobilization of men and materials gear up, commitment made by the above authorities for development of basic infrastructural facilities are forgotten for which construction activity get disturbed causing delay in execution.

Project authorities then under compulsion take up those constructions by incurring additional expenditures escalating project cost which were not envisaged earlier. This also results in cost and time overrun making the project unviable. Project authorities can neither abandon the project nor can go on pursuing the concerned authorities indefinitely. I have personally experienced one such situation relating to a hydroelectric project where principal contractor had to abandon the project for failure on the part of the concerned authority to build infrastructure facilities committed in the contract agreement and the employer had to meet arbitration award of several crores resulting in escalation of the capital cost. The project had to be completed by another contractor at a much higher cost. The per unit cost of power had finally gone upto Rs 8 to 9.

But the project could not be abandoned for political consideration.

iv) **Inappropriate capital structure –** Deciding the most appropriate capital mix before undertaking a project is a very crucial issue. The components of debt and owners' fund / equity play an enduring effect on the profitability of the project.

If the debt component is more, cost of production would impact adversely on the project profitability and its ultimate survival. Situation becomes worse in case of time overrun. On the other hand if the equity is more capital growth may suffer by way of more dividend pay-out. An appropriate leverage between debt and equity is therefore of paramount importance.

v) **Obsolete plant and machinery –** Normally infrastructure projects are laden with high gestation period spreading over couple of years. More advanced type of machineries and equipment may come to the market by the time project iscompleted rendering the original assets installed less productive resulting in less productivity. This also makes the project unviable.

vi) **Obsolete product design** – Similar is the case for quality of products designed in the feasibility report. In this age of rapid technological innovation and universal competition product quality and utility are subject to constant customer satisfaction. Once a product loses market, it is very difficult to regain and failure to regain makes the investment a flop. Take the example of indigenous television manufacturing companies like Sonodyne, Konark, Keltron, Uptron etc. which could not withstand the marketing strategy as well as product quality of foreign manufacturers like Toshiba, Samsung, LG etc. and had to vanish from the scene. Poor marketing policy / strategy on their part also resulted in gradual loss of market.

vii) **Scarcity of raw material –** This is the most unfortunate situation for unforeseen reason. In case the source of raw material gets dried up or exhausted before the expiry of normal project life, the operation of the production unit comes to a halt abruptly. The transportation cost for arranging the material from other sources may prove to be too dear and uncompetitive for the marketability of the product.

viii) **Managerial incompetence and inefficiency –** This is perhaps the most valid internal reason behind corporate sickness in both public as well as private sector. Lot of companies have very adversely suffered because of lack of leadership quality, vision, inefficiency, poor HR policy, lack of financial and other internal control. Let me present a few cases for the knowledge of the readers –

Case 1. It was a blue chip UK based conglomerate later on taken over by an Indian business house in Kolkata. They had engineering division in Bihar where I was working as Manager (Works Accounts) in the year 1985. When I joined, the factory was manufacturing only two machines per month. A new General Manager with foreign engineering degree and experience was appointed to look after the operation of the unit. With his professional skill and knowledge, monthly production went upto six machines with the existing facility and labour force. Turnover increased by 300%. Owners of the company were very happy with his performance. Cash flow also improved a lot. But this could not impress the people who were misleading the Managing Director that with the old machineries and the existing workforce production could not be augmented. So they set in to non - cooperate with the GM and started to hinder manufacturing operation by reducing supply of raw materials from Kolkata and instigating the labour union against him. Ultimately that gentleman had to resign from the company in sheer disgust and the factory had to down its shutters. Most surprising is that the MD also did neither interfere nor talk to the GM and evince any interest to address the anomaly.

Case 2. This is a case of a Central PSU under Ministry of Textiles in Kolkata. The Company had become sick and a revival scheme was being implemented as per recommendation of the erstwhile BIFR. The entire finance required for revival was sanctioned by the GOI and almost all the stakeholders were satisfied. Only necessity was to run the operation of the mills efficiently as per the approved plan. This could not be achieved and the company had become practically non-operational for the last couple of years. Irony of fate is that despite the availability of resources like men, materials, machineries, market and capital, management could not run the show. One after another CMD have been engaged but none of them could deliver goods . Many private companies in the same industry have been operating to full capacity. I was experiencing the happenings as Head(IA) and left the company before completion of my term. The above two cases are only instances of managerial incompetence closely observed by the writer. There are many other cases of sickness in Indian industry resulting from poor management culture.

Remedies & relevance of Bankruptcy Code 2016

A number of initiatives have been taken to resolve the problem of industrial sickness.

RBI have also emphasized on the adoption of corrective measures at the incipient stage. Policy framework to tackle the problem of industrial sickness was first adopted in 1981 for guidance of administrative ministries of Central, State Governments and financial institutions.The first major statutory initiative taken by the GOI was enactment of **Sick Industrial Companies (Special Provisions) Act (SICA) 1985**. SICA was enacted to make special provisions for the timely detection of sick and potentially sick companies owning industrial undertakings. Board for Industrial and Financial Reconstruction (**BIFR**) was formed to determine sickness of such industrial companies and to prescribe measures either to revive potentially viable units or to close down unviable units.

The main problem with BIFR and the appellate body under SICA i.e. AAIFR was that they used to take years together for determination of sickness and recommendation for revival or closure for various reasons. The revival case of the CPSU referred hereinabove had taken almost long 19 (nineteen) years with BIFR.

Under SICA 1985, a sick industrial unit was defined as a situation where the unit had existed for at least five years and had incurred accumulated losses equal to or exceeding its entire net worth at the end of a financial year. SARFAESI Act was

implemented in 2002 principally to take care of NPAs of Banks. The inordinate delay in dealing with sickness of industries by BIFR can be attributed to confusion and conflict regarding jurisdiction of various bodies. The need for a single platform for resolving these problems were felt. **NCLT** and **NCLAT** were therefore constituted under Companies' Act 2013. The issues to be dealt by NCLT covers inter alia management, mergers, acquisitions, amalgamations, revival, rehabilitation etc. of companies. The jurisdiction of NCLT was further strengthened by enacting **Insolvency** and **Bankruptcy Code (IBC) 2016** which empowers NCLT to hear and settle corporate insolvency processes also.

The IBC is aimed at orchestrating the process of insolvency, restructuring and rehabilitation under the cover of "**Corporate Insolvency Resolution Process**". Such insolvency process can be initiated even on the occurrence of default in repayment of debt by a corporate borrower irrespective of financial or operational which includes non-industrial entities unlike the provisions under SICA.

The Bankruptcy Code provides for step by step processes to be carried out including finalization of a resolution plan for revival and rehabilitation of an industrial undertaking. The resolution plan requires to be approved by NCLT and the approved plan have to be implemented strictly as per the details in the plan itself. In case of failure to implement the plan within a specified period of 180 days or within another 90 days, the company becomes liable for liquidation as per the provisions of the code.

The repeal of SICA and notification of bankruptcy code go beyond ‘sick company’ or

‘industrial undertaking’ and provides for revival process for all companies under one statute before a single tribunal. Objective is quicker and efficient process of bankruptcy resolution. This will also assist the lenders particularly banks/financial institutions to get back their dues locked up in industries within a specified period.

It is therefore evident from the above that IBC lays emphasis on the most important aspect of bankruptcy of industries / companies i.e. resolution at the very initial stage   when a company have just started to tread on a wrong foot. This enactment is therefore no doubt commendable but if we look at the various causes of industrial sickness narrated hereinabove, IBC seems to be a means to an end and not an end in itself. It is not a panacea. Other aspects particularly managerial inefficiency deserves equal attention if not more if resolution for revival and rehabilitation is to be achieved in true spirit . A sound corporate strategy, value engineering for products, timely completion of project construction, realistic project feasibility reports, an efficient internal control procedure etc. have also to be put in place.

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Insolvency Professional *v.* Committee of Creditors

Introduction

In the corporate insolvency resolution process the role played by the Insolvency Professionals and Committee of Creditors is very important and crucial one. An Insolvency Professional plays a key role in corporate insolvency resolution process under the Insolvency and Bankruptcy Code, 2016. A whole array of statutory and legal duties and powers are vested in him. He is to make every endeavor to protect and preserve the value of the property of the corporate debtor and manage its operations as a going concern. He requires conducting the entire corporate insolvency resolution process and manager the operations of the corporate debtor. He exercises the powers of the Board of Directors of the corporate debtor under resolution. He is, it fact, the driving force and the nerve-centre in insolvency proceedings of the corporate debtor. Whatever the important role played by the Insolvency Professional, he cannot act beyond the decisions of the Committee of Creditors.

Insolvency professional

Insolvency professional, for the purposes of this Code may act as -

- Interim Resolution Professional;
- Resolution Professional; or
- Liquidator.

Appointment of Interim Resolution Professional

- The Adjudicating Authority shall appoint an interim resolution professional within fourteen days from the insolvency commencement date.
- Where the application for corporate insolvency resolution process is made by a financial creditor or the corporate debtor, the resolution professional, as proposed respectively in the application under section 7 or section 10, shall be appointed as the interim resolution professional, if no disciplinary proceedings are pending against him.
- Where the application for corporate insolvency resolution process is made by an operational creditor and-
    - no proposal for an interim resolution professional is made, the Adjudicating Authority shall make a reference to the Board for the recommendation of an insolvency professional who may act as an interim resolution professional;
    - a proposal for an interim resolution professional is made under sub-section (4) of section 9, the resolution professional as proposed, shall be appointed as the interim resolution professional, if no disciplinary proceedings are pending against him.
- The Board shall, within ten days of the receipt of a reference from the Adjudicating Authority

under sub-section (3), recommend the name of an insolvency professional to the Adjudicating Authority against whom no disciplinary proceedings are pending.

Tenure of Interim Resolution Professional

The term of the interim resolution professional shall continue till the date of appointment of the resolution professional under section 22.

Duties of interim resolution professional

Section 18 of the Code prescribes the duties of interim resolution professional as follows-

- collect all information relating to the assets, finances and operations of the corporate debtor for determining the financial position of the corporate debtor, including information relating to-
    - business operations for the previous two years;
    - financial and operational payments for the previous two years;
    - list of assets and liabilities as on the initiation date; and
    - such other matters as may be specified;
- receive and collate all the claims submitted by creditors to him, pursuant to the public announcement;
- constitute a committee of creditors;
- monitor the assets of the corporate debtor and manage its operations until a resolution professional is appointed by the committee of creditors;
- file information collected with the information utility, if necessary; and
- take control and custody of any asset over which the corporate debtor has ownership rights as recorded in the balance sheet of the corporate debtor, or with information utility or the depository of securities or any other registry that records the ownership of assets including-
    - assets over which the corporate debtor has ownership rights which may be located in a foreign country;
    - assets that may or may not be in possession of the corporate debtor;
    - tangible assets, whether movable or immovable;
    - intangible assets including intellectual property;
    - securities including shares held in any subsidiary of the corporate debtor, financial instruments, insurance policies;
    - assets subject to the determination of ownership by a court or authority;
- to perform such other duties as may be specified by the Board.

Appointment of Resolution professional

- The first meeting of the committee of creditors shall be held within seven days of the constitution of the committee of creditors.
- The committee of creditors, may, in the first meeting, by a majority vote of not less than 66% of the voting share of the financial creditors, either resolve to appoint the interim resolution professional as a resolution professional or to replace the interim resolution professional by another resolution professional.

Duties of Resolution Professional

Section 25(1) provides that it shall be the duty of the resolution professional to preserve and protect the assets of the corporate debtor, including the continued business operations of the corporate debtor. For this purpose he has to perform the following functions-

- take immediate custody and control of all the assets of the corporate debtor, including the business records of the corporate debtor;
- represent and act on behalf of the corporate debtor with third parties, exercise rights for the benefit of the corporate debtor in judicial, quasi-judicial or arbitration proceedings;
- raise interim finances subject to the approval of the committee of creditors ;

- appoint accountants, legal or other professionals in the manner as specified by Board;
- maintain an updated list of claims;
- convene and attend all meetings of the committee of creditors;
- prepare the information memorandum;
- invite prospective resolution applicants, who fulfill such criteria as may be laid down by him with the approval of committee of creditors, having regard to the complexity and scale of operations of the business of the corporate debtor and such other conditions as may be specified by the Board, to submit a resolution plan or plans;
- present all resolution plans at the meetings of the committee of creditors;
- file application for avoidance of transactions, if any; and
- such other actions as may be specified by the Board.

Committee of Creditors

- The interim resolution professional shall after collation of all claims received against the corporate debtor and determination of the financial position of the corporate debtor, constitute a committee of creditors.
- The committee of creditors shall comprise all financial creditors of the corporate debtor.
- A financial creditor or the authorized representative of the financial creditor, if it is a related party of the corporate debtor, shall not have any right of representation, participation or voting in a meeting of the committee of creditors.
- where the corporate debtor owes financial debts to two or more financial creditors as part of a consortium or agreement, each such financial creditor shall be part of the committee of creditors and their voting share shall be determined on the basis of the financial debts owed to them.

Meeting of Committee of Creditors

- The members of the committee of creditors may meet in person or by such electronic means as may be specified.
- All meetings of the committee of creditors shall be conducted by the resolution professional.
- The resolution professional shall give notice of each meeting of the committee of creditors.
- The resolution professional shall determine the voting share to be assigned to each creditor in the manner specified by the Board.
- The resolution professional is responsible for the entire transactions done in the meeting.

Approval of committee of creditors for certain actions

Section 28(1) of the Code provides that the resolution professional, during the corporate insolvency resolution process, shall not take any of the following actions without the prior approval of the committee of creditors-

- raise any interim finance in excess of the amount as may be decided by the committee of creditors in their meeting;
- create any security interest over the assets of the corporate debtor;
- change the capital structure of the corporate debtor, including by way of issuance of additional securities, creating a new class of securities or buying back or redemption of issued securities in case the corporate debtor is a company;
- record any change in the ownership interest of the corporate debtor;
- give instructions to financial institutions maintaining accounts of the corporate debtor for a debit transaction from any such accounts in excess of the amount as may be decided by the committee of creditors in their meeting;
- undertake any related party transaction;
- amend any constitutional documents of the corporate debtor;
- delegate its authority to any other person;
- dispose of or permit the disposal of shares of any shareholder of the corporate debtor or their nominees to third parties;
- make any change in the management of the corporate debtor or its subsidiary;

- transfer rights or financial debts or operational debts under material contracts otherwise than in the ordinary course of business;
- make changes in the appointment or terms of contract of such personnel as specified by the committee of creditors; or
- make changes in the appointment or terms of contract of statutory auditors or internal auditors of the corporate debtor.

Section 28(2) provides that the resolution professional shall convene a meeting of the committee of creditors and seek the vote of the creditors prior to taking any of the actions under sub-section (1).

No action shall be approved by the committee of creditors unless approved by a vote of 66% of the voting shares. Where any action is taken by the resolution professional without seeking the approval of the committee of creditors in the manner as required in this section, such action shall be void. The committee of creditors may report the actions of the resolution professional to the Board for taking necessary actions against him under this Code.

Powers of Committee of Creditors

Where the corporate debtor owes financial debts to two or more financial creditors as part of a consortium or agreement, each such financial creditor shall be part of the committee of creditors and their voting share shall be determined on the basis of the financial debts owed to them.

Meeting of creditors

- The members of the committee of creditors may meet in person or by such electronic means as may be specified.
- All meetings of the committee of creditors shall be conducted by the resolution professional.
- The resolution professional shall give notice of each meeting of the committee of creditors to –
    - members of committee of creditors, including the authorized representatives
    - members of the suspended Board of Directors or the partners of the corporate persons, as the case may be;
    - operational creditors or their representatives if the amount of their aggregate dues is not less than ten per cent of the debt.
- The resolution professional shall determine the voting share to be assigned to each creditor in the manner specified by the Board.
- The resolution professional shall act as the chairperson of the meeting of the committee.
- The resolution professional shall ensure that the required quorum is present throughout the meeting.
- The resolution professional shall ensure that minutes are made in relation to each meeting of the committee and such minutes shall disclose the particulars of the participants who attended the meeting in person, through video conferencing, or other audio and visual means.
- The resolution professional shall circulate the minutes of the meeting to all participants by electronic means within forty eight hours of the said meeting.

Resolution Professional v. Committee of creditors

The Resolution professional, in the course of corporate insolvency resolution process has to-

- prepare information memorandum,
- invite resolution plan from the eligible resolution applicant,
- select the resolution applicants,
- obtain resolution plans within the time specified in the invitation from the eligible resolution applicant,
- scrutinize the resolution plans,
- submit the same before the Committee of Creditors,
- get approval by the Adjudicating Authority the resolution plan as approved by the Committee of Creditors.

In **'Ramesh Gupta v. C. Bala Mouli' – (2018) 147 CLA 181 (NCLT)** the Adjudicating observed, while analyzing the provisions of section 25 of the Code which provides the duties of resolution professional, that it is apparent on face that the Resolution Professional has been given duties to exercise, but no rights have been vested with Resolution Professional under the Code to do anything other than the duty cast upon him as specified under the Code. The duty lies in section 25(2)(h) is to invite resolution applicant with the approval of the committee of creditors, it is not that Resolution Professional is free enough to invite prospective resolution applicants on his own without the approval of the Committee of Creditors. That being the mandate of the legislature, it can never be visualized that the Resolution Professional shall invite for the prospective resolution applicants by issuing an invitation of Expression of Interest which is nothing but the transgression of the duty cast upon the Resolution Professional.

While under the Code management of the corporate debtor is shifted from the Board of Directors to the Committee of Creditors the role of the Resolution Professional is limited to work to the extent that has been mentioned in the Code, and obtain time to time approvals from the Committee of Creditors in running the company. Extending his duties, beyond the stretch mention in the Code, is arbitrary and in contravention of the powers conferred on the Committee of Creditors.

The Resolution Professional cannot question why Committee of Creditors has not sought extension of time or why it has not given approval for invitation of resolution plans. The Adjudicating Authority further observed that under section 31, the Adjudicating Authority has to reject or modify the resolution plan only when placed before it, the Adjudicating Authority cannot invoke jurisdiction to question the discretion of the Committee of Creditor until being placed before it. However, to go for resolution or liquidation always lies in the hands of the Committee of Creditors and the Adjudicating Authority cannot question the merit of that business decision unless it is non compliance of law or vitiated by fraud.

Replacement of Resolution Professional

The Committee of Creditors is to appoint the Resolution Professional after its constitution. The Committee of Creditors may allow the Interim Resolution Professional to act Resolution Professional or it may replace the Interim Resolution Professional by another insolvency professional as Resolution Professional.

Section 27 of the Code provides that where, at any time during the corporate insolvency resolution process, the committee of creditors is of the opinion that a resolution professional appointed under section 22 is required to be replaced, it may replace him with another resolution professional in the manner provided under this section. The committee of creditors may, at a meeting, by a vote of sixty-six per cent. of voting shares, resolve to replace the resolution professional appointed under section 22 with another resolution professional, subject to a written consent from the proposed resolution professional in the specified form. The committee of creditors shall forward the name of the insolvency professional proposed by them to the Adjudicating Authority. The Adjudicating Authority shall forward the name of the proposed resolution professional to the Board for its confirmation. On the confirmation by the Board the Adjudicating Authority shall appoint the Resolution Professional.

Conclusion

The object of the code is to consolidate and amend the laws relating to reorganization and insolvency resolution of corporate persons, partnership firms and individuals in a time bound manner for maximization of value of assets of such persons, to promote entrepreneurship, availability of credit and balance the interests of all the stakeholders including alteration in the order or priority payment of Government dues. The role of resolution professional is of much important to fulfill the object of the Code. The resolution professionals are to adhere the code of conduct for the insolvency professionals. There shall be a balance between the insolvency professionals and the committee of creditors so that the object of the Code can be achieved.

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The Companies (Amendment) Ordinance, 2019 – A perspective

The Companies (Amendment) Ordinance, 2019 ("**Ordinance 2019**") promulgated on 12th January, 2019 has amended several existing provisions of the Companies Act, 2013 ("**the 2013 Act**") which shall be deemed to have come into force on 2nd November, 2018. The Ordinance 2019 replaces the Companies (Amendment) Ordinance, 2018 ("**Ordinance 2018**") which was promulgated by the President of India on 2nd November, 2018. Mr. Arun Jaitley, the Hon'ble Minister of Corporate Affairs had introduced The Companies (Amendment) Bill, 2018 in the Lok Sabha on 30th December 20, 2018 to replace the Ordinance 2018. The Bill was passed by the Lok Sabha on 4th January, 2019 and was scheduled to be listed in the business of the Rajya Sabha on the last day of its winter session i.e. 9th January, 2019, but could not be deliberated and passed on the said date. Thereafter, in order to give continued effect to the provisions of the Ordinance 2018, the President of India has promulgated the Ordinance 2019 to replace the Ordinance 2018.

The Ordinance 2018 was the second major change in the 2013 Act effected during 2018 following the Companies (Amendment) Act, 2017 which received the assent of the President of India on 3rd January, 2018 succeeding various earlier Notifications/Removal of difficulties Orders/Circulars/ Amendments, more notable ones being the Companies Amendment Act, 2015 and the Notification dated 5th June, 2015 providing certain exemptions to private limited companies.

The Ministry of Corporate Affairs (MCA) had formed a 10 Member expert committee on June 13, 2018, headed by Shri Injeti Srinivas (Secretary, MCA), for review of the penal provisions in the 2013 Act. The basic aim of the Committee was to carry out de-criminalisation of certain offences and suggest ways to replace it with in-house mechanism, where a penalty could be levied in instances of default. The Committee gave its report on August 14, 2018 and the Ordinance 2019 is based on such recommendations. Legally, an Ordinance is a law that is promulgated by the President of India on the recommendation of the Union Cabinet. It can only be issued when Parliament is not in session. Ordinances enable the government to take immediate legislative action. Ordinances cease to operate if Parliament does not approve of them within six weeks of reassembly, or if disapproving resolutions are passed by both Houses. It is also compulsory for a session of Parliament to be held within six months.

The Ordinance 2019 mainly aims at re-categorisation of certain offences to bring them within the purview of compoundable procedure through an in-house adjudication framework, prescribing stiffer penalties in case of repeated defaults with a view to unclogging NCLT thereby affording the Tribunal greater focus on dealing with the matters under Insolvency & Bankruptcy Code (IBC). The Amendment Bill would also further assist in the Indian Government's endeavours to promote ease of doing business. The table below shows a gist of the amendments made by the Ordinance and the Authors' comments/ remarks in the last column, classified under the following broad headings:

- Changes considered to be substantive
- Shifting/ Enhancement of Authority

- Enhancement of Penal Provision
- The word ‘penalty’ used instead of ‘fine’ / Imprisonment removed

Section of the Companies Act, 2013 amended by the Ordinance 2019	**Gist of the amendment by The Companies (Amendment) Ordinance, 2019**	**Remarks**
CHANGES CONSIDERED TO BE SUBSTANTIVE		
Insertion of new Section 10A: Commencement of business, etc.	New Section 10A has been inserted: Companies having a share capital, which are incorporated after Ordinance 2019 comes into force, shall not commence business or exercise borrowing powers unless a declaration is filed by a Director with the RoC within 180 days of incorporation that every subscriber has paid the value of the shares and its registered office has been verified in e-Form INC-22 (the Declaration). Any failure in filing the Declaration would be one of the grounds to strike off the name of the company by Registrar.	*(i) This is re-introduction of erstwhile section 11 of the 2013 Act omitted under the Companies (Amendment) Act, 2015.* *(ii)Default in compliance with section 10A shall lead to penalty of Rs. 50,000 on the Company and Rs. 1000 for each day, upto a maximum of Rs. 1 lakh, for every officer in default*
Section 12: Registered Office of Company	Introduction of a new sub-section (9) after Section 12(8): The Registrar may physically verify the registered office of the company and if any default is found in complying with the requirement of maintenance of registered office, he may initiate action to remove the company’s name from the register of companies	*In case any default is found upon Physical verification of the registered office, the RoC may strike-off the name of the Company from the register of companies. This appears to be one of the steps to check proliferation of shell companies*
Section 77(1): Duty to register charges, etc.	The charges created before commencement of Ordinance 2019 have to be registered with RoC within 300 days of such creation. The charges created on or after commencement of Ordinance 2019 have to be registered within 60 days of such creation.	*The Ordinance 2019 reduces the maximum time period of reporting for registration and modification of charge with the RoC from existing 300 days to 60 days from date of creation/ modification. It is a welcome step and would ensure updated records of secured borrowings to be available in public domain.*
Section 86: Punishment for Contravention	Insertion of a sub-section: If any person willfully furnishes any false or incorrect information or knowingly suppresses any material information w.r.t. registration of charges u/s 77, shall be liable to fraud and attract action u/s 447	*The contravention shall invite action u/s 447 i.e. punishment for fraud. Should work as a deterrent to suppression of correct information regarding secured borrowings.*

Section of the Companies Act, 2013 amended by the Ordinance 2019	Gist of the amendment by The Companies (Amendment) Ordinance, 2019	Remarks
Substitution of new Section for Section 87: Rectification by Central Government in Register of Charges	The existing Section 87 has been substituted to provide: The Central Government on being satisfied that- (a) Omission in giving intimation to the ROC regarding satisfaction of charge within the prescribed time; or (b) Omission or misstatement of particulars w.r.t. any such charge or modification of charge or w.r.t any memorandum of satisfaction or other entry made u/s 82 or 83, was accidental or inadvertently made, it may on an application made, direct for extending the time for intimating about the satisfaction of charge and rectification of the misstatement or omission made.	*The following contained in the 2013 Act has been removed:* *"…on any other grounds, it is just and equitable to grant relief". Thus discretionary power which could be used arbitrarily, has been eliminated.*
Section 164(1): Disqualifications for Appointment of Director	An additional disqualification for appointment of Director has been added, viz. non-compliance of provisions of Section 165(1) [maximum number of directorships, i.e. not more than 20 companies at the same time, out of which number of public companies should not exceed 10].	*Accepting directorships beyond specified limits would be a ground for disqualification of the Director. This would help check the earlier malpractice of dubious directors in multiple shell companies.*
Section 248(1): Power of the Registrar to remove the name of the company	Two new clauses for removal of name of the Company have been introduced: i) if the subscribers of MoA of the Company have not paid the subscription amount and have not furnished a declaration in this regard within 180 days; ii) if the Company is found not having any registered office after physical verification of registered office.	*These two non-compliances shall be additional grounds for removal of the name of the Company by the Registrar. Please see the comments on Sections 10A and 12 above.*
SHIFTING/ ENHANCEMENT OF AUTHORITY		
Section 2(41): Financial Year	The authority to approve application for change of financial year has been shifted from "Tribunal" to "Central Government". Any application pending before the Tribunal as on date of commencement of Ordinance 2019 shall be disposed of by the Tribunal as per the provisions applicable before such commencement.	*Power of Tribunal has been transferred from Tribunal to Central Government with a view to enable Tribunal to give greater focus on other important matters viz. insolvency petitions and mergers/demergers etc. Pursuant to Section 458, the Central Government may delegate the power to any authority or officer.*

Section of the Companies Act, 2013 amended by the Ordinance 2019	Gist of the amendment by The Companies (Amendment) Ordinance, 2019	Remarks
Section 14(1): Alteration of Articles	The authority to approve application for conversion of a public company into private company has been shifted from "Tribunal" to "Central Government". Any application pending before the Tribunal as on date of commencement of Ordinance 2019 shall be disposed of by the Tribunal as per the provisions applicable before such commencement.	*Please see the comment on Section 2(41) above.*
Section 441: Compounding of certain offences	Power of Regional Director to compound offence punishable increased upto Rs. 25,00,000/- Pre-Ordinance 2019, where the maximum amount of fine for any offence did not exceed Rs. 5 lakh, such offence was compounded by the Regional Director or any officer authorised by the Central Government. With the Ordinance 2019 the maximum amount of fine for an offence not exceeding Rs. 25 lakh shall be compounded by the Regional Director or any officer authorised by the Central Government.	*Pecuniary jurisdiction of Regional Director to compound offence has been enhanced. Further clarification is made that offences which are punishable with imprisonment only or with imprisonment and also with fine shall not be compoundable. This is another step to reduce the load on the Tribunal.*
Section 454: Adjudication of penalties	Adjudicating officer can now impose penalty on company, officer in default, or any other person. The adjudicating officer shall also give the direction of making good of the default at the time of levying penalty. Default would occur when the company or the officer in default would fail to comply with the order of the adjudicating officer or RD as the case may be.	*The erstwhile provisions only provided for officer in default. The introduction of the word 'any other person' shall widen the power of the adjudicating officer.*
ENHANCEMENT OF PENAL PROVISION		
Section 90: Register of significant beneficial owners in a company	Existing sub-section (9) substituted to provide that an aggrieved party may make an application to the Tribunal within 1 year from date of such order. In case no application is made within this time, then such shares shall be transferred to IEPF. Amended Sub-section (10) provides that a person failing in making declaration shall be imprisoned for 1 year along with the fine applicable and may even be levied fine and imprisonment both.	*Considering the importance of the disclosures under section 90, the punishment for violation of section 90(1) prescribed under section 90(10) is enhanced to the effect that the contravention is punishable with fine or imprisonment or both, instead of being punishable with only fine.*

Section of the Companies Act, 2013 amended by the Ordinance 2019	Gist of the amendment by The Companies (Amendment) Ordinance, 2019	Remarks
Section 447: Punishment for Fraud	Where the fraud involves an amount less than Rs. 10 lakh or 1% of the turnover of the company, whichever is lower, and does not involve public interest, the defaulter shall be punishable with imprisonment for a term which may extend to 5 years, or with maximum fine upto Rs. 50 lakhs or both.	*The maximum fine under section 447 has been increased from Rs. 20 lakhs to Rs. 50 lakhs*
Insertion of a new Section 454A: Penalty for repeated default	A new section has been inserted to provide where a penalty in relation to a default has been imposed on a person under the provisions of the 2013 Act, and the person commits the same default within a period of three years from the date of order imposing such penalty, passed by the adjudicating officer or RD as the case may be, it or he shall be liable for every second and subsequent default for an amount equal to twice the amount provided for such default under the relevant provision of the 2013 Act.	*For repeated default within 3 years double penalty shall be imposed*
THE WORD 'PENALTY' USED INSTEAD OF 'FINE' / IMPRISONMENT REMOVED		
Section 53(3): Prohibition of issue of shares at a discount	The company and every officer-in-default shall be liable to a penalty equivalent to the amount raised through issue of shares at discount or Rs. 5 lakhs, whichever is less, and shall also be liable to refund the amount with interest at the rate of 12% p.a. from the date of issue of shares to the persons to whom such shares have been issued	*The Ordinance 2018 provides for penalty instead of earlier provision for default being punishable with fine or imprisonment or both.*
Section 64(2): Notice to be given to Registrar for alteration of share capital	For default in filing of e-Form SH-7 with the RoC, the company and every officer-in-default shall be liable to a penalty of Rs. 1000 for each day during which such default continues or Rs. 5 lakh whichever is less.	*The 2013 Act provided for "fine". The Ordinance 2019 uses the term "penalty".*
Section 92(5): Annual Return	The existing sub-section (5) has been substituted to provide the following penal provisions for failure in filing annual return- Company and ever officer-in-default- Rs. 50,000 and in case of continuing default, further penalty of Rs. 100 for each day, subject to maximum of Rs. 5 lakh.	*Imprisonment has been removed.*

Section of the Companies Act, 2013 amended by the Ordinance 2019	Gist of the amendment by The Companies (Amendment) Ordinance, 2019	Remarks
Section 102(5): Statement to be Annexed to Notice	The existing sub-section (5) has been substituted to provide the following penal provisions- Every promoter, director, manager, KMP in default being liable to a penalty - Rs. 50,000 or 5 times the amount of benefit accruing to promoter, director, manager, KMP or his relatives, whichever is higher.	*In place of "fine" the word "penalty has been used in Amendment Ordnance*
Section 105(3): Proxies	Default in providing a declaration regarding appointment of proxy in a notice calling for general meeting shall be liable to a penalty of Rs. 5000.	*In place of "fine" the word "penalty has been used in Amendment Ordinance 2019.*
Section 117(2): Resolutions and Agreements to be Filed	The Ordinance 2019 introduced a penalty of Rs. 500 per day in case of continuing failure of non-filing of resolutions or agreements as specified under Section 117(3) in addition to penalty of Rs. 1 lakh to Rs. 5 lakh against company and Rs. 50,000 against every officer-in-default including liquidator of the company	*The 2013 Act provided for "fine". The Ordinance 2019 uses the term "penalty".* *For continuing default, a further penalty of Rs.500 per day has been added.*
Section 121(3): Report on Annual General Meeting	Failure to file the report shall attract a penalty of- Company- Rs. 1 lakh and in case of continuing default, Rs. 500 for each day upto maximum Rs. 5 lakh. Officer-in-default- Rs. 25,000 and in case of continuing default, a further penalty of Rs. 500 each day upto maximum Rs. 1 lakh.	*In place of "fine" the word "penalty has been used in the Ordinance 2019. For continuing default, a further penalty of Rs. 500 per day has been added.*
Section 137(3): Copy of financial statement to be filed with Registrar	Non-compliance with sub-section (1) or (2) of Section 137 shall result in: (i) the company being liable to a penalty of Rs. 1000 for each day upto maximum of Rs. 10 lakh; and (ii) the managing director and the Chief Financial Officer of the company, if any, and, in the absence of the managing director and the Chief Financial Officer, any other director who is charged by the board of directors with the responsibility of complying with the provisions of Section 137, and, in the absence of any such director, all the directors of the company, being liable to a penalty of Rs. 1 lakh and in case of continuing default, a further penalty of Rs. 100 each day upto maximum Rs. 5 lakh.	*In place of "fine" the word "penalty has been used in the Ordinance 2019 for non-compliance by the company.* *In place of being punishable with fine or imprisonment or with both, the word "penalty has been used in the Ordinance 2019 for non-compliance by the concerned officers.*

Section of the Companies Act, 2013 amended by the Ordinance 2019	Gist of the amendment by The Companies (Amendment) Ordinance, 2019	Remarks
Section 140(3): Removal, resignation of auditor and giving of special notice	If an auditor fails to file e-Form ADT-3 within 30 days of his resignation he shall be liable for a penalty of Rs. 50,000 or his/her remuneration whichever is lower, with an everyday penalty of Rs. 5000 if the failure continues.	*In place of "fine" the word "penalty has been used in the Ordinance 2019. For continuing default, a further penalty of Rs. 500 per day has been added.*
Section 157(2): Company to inform Director Identification Number to Registrar	Failure/Delay by company in informing DIN of director shall attract a penalty of- Company- Rs. 25,000 and in case of continuing default, Rs. 100 for each day upto maximum Rs. 1 lakh. Officer-in-default- Rs. 25,000 and in case of continuing default, a further penalty of Rs. 100 each day upto maximum Rs. 1 lakh.	*In place of "fine" u/s 157 for not furnishing DIN to the Registrar, the word "penalty has been used in the Ordinance 2018.* *If the default continues, a further penalty of Rs. 100 shall be levied per day.*
Substitution of new Section for Section 159: Penalty for default of certain provisions	Non-compliance with Section 152 (Appointment of directors), Section 155 (Prohibition to obtain more than one Director Identification Number) and Section 156 (Director to intimate Director Identification Number) shall result in any individual or director of a company in default being liable to a penalty of Rs. 50,000 and in case of continuing default, Rs. 500 per day.	*In place of being punishable with fine or imprisonment, the word "penalty has been used in the Ordinance 2019.* *If the default continues a further penalty of Rs. 500 shall be levied per day.*
Section 165(6): Number of Directorships	If a person accepts directorships beyond specified limits in contravention of sub-section (1) of Section 165, he shall be liable to a penalty of Rs. 5000 for each day of contravention.	*In place of "fine" the word "penalty has been used in the Ordinance 2019.*
Section 191(5): Payment to Director for Loss of Office, etc., in connection with transfer of undertaking, property or shares	Non-compliance with Section 191 shall result in the director of the company being liable to a penalty of Rs. 1 lakh.	*In place of "fine" the word "penalty has been used in the Ordinance 2019.*
Section 197(15): Overall maximum managerial remuneration and managerial remuneration in case of absence or inadequacy of profits	Non-compliance with Section 197 shall result in any person in default being liable to a penalty of Rs. 1 lakh and in case of company, Rs. 5 lakh.	*In place of "fine" the word "penalty has been used in the Ordinance 2019.*

Section of the Companies Act, 2013 amended by the Ordinance 2019	Gist of the amendment by The Companies (Amendment) Ordinance, 2019	Remarks
203(5): Appointment of Key Managerial Personnel	Non-compliance with Section 203 (Appointment of KMPs in certain class of companies) shall attract a penalty of- Company- Rs. 5 lakh and in case of Officer-in-default- Rs. 50,000, and in case of continuing default, a further penalty of Rs. 1000 each day upto maximum Rs. 5 lakh.	*In place of "fine" the word "penalty has been used in the Ordinance 2019.*
Section 238: Registration of offer of schemes involving transfer of shares	The fine provided under this section for the director for non-compliance with clause (c) of sub-section (1) of Section 238 has been substituted with a penalty of Rs. 1 lakh	*In place of "fine" the word "penalty" has been used in the Ordinance 2019.*
Section 446B: Application of fines	The penal provisions for any default in the annual return of a OPC or small company shall be liable to a penalty which shall not be more than one half of the penalty specified in provisions of Section 92(5), section 117(2) or section 137(3)	*The penal provision for any default in the annual return of an OPC or small company has been modified from fine to penalty.*

The re-categorisation of the consequences of certain offences from 'fine' to 'penalty' is explained as follows: fine requires prosecution which is adjudicated by a Court of competent jurisdiction whereas penalty is a departmental affair. There is no question of compounding in case of penalty. The Ordinance 2019 should facilitate expeditious administration of the process involving offences, their consequences and disposal. With the amendments coming into force, Registrar of Companies and Regional Directors can now impose penalties directly after issuing a show cause notice online. Going forward, this will help in speedy disposal of such cases.

According to the provisions of Section 2(38) of the Companies Act, 2013, the term "expert" includes inter alia a Cost Accountant. Section 203 of the Act provides for appointment of Key Managerial Personnel (KMP). By virtue of qualification and experience, a Cost Accountant may also become a KMP of the Company. A Cost Accountant also is expected to have sound knowledge of the provisions of the Companies Act, keep abreast of the developments in the Act and continue to advise and advocate the cause of the effective compliance of the applicable provisions of applicable laws including the Act by the bodies corporate. Thus being aware of the latest changes in the Act would supplement the power of a Cost & Management Accountant and enable him/her to become a catalyst in the process of better corporate governance and in turn the force of the future.

CONCLUSION:

With its twin objectives of combating spread of shell companies and decriminalization of the Companies Act, 2013 paving the way for NCLT to provide greater focus on more important matters viz. resolution/ disposal of insolvency petitions and mergers/demergers etc., the Ordinance 2019 comes across as a step in the right direction and deserves the positive response it is getting.

▪ *The views expressed herein are solely the views of the Authors and are not connected in any way with the views of the Company/ or the Group where the Authors are employed.*

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Bringing Efficiency in Manufacturing Activity

Manufacturing activity comprises the conversion costs such as power cost, consumables & spares the direct labour cost, factory supervision, factory expenses, and the depreciation costs. This is apart from the basic Raw Material input costs.

Raw material efficiencies can be measured by input output ratios. In any manufacturing activity, if these ratios are varying there is something wrong in the manufacturing activity itself. Standardisation of input output ratio is the first step to bring efficiency in the manufacturing activity. There should be zero tolerance as far as the input output ratio is concerned .

If the quality of raw material is the culprit for variation in the input output ratio of material, it should be addressed at the quality check . There should be clear specifications of quality parameters of each receipts. All suppliers of the raw material should be intimated about the requirements of the quality and the standard parameters.

The purchase department of the organisation to be trained up in the quality and the technical specifications of the raw materials. If any supplier is not giving the desired quality of material , there should be check on him and purchase department should stop procuring from that particular supplier.

There should be coordination among the quality and the purchase team so as perfect material is brought in place for manufacturing. Purchase manager needs to visit the workplace and see for himself whether any quality complaints exist .If possible, we need to arrange the supplier visit to the workplace and show him how the material differs from the desired quality specification for which the purchase orders were placed.

The purchase manager needs to visit the market and enquire the price trend in the market. This activity is required in bringing the input landed costs at minimum level.

In the case of imported raw material, purchase department should be proactive . Purchase manager should know the timing of placing the bulk orders to get the maximum discounts from the overseas suppliers .Purchase manager should engage the efficient clearing agents for port clearances at the competitive prices . The clearing charges cost should be at Minimum by balancing the quantity of imports . The transportation from the port to the factory to be negotiated and the transporter has to be appointed to get the best rates.

In the case of the domestic procurements, there should be continuous negotiations of the prices for all the Raw materials whether required immediately or required on phased manner. All the suppliers are to be given a chance in negotiations . The trend of past history of prices may be helpful to know in advance what are the seasons in which the raw material prices would be at lowest.

Another important aspect in raw material efficiency is to procure the material from as many suppliers as possible so that the supplies are on continuous basis which facilitates the lowest inventory possible .

Power cost efficiency: power cost comprises the units purchased and also the units generated. Most of the cases the power is purchased from the state electricity which is much cheaper than the generated power. Normally power is generated as standby power to continue the manufacturing operations without any stoppages to ensure there is no loss of production hours.

The power consumption per unit of production should be bench marked. There should not be variation between period to period.. If there is any variation in the consumption per unit of production there is something wrong in the other production parameters in which the product is produced. Consumption pattern variation in power can be attributed to the quality of raw material. This needs to be investigated if there is any significant variation in power consumption per unit of production. This is required to standardise the production operations. Controlling points are the places where the sub meters are in place to track the consumption . Recording to be done each day and the historic data to be analysed for each of these sub meters why the consumption per hour is varying. Also the works manager to cross check cumulative daily recorded power consumption tallies with the monthly power bill units. Power factor in the monthly bill to be cross checked whether correlates with the data recorded.

This is the trigger point to know why the per hour power consumption is varying at the submeters. By analysing the power consumption at sub metres the factory over all power consumption can be controlled. Here, there should be cross check of power consumption for all the motors engaged in the manufacturing activity. We need to explore non-conventional sources of energy such as solar generating systems. Solar roofing is a new trend being installed in many factories to meet some power requirements of lighting etc.

Consumables and stores and spares consumption

Efficiency lies in selection of good quality spare. Purchase team should know the quality brands available for each spare part. All replacements are to be monitored what is the guarantee period and when it is being replaced. All critical spares to be monitored for better pricing and the timing of purchase keeping in view of continuous negotiation with the various potential suppliers.

Production team should be given necessary training in handling the mechanical spares to minimise the breakdowns. Inventory holding to be checked in relation with the quantity purchasedand consumption.

Direct labour-efficiency

Need to see the mandays worked. The output to be correlated with the man days worked . The variations in output to be analysed and reasons recorded. If the production is uniform there should not be much variation in terms of output/manday.

In a given month, number of days worked and the no of workers engaged for a given activity should be captured in erp system . Cost of labour per one hour of operation to be calculated to know the labour efficiency.

If contract labour is engaged on piece rate basis continuous monitoring is required to ascertain whether the quality is adhered. The role of quality team is very important in assessing the quality of operations in the case of piece rate wages system in the manufacturing activity.

Factory supervision – efficiency

This is mostly the salaries and benefits cost of supervisory staff engaged in manufacturing activity. The efficiency lies in the quality of products with the lesser rejections. The rejections as percentage of gross production is the bench mark for efficiency of supervisory staff. The bench mark of rejections should be fixed base on the industry standards.

The efficiency of supervisory staff also depends on the number of improvements taken up during a given period. Production parameters to be displayed in the shop floor. The best practices followed in the industry to be circulated among the staff members . The quality parameters of rawmaterial to be deciminated among the workers.

Factory expenses –efficiency

All other factory related expenses to be captured in the system. Month on month expenses variation to be monitored. Expenses head wise per unit of production to be analysed.

Any one time expenses to be eliminated in arriving the per unit cost of such overhead expense..

If expenditure is of fixed nature it is better to evaluate such expense on need based and industry norms.

Depreciation - efficiency

manufacturing operations depends upon the machinery items . It is better to evaluate the depreciation based on the useful life of the asset . It is better to calculate the machine hour rate keeping in view of the manpower required to operate the particular machine.

Once the historical data of machine hour rate is framed next step is to find out what are the deviations from the standard rate. On how many occasions there are deviations from the standard rate. If deviations are happening frequently , there is something wrong with the machine itself.

Thus these are the basic guidelines under which the factory conversion costs can be optimised in the manufacturing process.

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Blockchain and Future of Accounting Profession

Bockchain technology seems to be the buzzword in today's world. Corporates, banks, governments, entrepreneurs all have been paying significant attention and even allocating huge resources and investment to better understand and develop what sounds like the most influential technology of the future.

What is blockchain

Blockchain is a peer to peer network technology combined with cryptography.It was originally devised for handline grabbing digital currency 'Bitcoin' . Under Blockchain, every transaction made on its network is a public record. A new blockchain is created every ten minutes. The chain is continuously growing because each completed blocks is added to the public ledger. There are an infinite number of blocks on the blockchain, because as soon as one block gets completed, another is automatically generated. blocks" is added to the public ledger. What is used to secure the authentication of the source of the transaction is cryptography, through the hash codes. There is never a duplicate recording of the same transaction. As such, the need for a central intermediary is not there any more.

The benefits as envisaged by experts of blockchain technology are :

1. Greater transparency : Being a distributed ledger, all participants on the network share the same data as against individual copies. Moreover, it is not possible to do any manipulation or tinkering of data
2. Enhanced security : As compared to other record keeping systems, it becomes very difficult for hackers to steal the information because once the transaction is approved , it is encrypted and linked to the previous transaction
3. Enhanced speed and efficiency : Because of automation, there is single ledger and hence there is no need to reconcile multiple ledgers which means transactions can be completed faster and efficiently.
4. Reduction in costs : Reduction of documentation and third parties intermediaries will result in reduction of costs
5. Ecosystem simplification : With all transactions being added to a single public ledger , it reduces the clutter and thereby complications of multiple ledger
6. Durability and longevity : Due to the decentralised networks, blockchain does not have a central point of failure and is better able to withstand attacks.

Blockchain and accounting profession :

Blockchain technology will impact recordkeeping right from transactions are initiated, processed, recorded and reported. Already Big 4 accounting firms i.e. EY, Deloitte, PwC and KPMG have got into blockchain . Lot of accounting professionals are clouded with thoughts of insecurity whether blockchain will eventually replace them. Luckily, the most optimistic forecasters also don't see that happening. However, the challenge is that these professional have to equip themselves with knowledge of this revolutionary technology.

Auditors will spend much less time performing audits, and more time designing, reviewing, and verifying how information flows between systems. Rather than audits being performed at regular intervals, blockchain present the possibility of a true continuous audit. Continuous auditing also would give peace of mind to businesses and their investors

A similar shift could also occur for accountants. Everyday data-entry tasks are poised to become much easier, freeing up time for accountants to focus on analysis and insights. Accountants and firms that develop these skills now will be able to differentiate themselves as the technology becomes widespread.

As we know, that every challenge throws some opportunity. Similarly , plethora of opportunities are going to be for those accountants who are forward thinking and cutting edge in their approach . Even implementation of blockchain will not provide sufficient audit evidence with regards to

- Whether transaction is unauthorised, illegal or fraudulent
- Whether transaction is being executed between related parties
- Whether transaction is correctly classified in the financial statements

Every organization is different, obviously, so it's important to always evaluate technology decisions with your team before making any final choices.Some of the factors to consider before implementing blockchain are :

- Talk to clients and customers
- **Figure out if blockchain is even an appropriate fit for your organization**
- Link cryptocurrencies and blockchain for your clients and colleagues
- Cost benefit analysis

Conclusion:

- Blockchain is an exciting technology and has tremendous potential to reshape virtually every aspect of business within the next 5-10 years.
- There is no need to panic about implementing blockchain technology, but now is the time to begin understanding what blockchain technology does well and what it doesn't do well.
- For some industries, such as financial services and the supply chain industry, blockchain based solutions will likely appear sooner than many other industries.
- For blockchain technology to be fully utilized, it is necessary to educate people on the nature of the technology.
- Developers and companies working on blockchain solutions need to actively engage policy makers in order to ensure proper regulation and useful legislation.

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Farmers' suicides *vis-à-vis* Rural Banking in India

We are a society with set and preferred precedents. We meet a small boy and ask him what he wants to become when he grows up. We show admiration for him if he says Doctor, Engineer, Scientist, Pilot, IAS or IPS. We say – wow! What a choice! We meet a small girl and ask her the same question. We look at her with awe if she says the same – Doctor, Engineer, Scientist, Teacher, IAS. We hug her, we bless her. The parents of these small kids take pride in themselves for having such an offspring.

We also happen to meet a grown up boy from Marwadi village of Ner Taluk under Yavatmal district in Vidarbha Region of Maharashtra. He is the only son of his parents. His father served in the police. We ask him the same question albeit a little bit differently because he is already grown up. We ask him what his preferred choice of occupation is. His blunt answer is – farming. How do we react? Can we shed our elitist mindset and still say – wow? Can our urban outlook reconcile with an ecosystem which says farming can be a respectable, decent, honourable and profitable occupation? Probably not. We can't reconcile, rather we don't want to.

The above is the story of Vishal Pawar who was an exception. His father Namdev Pawar was a police constable and wanted his only son to become a policeman. But Vishal had different thinking, he always had farming in his mind. In order to pursue his dream, he started working in a pesticide company to gather knowledge about different pesticides available for farming. He left his job in 2010 and started cotton farming on their 15 acres of land. He was educated, hence was not reluctant to use modern methods of farming. In 2013, due to severe drought, the well that he built in his farm which gave him enough water for the entire 15 acres, turned dry. Despite managing to dig a small pond and setting up boring which would help him having sufficient water for irrigation, things did worsen only. Left with no other option, Vishal took extra 10 acres on lease with a view to repaying the loan that he had taken from a bank (Ner Urban Credit Co-operative Bank) as well as from one of his fellow farmers. Vishal had a belief that with the hard work that he would put in on this 25 acres of land, he would be able to repay the debts.

However man proposes, nature disposes. The worst was yet to come. In 2015, he reaped only about 10% of his expectations from this 25 acres and on December 18, Vishal ultimately gave up. The burden of consecutive crop failures and debts were too much for him to handle. He wrote four suicide notes and left the world with his passion for farming remaining unfulfilled. His suicide note to his small daughter was heart rending:

"My daughter, Vaishnavi, Beta you are a kid now but I am leaving you considering you are a grown up kid. I never wanted to be an irresponsible father but situation were such that I couldn't become a good father. As a father, I couldn't give you much, hence leaving you alone. Please forgive me. When you grow up, you will realize my situation. Please do me a favour—Please don't cry, missing me. Grandfather, Grandmother, Uncle and Mother will love you so much that you will never miss me. That's the only thing I pray for."

Vishal's story is not one of its kind. It was pathetic and not ideal. The decision was cowardly but still remains an unpleasant fact which should disturb us. It is neither the beginning nor the end. If Vishal, who had to meet such fate having fair idea about modern farming, it is dreadful to imagine the conditions of the farmers who are uneducated when monsoon plays truant.

Over the years, farmer suicides have remained a contentious issue in India. The political fraternity has left no stone unturned to make it more of a political issue than a socio-economic issue. It has been a practice for the authorities to contest whether every suicide by a farmer can be linked directly or indirectly to agricultural distress such as crop failure, unpaid loans, drop in the market price of the crop and so on. They argue that if a farmer's suicide cannot be linked to agriculture, it should not be considered a farmer suicide at all. But The National Crime Records Bureau under the Ministry of Home Affairs, which is entrusted with collecting and summarising data on farmer suicides across the country, failed to address these contentions even when the issue was given a chapter of its own in the 2015 report. The bureau publishes this data in an annual report titled Accidental Deaths and Suicides in India. The data for each year is published in the subsequent year's report. NCRB started publishing farmer suicide data as a separate section for the first time from the 2015 report.

As per Entry 14 of State List of Seventh Schedule of Constitution of India, Agriculture, including agricultural education and research, protection against pests and prevention of plant diseases is a subject matter of the State, hence overall responsibility of promotion and development of agriculture lies with the State Government. However, Government of India through Ministry of Agriculture and Farmers Welfare supervises and assists States and Union Territories in development and welfare of people involved in agriculture. Agriculture still continues to be the principal source of livelihood for more than 55 percent of the population of the country. Despite involvement of more than 50-55 percent of workforce in agriculture sector, contribution of agriculture in Gross Domestic Product is merely 14 percent. Agricultural sector has not reached its full potential due to small land holdings, over dependency on monsoon, insufficient irrigation facilities, lack of cheap credit and insurance etc. Highly erratic and inadequate monsoon can aggravate the problems for persons engaged in farming sector and in extreme situations can lead to farmers' suicides. Considering the paramount importance of this issue, the NCRB in consultation with Ministry of Agriculture and Farmers Welfare and Ministry of Home Affairs started collecting data on exclusively farmer suicides since 2014. Data on suicides in farming sector now include suicides committed by farmers/ cultivators as well as agricultural labourers. For the purpose of this report, 'Farmers/Cultivators' include persons whose profession is farming and who either cultivates his/her own land or who cultivate lease land with or without the assistance of agricultural labourers. 'Agricultural Labourers' are those persons who primarily work in farming sector (agriculture/horticulture) and whose main source of income is from agricultural labour activities.

As per NCRB data, a total of 12,602 persons involved in farming sector (consisting of 8,007 farmers/ cultivators and 4,595 agricultural labourers) had committed suicides during 2015, accounting for 9.43% of total suicide victims of 1,33,623 people in our country. The corresponding figures of suicides were 11,772 and 12,360 persons in the years 2013 and 2014 respectively.

Year	Suicides in farming sector			Total suicides	Percentage
	Farmers/ cultivators	Agricultural labourers	Total		
2013	N.A.	N.A.	11,772	1,34,799	8.73%
2014	5,650	6,710	12,360	1,31,666	9.39%
2015	8,007	4,595	12,602	1,33,623	9.43%

State and Union Territory wise analysis of suicides during the year 2015 reveals that majority of the suicides were reported from the following 7 states which together accounted for 87.49% of the total suicides :

States	No. of suicides	Percentage of total suicides
Maharashtra	4,291	34.05%
Karnataka	1,569	12.45%

Telangana	1,400	11.11%
Madhya Pradesh	1,290	10.24%
Chhattisgarh	954	7.57%
Andhra Pradesh	916	7.27%
Tamilnadu	606	4.81%
Total for these states	**11,026**	**87.49%**

Further analysis of data divulges that out of the 8,007 suicides of farmers/cultivators, 7,566 were male and 441 were female. Majority of suicides committed by farmers/cultivators were reported in Maharashtra (3,030) followed by 1,358 such suicides in Telangana and 1,197 suicides in Karnataka, accounting for 37.84%, 16.96% and 14.95% of total such suicides respectively during 2015. Chhattisgarh (854), Madhya Pradesh (581) and Andhra Pradesh (516) accounted for 10.67%, 7.26% and 6.44% of the total farmer/ cultivators suicides reported in the country respectively. These 6 States together reported 94.12% of the total farmer/cultivators suicides (7,536 out of 8,007 suicides) in India during 2015. Bihar, Goa, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Mizoram, Nagaland, Uttarakhand and West Bengal along with all 7 Union Territories have reported NIL incident of farmers/cultivators suicides during 2015.

Similarly, a total of 4,595 agricultural labourers have committed suicides during 2015. Out of 4,595 suicides committed by agricultural labourers during 2015, 4,018 were male and 577 were female. The State and Union Territory analysis reveals that majority of such suicides were reported in Maharashtra (1,261) followed by Madhya Pradesh (709), Tamil Nadu (604), Andhra Pradesh (400), Karnataka (372), Gujarat (244) and Kerala (207), these States together accounted for 82.63% of total such suicides (3,797 out of 4,595 suicides) in the country during 2015. Goa, Manipur and West Bengal and all Union Territories (except Puducherry) have reported NIL incident of agricultural labourers' suicides during 2015.

This leads us to the inevitable question – what are the reasons for these unfortunate suicides among the famers, cultivators and agricultural labourers.

Again, as per NCRB Data and analysis, 'Bankruptcy or Indebtedness' and 'Farming Related Issues' are reported as major causes of suicides among farmers/cultivators, accounting for 38.68% (3,097 out of 8,007 suicides) and 19.51% (1,562 out of 8,007 suicides) of total such suicides respectively during 2015. The other prominent causes of farmer/cultivators suicides were 'Family Problems' (933 suicides), 'Illness' (842 suicides) and 'Drug Abuse/Alcoholic Addiction' (330 suicides), accounting for 11.65%, 10.52% and 4.12% of total farmers/cultivators' suicides respectively. Similarly, in case of Agricultural Labourers. 'Family Problems' followed by 'Illness' are reported as major causes of suicides among them, accounting for 40.11% (1,843 out of 4,595 suicides) and 18.98% (872 out of 4,595 suicides) of total such suicides respectively during 2015. The other prominent causes of suicides among agricultural labourers were reported as 'Drug Abuse/Alcoholic Addiction' (312 suicides), 'Poverty' (178 suicides), 'Bankruptcy / Indebtedness from Financial Institutions' (155 suicides), 'Bankruptcy / Indebtedness from Non-Financial Institutions/Money Lenders' (100 suicides), 'Property Disputes' (93 suicides) and 'Marriage Related Issues (Dowry, Non-settlement of marriage, Divorce etc.)' (90 suicides), accounting for 6.79%, 3.87, 3.37%, 2.18%, 2.02% and 1.96% of total such suicides respectively. The following table will present the data vividly.

Farmers/Cultivator			**Agricultural Labourers**		
Reasons	**No. of cases**	**%**	**Reasons**	**No. of cases**	**%**
Bankruptcy or indebtedness	3,097	38.7%	Family problems	1,843	40.1%
Farming related issues	1,562	19.5%	Illness	875	19.0%
Family problems	933	11.7%	Drug abuse/alcoholic addiction	312	6.8%
Illness	842	10.5%	Poverty	178	3.9%

Drug abuse/alcoholic addiction	330	4.1%	Bankruptcy/ Indebtedness from financial institutions	155	3.4%
			Bankruptcy/ Indebtedness from non - financial institutions/Money Lenders	100	2.2%
			Property disputes	93	2.0%
			Marriage related issues	90	2.0%

It is clear from the above that as per NCRB data, bankruptcy or indebtedness is the main cause of farmers/cultivators' suicides. If the same is painstakingly analysed further, we would be faced with the following facts:

1. 42.67% of suicides in Maharashtra (1,293 out of 3,030), 79.03% in Karnataka (946 out of 1,197 suicides) and 46.53% suicides in Telangana (632 out of 1,358 suicides) were due to 'Bankruptcy or Indebtedness'.
2. Among 3,097 suicides committed by farmers/cultivators due to 'Bankruptcy or Indebtedness', 2,474 farmers/cultivator have taken loan from 'Financial Institutions like Bank/Registered Micro Financial Institutions' and 302 of them have taken loan from 'Money Lenders' during 2015.

The above is enough to correlate that bankruptcy/indebtedness is the main cause for suicides of farmers/cultivators in the year 2015 and the indebtedness were to the formal banking sector as well as informal banking sector. In fact, among the farmers/cultivators who committed suicide in 2015, most of them borrowed from formal banking sector. Whether the banks/MFI harassed them or not for non-repayment of debts is subject to conjecture as there are not enough empirical data to prove the same. Moreover, the proportion of loan availed from money lenders where there are perceived use of muscle power and exorbitant rate of interest, was substantially lower.

This brings us to moot question – has the formal rural banking sector has failed to deliver so far as affordable rural credit is concerned?

The institutional banking channels that take part in the rural credit delivery system mainly consist of the Regional Rural Banks, Rural Credit Co-operatives, State and Central Credit Co-operative Banks, State Co-operative and Primary Co-operative Agricultural and Rural Development Banks and Micro Finance Institutions. Most of these banks are under the supervision and regulation of NABARD.

In March 1979, The Reserve Bank of India (RBI) at the insistence of the Government of India, constituted a Committee under the Chairmanship of Shri B. Sivaraman, former member of Planning Commission, to look into critical aspect of institutional credit in boosting rural economy. The Committee's interim report, submitted on 28 November 1979, outlined the need for a new organisation for providing undivided attention, forceful direction and pointed focus to credit related issues linked with rural development. It recommended the formation of a unique development financial institution which would address these aspirations and accordingly NABARD came into existence on 12 July 1982 through Act 61 of 1981 by transferring the agricultural credit functions of RBI and refinance functions of the then Agricultural Refinance and Development Corporation (ARDC) for fostering rural prosperity. It was dedicated to the service of the nation on 5th November 1982. NABARD today is fully owned by Government of India.

As stated, the rural economy of our country, which is mainly agrarian, demands a strong and efficient credit delivery system, capable of taking care of the expanding and diverse credit needs of agriculture and rural development. More than 50% of the rural credit is disbursed by the Co-operative Banks and Regional Rural Banks. NABARD is responsible for regulating and supervising the functions of Co-operative banks and RRBs.

Let us take the case of Regional Rural Banks (RRBs) of India in respect of sufficiency of rural credit delivery.

Regional Rural Banks (RRBs), otherwise known as Gramin Banks, are Government owned scheduled banks mainly serving the rural areas of India on a regional basis with basic banking and financial services.

However, RRBs may have branches set up for urban operations and their area of operation may include urban areas too. The area of operation of RRBs is limited to the area as notified by Government of India covering one or more districts in the State. RRBs also perform a variety of different functions which may consist of, inter alia:

- Providing banking facilities to rural and semi-urban areas.
- Carrying out government operations like disbursement of wages of MGNREGA workers, distribution of pensions etc.
- Providing para-banking facilities like locker facilities, issue of debit and credit cards.

Regional Rural Banks were established under the provisions of an Ordinance passed in September 1975 and the RRB Act 1976 to provide efficient banking and credit facility for agriculture and other rural sectors. These were set up on the recommendations of The Narasimham Committee Working Group with a view to including rural areas into economic mainstream. The Regional Rural Banks are owned by the Central Government, the State Government and the Sponsor Bank jointly who hold shares in the ratio 50%, 15% and 35% respectively. However, the RRB Act was amended in 2015 whereby such banks are permitted to raise capital from sources other than Centre, State and Sponsor bank but even after stake dilution, the shareholding of the Centre and Sponsor Public Sector Bank cannot fall below 51%.

RRBs are recognized by the law and they have legal significance. The Regional Rural Banks Act, 1976 reads - "For the incorporation, regulation and winding up of Regional Rural Banks with a view to developing the rural economy by providing, for the purpose of development of agriculture, trade, commerce, industry and other productive activities in the rural areas, credit and other facilities, particularly to the small and marginal farmers, agricultural labourers, artisans and small entrepreneurs, and for matters connected therewith and incidental thereto". It is thus ample clear that RRBs can be a vehicle of growth and support so far as rural credit is concerned.

Subsequent to review of the financial status of RRBs by the Union Finance Minister in August, 2009, it was felt that a large number of RRBs had a low Capital to Risk weighted Assets Ratio (CRAR) and following the recommendation of K C Chakrabarty Committee, which was formed in September 2009, the Government of India approved the recapitalization of Regional Rural Banks (RRBs) to improve their Capital to Risk Weighted Assets Ratio. Currently, RRBs are going through a process of amalgamation and consolidation. As on 31 March 2016, there were 56 RRBs but the Govt. intends to bring down the number further to 36 from the existing 56.

As on 31.03.2017, 56 RRBs operated through 21,422 branches covering 648 districts. 49 RRBs earned profits to the tune of Rs. 2,604 crore and 7 RRBs incurred losses to the tune of Rs. 387 crore. Gross Loans and Advances outstanding under various schemes stood at 2.26 lakh crore and the GNPA stood at 8.07%. In 2017, there were about 700 odd districts in India and it seems that more than 90% of the districts of India are covered by RRBs.

As per NCRB data, most of the suicides of farmers/cultivators took place in Maharashtra, Karnataka, Telangana and Madhya Pradesh. The following table will show what the coverage of RRBs for these four states is as on 31.03.2017:

State	No. of RRBs	No. of branches	No. of districts covered	Total no. of districts in the State	Coverage in percentage
Maharashtra	2	645	33	36	92%
Karnataka	3	1460	30	30	100%
Telangana	1	397	18	31	58%
Madhya Pradesh	3	1132	50	52	96%

Apart from the RRBs, in 2013-14, there were 31 Central Co-op Banks in Maharashtra and it accounted for 8.38% of the total no. of Central Co-op banks in India. The figures for Karnataka and Madhya Pradesh are 21 (5.68%) and 38 (10.27%) respectively. Each of these states had State Co-operative Banks as well as State Co-operative Agricultural and Rural Development Banks.

It appears from the above that the above states are well covered so far as rural banking is concerned. However, small villages not properly connected with the mainland might not be covered under this network and money lenders might have a free hand there. A search about the Marwadi village in Ner Taluka where Vishal Pawar used to live reveals that the village has a population of only 439 and it is not viable for a banking institution, howsoever small it may be, to operate therefrom. Data is not sufficient to form an opinion whether there were rural banks or co-operative banks in near vicinity. Reports suggest that Vishal Pawar took a loan from Ner Urban Credit Co-operative Bank where interest rates could have been exorbitant.

Two pertinent questions crop up here – a) did Vishal Pawar had access to rural credit at an affordable rate of interest, and b) did he have crop insurance? The issue of crop insurance is beyond the purview of this write up, hence we would concentrate on whether he did have access to affordable rural credit or not.

As stated, Marwadi village did not have a bank at all. Sub-District HQ Ner where Vidarbha Konkan Gramin Bank had a branch is at a distance of 15 km only. This gives rise to the obvious question - was it difficult for him to approach the bank for an affordable credit? Was he forced to take a loan from a reportedly private bank? What prompted him to take a loan from one of his fellow farmers also? Reports available in various media don't seem to cover these issues.

To address the issue of indebtedness and the resultant farmers' suicides, the Government from time to time formed inquiry committees, provided relief packages, waived debts and given one time grants. These are more of ad-hoc measures which are, in most cases, ineffective, misdirected and flawed and have political overtones. The direction should have been on availability of affordable rural credit, agricultural productivity, crop insurance, proper marketing outlets, abolition of unnecessary middlemen etc. which would result in farmers' income and prosperity. Loan waiver and debt relief just postpone the problem but fail to face the problem head on. There were loan waivers in the past too, but had it been successful in bringing down the cases of farmers' suicides? Statistics don't prove that. Moreover, loan waiver applies to loans from formal banking sector only, whereas a large portion of the debt taken by the small and marginal farmers from money lenders on an exorbitantly high rate of interest remains unaffected.

Therefore the final question still remains – have the institutional and formal rural banking mechanism in India been able to address the issue of rural credit and farmers' indebtedness efficiently and successfully as of now? The answer is probably no.

This main questions carries with it a set of related but equally important issues:

1. Should the institutionalised formal rural banking prioritise profit?
2. Should the main target of such banking mechanism be to penetrate into rural areas as much as possible irrespective of financial consequences?
3. Should private banks be forced to take part in rural credit delivery?
4. Can or should there be a blanket ban on all kinds of chit funds, private money lending and privately run finance co-operative societies?
5. Should Regional Rural Banks with robust capital adequacy, complete mechanisation of operations and extensive network of branches be the only banking institution to operate in rural areas and all other channels be got rid of?

Let the experts and policymakers enlighten us on the above.

References and acknowledgements:

1. *Wikipedia*
2. *NCRB data and literature*
3. *NABARD website*
4. *financialservices.gov.in*
5. *The Better India*
6. *Scroll.in*
7. *The Economic Times*
8. *community.data.gov.in*

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GST on Supplies from Corporate Office to Branches and Application of CAS-4

Introduction: The GST law was introduces in India to replace the multiple taxes and was introduced on the theme "One nation, One tax". The lawmakers tried to overcome on the problems faced in previous tax regime. However, there are still certain issues, which are creating serious difficulties for the trade and industry. One such issue is GST implications on costs incurred at the head office of a business entity/ organization which are benefiting its other units. It is usual orgnasiation practice to have the centralised functions such as procurement, Human Resource Management, Accounting, Finance, IT Functions and Marketing etc. at head office. In this context an important question arises on treatment of such common services. Whether such services will fall under the definition of 'Supply'?. Should HO raise invoice in the name of branches and charge GST?. Well, an attempt is made to take a view on such services provided by HO to its branches and its legal implication under GST.

Legal Validity for charging GST on corporate services provided to branches: Taxable event is soul of every tax law. Section 9 of CGST/SGST Act, 2017 and Section 5 of IGST Act 2017 charges tax (i.e. GST) on supply of Goods and or Services on intra state sales (CGST & SGST) or inter-state sales (IGST). Therefore supply is the taxable event under GST. It is always challenging for legislative body to define a taxable event in correct manner considering various dimensions of the transactions to avoid the litigation and judicial pronouncement. Term supply is defined under Section 7 of CGST Act, 2017. The definition is inclusive and wide enough to cover almost everything. According to Section 7 (1) of CGST/SGST Act, 2017, the expression "supply" includes—

(a) all forms of supply of goods or services or both such as sale, transfer, barter, exchange, licence, rental, lease or disposal made or agreed to be made for a consideration by a person in the course or furtherance of business;

(b) import of services for a consideration whether or not in the course or furtherance of business;

(c) the activities specified in Schedule I, made or agreed to be made without a consideration; and

(d) the activities to be treated as supply of goods or supply of services as referred to in Schedule II.

So generally sale, barter, exchange, license, rental lease or disposal for consideration will be treated as the supply and shall be subject to payment of GST. However, under certain circumstances as laid down under Schedule I to CGST Act, even without consideration also activities or transaction shall be treated as the supply. We shall deal with subject matter separately in further discussion. Section 22 of CGST/ SGST Act 2017, makes it mandatory to get registered under GST law, if his turnover exceeds twenty lakhs or ten lakhs as the case may be. As per Sub-Section (2) of Section 25 of CGST/SGST Act, 2017, a person seeking registration under this Act shall be granted a single registration in a State or Union territory. However, a person operating in multiple business vertical may apply for sperate registration. Person having presence in multiple states is requires to apply for the separate registration in each such state.

According to Sub-Section (4) of Section 25 of CGST/SGST Act, 2017, A person who has obtained or is required to obtain more than one registration, whether in one State or Union territory or more than one State or Union territory shall, in respect of each such registration, be treated as distinct persons. Distinct person means separate person. Therefore, transaction between such distinct person shall be treated like transaction with third party and will be subject to GST. In earlier regime also under central excise law inter unit transfer of manufactured goods was subject to payment of excise duty. Considering the provisions of GST law, both inter unit supply of goods as well as services are also subject to GST. Therefore, services provided by head office such as accounting, banking, IT etc. shall be considered as taxable supply and will be subject to payment of tax.

Relevance of Consideration: Consideration is having pivotal role in order to comply with the concept of supply. The term consideration is defined under Section 2(31) of CGST/SGST Act, 2017 as "consideration" in relation to the supply of goods or services or both includes -

(a) any payment made or to be made, whether in money or otherwise, in respect of, in response to, or for the inducement of, the supply of goods or services or both, whether by the recipient or by any other person but shall not include any subsidy given by the Central Government or a State Government;

(b) the monetary value of any act or forbearance, in respect of, in response to, or for the inducement of, the supply of goods or services or both, whether by the recipient or by any other person but shall not include any subsidy given by the Central Government or a State Government:

Provided that a deposit given in respect of the supply of goods or services or both shall not be considered as payment made for such supply unless the supplier applies such deposit as consideration for the said supply.

The definition as stated above is inclusive and wider in nature and therefore it will be wise to refer the most accepted definition of "Consideration" as stated under section 2 (d) of the Indian Contract Act, 1872 as follow-

"When, at the desire of the promisor, the promisee or any other person has done or abstained from doing, or does or abstains from doing, or promises to do or to abstain from doing, something, such act or abstinence or promise is called a consideration for the promise"

On careful deliberation, following essential elements were found in connection with consideration.

1) Consideration in money: Any payment made or to be made in money, for the supply of goods or services or both shall be treated as consideration in money or monetary consideration.

2) Consideration not in money: The consideration may be received in form other than money. This is called as non-monetary consideration where the compensation is received in kind such as Supply of goods or services or both in return of supply of goods, services or both e.g. X agrees to click a photograph of Y and in return Y will dry clean X's clothes.

Consideration is an essential ingredient in order make any transaction as a supply. However, Sub-section (c) of Section 7 of CGST/SGST Act, 2017, specifies certain activities under schedule I which are to be treated as the supply even if made without consideration. There are total 4 categories of supply which shall be treated as supply even if made without consideration. As per clause 2 of Schedule I to CGST/SGST Act, 2017, Supply of goods or services or both without consideration between related persons or between distinct persons as specified in section 25, when made in the course or furtherance of business are taxable. Therefore, it is pertinent to note that transaction between distinct person shall be subject to tax even if no consideration is paid. Normally, inter-unit stock transfer between distinct person are done by paying appropriate tax. However, in case of services particularly where consideration is not received, GST is not levied. This may create the conflict in future if tax authorities forms the nexus of provision of services between HO and its branches.

Employer employee relationship: Recently, a judgment is passed by the Karnataka Advance ruling authority which is subsequently confirmed by the Karnataka Appellet authority. Wherein applicant has argued that there is no need to pay GST on the services given by Head office. Since, services given by HO employees are specifically covered under entry 1 of schedule III of CGST Act, 2017. The preferred arrangement between HO and the branches is that the employees of HO provide the services to branches. in order to comply with the provision of GST law a person requires to obtain the registration in each such

State, where he supplies goods or services. However, the existence of company goes beyond that. It is legal entity and entity is not restricted to specific geographical area. Therefore, though the employees are employed at HO. His employment is not confined to the geographical boundaries of the state in which HO is operated and hence the services provided by the HO employee to the branches are covered under the relationship of employer and employee which is within the purview of entry 1 to Schedule III. Applicant has referred the judgement of tribunal in the case of Milind Kulkarni Vs Commissioner of C.Ex. Pune [2016 (44) STR. 71 (Tri. Mumbai)] & Franco India Pharmaceutical (P) Ltd Vs. Comm of ST, Mumbai [2016 (42) S.T.T.1057 (TRI Mumbai)] to support his stand.

The AAR (Karnataka) has not accepted the stand of applicant and gave ruling against said statement. Appellate authority Karnataka has also discussed the employer employee relationship in detail in their ruling. The Appellate authority of Karnataka has stated in their ruling that normally HO do the three types of functions. First is strategic role. i.e. to define the strategy for the business. Second, Co-ordination of various activities and Third is control overall organization and design the policies for the organization. In addition to these core functions, the head office also serves role of service provider. E.g. Accounting, payment of salaries, technical support, shared knowledge services etc. Such additional activities are defiantly for the benefit of other units and are in the nature of supply of services. In further discussion, the appellate authority has stated that as per entry 2 of schedule 1 of the CGST Act, any supply between distinct person is to be treated as the a 'supply' in terms of Section 7 of the said Act. In view of this deeming fiction in the law, the service supplied by HO to its branches or other unit by way of performing various activities will amounts to supply and will be subject to GST. An individual is always employed by an entity and serves the organization. However, the applicability the entry 1 of schedule III should be understood in backdrop of other provisions of GST law. Every unit of an entity is requires to obtain GST registration separately. In terms of Section 25 (4) of CGST Act, in respect of each registration, the entity shall be treated as the distinct person. That means for GST law every distinct person is independent registered person. Therefore, liability to GST on supplies made by such distinct person cannot be shifted to another distinct person merely on the ground that they are part of the same entity. Further, non-compliance with the provision of GST law attracts penal action. Services by distinct person even without consideration are supply and taxable in terms of Section 7 (1) (c) of CGST Act read with entry 2 of Schedule I of said act. In view of above provision, employees stationed at the particular location of an establishment of a distinct person are deemed to be rendering their services to that establishment of distinct person and not to any other distinct person even though all distinct persons are of the same business entity. Such services of employees, when rendered in the course of their employment are not considered as the 'supply of service' in terms of entry 1 of Schedule II. However, when services given by such employees are helping other distinct person, it becomes supply and will attract the GST. Therefore, the employer-employee relationship should be viewed separately for every registered unit of the business entity.

Valuation perspectives with special reference to CAS -4: It is always challenging to decide the value of goods or services supplied between distinct persons. In previous tax regime also the matter went up to supreme court as to what should be the value of goods or services supplied between two units of same entity. According to Section 15, normally transaction value i.e. price actually paid or payable is the value of the goods or services supplied. Provided that supplier and recipient are the not related person and consideration received is sole consideration for sale. Normally, there is no flow of consideration in case of supply between distinct person. Therefore, the concept transaction value can't be used. Section 15 (4) of CGST Act comes into picture in such cases. As per Sub-Section (4) of Section 15, value in such cases shall be determined using CGST/SGST Rules, 2017. Rule 28 of CGST Rules determines the value of supply in case of supply to the distinct person.

(a) be the open market value of such supply;

(b) if the open market value is not available, be the value of supply of goods or services of like kind and quality;

(c) if the value is not determinable under clause (a) or (b), be the value as determined by the application of rule 30 or rule 31, in that order:

Provided that where the goods are intended for further supply as such by the recipient, the value shall, at the option of the supplier, be an amount equivalent to ninety percent of the price charged for the supply of goods of like kind and quality by the recipient to his customer not being a related person:

Provided further that where the recipient is eligible for full input tax credit, the value declared in the invoice shall be deemed to be the open market value of the goods or services.

Rule 30 of the CGST Rules states that where the value of a supply of goods or services or both is not determined by any of the preceding rule rules of Chapter IV, the value shall be on 110% of the cost of production OR manufacture or the cost of acquisition of such goods or the cost of provision of such service. However, CGST/SGST Act or Rules thereof doesn't provide the methodology for determination of cost of production OR manufacture or the cost of acquisition of such goods or the cost of provision of such service. In absence of such methodology Cost Accounting Standard -4 (CAS-4) issued by The Institute of Cost Accountants of India can be the best suited method to arrive at the cost of provision of service. In earlier regime also for inter-company or inter plant transfer, tax authorities were relying on the principles of CAS-4. In view of the provision of GST law, The Institute of Cost Accountants of India has published exposure draft to CAS-4 to define the methodology for calculation of

a) Statement of Cost of Production of the taxable goods (Rule 30)

b) Statement showing Cost of Provision of the taxable Service (Rule 30)

c) Statement showing Cost of Acquisition of the taxable Goods and (Rule 30)

d) Statement of Open Market Value / Value as per Goods or Services of like kind and quality (Rule 27 to 29)

Though, as per the proviso to Rule 28 of CGST Rules, 2017, where the recipient is eligible for full input tax credit, the value declared in the invoice shall be deemed to be the open market value of the goods or services. It is more scientific to calculate the Cost of provision of services using the principle laid down under the CAS-4.

Concluding remark and future dimension: In view of the above discussion, we can say that legally tax authorities can recover the GST on the various services provided by head offices to its other distinct unit. In absence of consideration also, GST will attract. Therefore, it is always advisable to get the separate registration at HO and apportion the cost of provision of goods or services to respective distinct person. Business may opt to the valuation certificate from the independent Cost Accountant in align with the principles of CAS-4 to avoide valuation dispute and allegation by authorities in future.

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Strategic Management Accounting - A Force of the Future

The term strategy is very common in today's business world. The simple meaning of the term strategy is planning. The term 'strategy 'has been borrowed from the military. It is often said that better the strategy or planning more chances are there for the survival of the firms. In today's competitive environment a firm need to consider the competitors plan and ideas while developing its own plan. The main objective of any strategy is to keep the firm in a position of competitive environment.

This paper critically evaluates the concept of strategic management accounting. Does a strategic management accounting technique need to focus only on accounting information for developing the business strategy/plan? The paper examines the literature on strategic management accounting and explores the relationship between the business strategy and management accounting functions. The paper is basically theoretical in nature and no empirical/statistical data is being used for analysing the influence of strategic management accounting in business plan.

It is concluded that for successful implementation of the strategic management accounting in a firm it is necessary to integrate it with multiple aspects of the organisational practices. Solely depending on the management accounting information is not enough in strategy building.

Key words: competitors strategy, strategic position, value chain analysis, activity based costing, management planning, management accounting.

1. Introduction

The term strategy is very common in today's business world. The simple meaning of the term strategy is planning. The term 'strategy 'has been borrowed from the military. It is often said that better the strategy or planning more chances are there for the survival of the firms. In today's competitive environment a firm need to consider the competitors plan and ideas while developing its own plan. Strategy developed in isolation is bound to flop. Strategy can be of short term or long term. In a globally connected world organisation requires sound strategy with specialised knowledge of business strategy and value creation. Any successful planning depends upon the critical analysis of the present business environment and foreseeable future events. The main objective of any strategy is to keep the firm in a position of competitive environment.

How does management accounting play a vital role in the strategic decision-making process? According to Tricker(1989) there exist a relationship between business strategy and management accounting as relationship exist between military strategy and military intelligence.

This paper critically evaluates the concept of strategic management accounting. The paper examines the literature on strategic management accounting and explores the relationship between the business strategy and management accounting functions. The paper is basically theoretical in nature and no empirical/statistical data is being used for analysing the influence of strategic management accounting information in business plan. The paper evaluates different literature on the existing topic and conclusion has been drawn from there to.

2. What is strategic management accounting?

There are several viewpoints on strategic management accounting. By examining different taxonomies on strategic management accounting four viewpoints has been developed:

i. The first view point focuses on inclusion of both internal and external management accounting information for developing the strategy of the business. This school of thoughts focuses on "what our competitors are doing"?

ii. The second viewpoint analyse the strategic position of the firm and expect the role of the management accounting for successful implementation of the strategic position.

iii. The third viewpoint focuses on the ways to decrease the cost and increase the profitability of the firm. The literature on value chain and activity based costing is referred to develop this viewpoint.

iv. The fourth view point challenges the above viewpoints. It points out that strategy of any business can be developed deliberately. The fourth view point challenges the above three view points. This group of researcher raised the question 'Is it possible to plan the strategy'?

3. Research Questions and Sub Questions:

The researcher is guided by the following research questions:

i. Does a strategic management accounting techniques need to focus only on accounting information for developing the business strategy/plan?

ii. Is there any other factors needed to be considered for developing a business strategy?

3.1 Methodology:

This paper has been developed by analysing the relevant literature on each of the above viewpoints. The existing literature on strategic management accounting has diversified opinions on the topic. The present paper tries to analyse those research work and to identify the scope and extent of application of strategic management accounting in business. The research approach is qualitative in nature. Literature review is being done on the following key words: Competitors strategy, strategic position, value chain analysis, activity based costing, management planning, management accounting. No statistical tools are being used in the research paper. This research paper is basically a theoretical research and conclusion is being arrived after analysing the different researcher views.

4. Literature Review:

4.1 *What is the competitors plan?*

Competitor's strategy can be known though a public document (Audited Annual Accounts), firm's sales force and its customers. According to Simmonds (1981) suggested that market share assessment could be included in management accounts. Budgets could be presented with columns for ourselves and for the competitors.

Simmonds'(1982) a firm must collect information which enables it to determine market share, competitors pricing ,cost and volume. A firm which monitors market share can measure the extent to which it is gaining and loosing the competitive position.

Browmwich (1988) suggested that for success of any firm it is not enough to evaluate its performance with the competitors but it is essential that firm must evaluate the benefits of its product from customer's point of view and the firm's perspective.

Wilson (1990) found in his study that traditional management accounting system is reactive by nature.

He suggested that business need to develop and implement the proactive management accounting techniques.

Taylor and Graham(1992) inclusion of non financial information are important for strategic planning and control.

4.2 *Firm strategic position*

There are three types of cost management initiatives for building firms strategic position:

i. Those that strengthens the firms competitive position

ii. Those that has no impact on the firm's position

iii. Those that weaken the firm's position.

The first type can be easily illustrated with example of a hospital. If a hospital redesign its admission process than it will be less stressful for the patients to be admitted. This will increase the popularity of the hospital. The hospital will get competitive edge over its competitors.

The second type can be illustrated with the example of a company that redesigns its accounts receivable section to make its more efficient. The only significance of this position is that it will make the revenue collection fast and efficient but it has no strategic significance in contrast to the competitors.

The third position can be illustrated with the example of an airline industry that reduces the head count by no longer having 'floater' .This is important because there are two types of ticket desks and hence two sets of queues. One desk deals with normal condition and other with special condition. The average passenger does not now which is the appropriate queues because there is no easy way to delineate between the two. When the queue is long it is really disgusting to stand in the long queue and later on the counter person asked to change the queue. This type of cost reduction technique will bring extreme dissatisfaction among the passenger and the passenger may shift to some other airliners.

According to Miles and Snow(1978) the success of any firm depends upon the response to the environment and their technology, process and the structure. Defenders are prominent in the stable, narrow product environment. Reactors are normally unsuccessful because they don't respond to business environmental changes and uncertainty.

Porter (1980) suggested that a firm can be successful in the market either by having product differentiation or by achieving the cost leadership. To differentiate a product it must have some unique feature and quality which are not included in the competitor's product. This uniqueness is possible only though constant research and development. Competitive advantage can be achieved by giving superior products to the customers. For cost leadership competitive advantage is achieved by having lower costs than all its competitors.

Simon (1987) tries to establish relationship between the firm business strategy and accounting control system. He found that prospector firms place great importance on forecast data, setting budgets and focussing on the outputs. The reactors firm are highly inclined in cost control.

Shank (1989) and Shank and Govindarajan(1989) found that those companies choosing the cost leadership policies will prefer to use the traditional management accounting tools to judge their performance. The traditional management accounting tools include standard costing; budgeting etc. these categories of companies feel that understanding the competitor's budget has significant influence in the survival of the firm.

Govindarajan and Shank (1992) tried to integrate the firm mission (build, hold and harvest) with the accounting policies. They concluded that accounting policies for strategic planning would be very similar with harvest mission and cost leadership strategic mission.

4.3 *Gaining Competitive advantage*

Porter (1985) presented the value chain analysis. He suggested that value chain analysis is the key of success for any business firm in this competitive world. Cost can be reduced by eliminating those activities that don't add any value in the process. The value chain has been described as a set of processes that start from the basic raw material and end up in final output. The aim of any value chain analysis is to identify those value creating activities. The non-value added activities needed to be removed from the chain. This will result in cost reduction. The following figure illustrates the Porter value Chain Analysis.

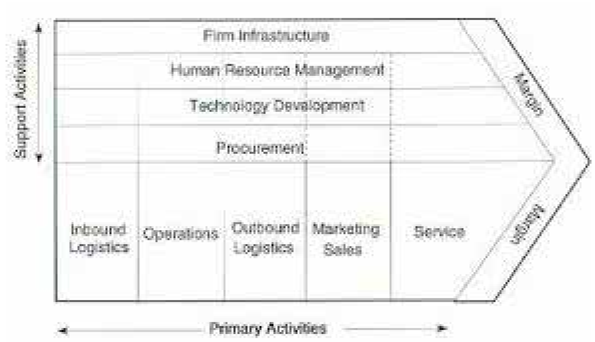


Figure1: Porter Value Chain Analysis *(source: internet)*

Hergert and Morris (1989) found that most of the accounting data are not suitable for the value chain analysis purpose. They further asserted that traditional accounting tools don't optimise and establish coordination among the different departments in an organisation. After introduction of the responsibility accounting system the firm is being departmentalised and it is difficult to establish the linkages as propagated in the value chain analysis system.

Nanni et al (1992) cited that cost driver analysis needed to be dynamic. The cost drivers tend to lose its importance because of the changing business environment. In this scenario the companies are suggested to develop new drivers and replace the old one. Further it is being asserted that performance measurement is a key to build the strategy.

4.4 *Is it possible to plan the strategy?*

Lots of debates and discussion had taken place on the matter whether it is possible to plan the strategy or it's just arises because of the interaction of the business firm to a continuously changing and challenging environment. There are some authors who are in support of the theory of planned strategy or deliberate strategy. This group of thinkers propagate that if the organisation is neatly integrated than it is possible to plan the strategy beforehand.

The other group of researchers suggested that no planned strategy can be easily implemented. As the business environment is dynamic in nature so it is not possible to implement any deliberate strategy. They suggested that designing strategy is a continuous process and a firm need to develop it whenever some changes are taking place in the environment.

Mintzberg (1978) asserted that there are two concepts of strategy. First one is strategy formulation and the second one is strategy formation. He further suggested that strategy formulation is a long term process where as strategy formation is a adaptive process. Strategy formation takes places by screening the business environment. Strategy formulation is a part of long term planning. Strategy formation tries to adopt the organisational stability along with the ability to adopt the changes. It is possible to adopt deliberate strategy only when external environment has very limited influence over the organisation. But in reality hardly it happens so. External business environment has significance influence over the organisation therefore, it is being suggested that organisation need to formulate the strategy as and when situation demands.

Dermer(1990) asserted that accounting has very limited role in strategic formulation process. Accounting information is being developed on economic basis and so it totally ignored the human factors and the overall mood of the organisation. Formulating the strategy by relying on the accounting data will severely paralysed the firm in a long run. Dermer also argued that research made on accounting and the strategy is biased and it is highly inclined in support of accounting information.

Simon (1992) asserted that accounting data has very limited role in stimulating emergent strategies. Accounting information can be used as guide for developing emergent strategies.

5. Results and Discussion

After analysing the different researcher views the following conclusion is drawn regarding the strategic management accounting. Strategic management accounting is a very broad concept and it's not confine to only accounting information. For successful implementation of this tool it is essential for a firm to analyse the following elements.

Collection of competitor's information: First steps of implementation of strategic management accounting are to analyse the competitor's information. It is quite easy to collect competitor's information. It can get collected through public documents, customers, sales force etc. the competitor's information helps to build the plan for the business.

Cost Reduction and Control: The cost reduction and control is an ongoing process for any dynamic business firm. Meeting the set targets are not enough for the success of any firm. The firm need to look for real and permanent reduction of the cost. For achieving these targets firm need to review its cost drivers after certain point of time. Some of the old cost drivers needed to be abandoned and new cost drivers are expected to be introduced. Activity based costing and target costing is a very sophisticated tool in cost reduction and control. Finding ways to reduce cost and establishing linkages between the activities is the key to survive in this highly competitive business environment.

Accounting and strategic planning:

The firm need to relate the accounting information with the strategic planning of the business. Any strategic planning shouldn't be developed in isolation. Whether it is strategic formulation or formation both needed to be supported by the management accounting information. Similarly, management accounting tools needed to be more dynamic and realistic so that it supports the strategy. The accounting tools must cover the human factors and overall mood of the organisation before it gives suggestion/ support to any strategic planning. For example if a firm plans to become a cost leader than it needs to take the accounting support for in depth cost analysis. Similarly, product differentiation strategy has high importance on marketing cost analysis.

6. Conclusions:

i. It is not possible to develop Strategy for any business in isolation. Strategy building is complex task. Lots of factors effect strategy building.

ii. Strategic management accounting decision is affected by several factors like dynamic business environment, competitor's policy, government rules and regulation etc.

iii. Management accounting information aids in strategy formulation.

iv. Management accounting tools needed to be more dynamic and versatile so that it can incorporate different non-financial information. Like financial information non-financial information too play a significant role in strategy formulation and formation.

v. It may be suggested that for successful implementation of the strategic management accounting in a firm it is necessary to integrate it with multiple aspects of the organisational practices. Solely depending on the accounting information is not enough in strategy building.

References :

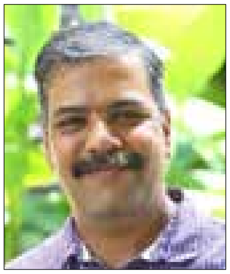
» *Bromwich, M. (1988). Managerial accounting definition and scope-from a managerial view. Management Accounting, 66 (8), 26-27.*

» *Dermer, J. (1990). The strategic agenda: Accounting for issues and support. Accounting, Organizations and Society, 15 (1-2), 67-76.*

» *Hergert, M., & Morris, D. (1989). Accounting data for value chain analysis. Strategic Management Journal, 10(2), 175-188.)*

» *Miles , R . E . and Snow , C . G ., 1978 . Organizational Strategy, Structure, and Process , New York ,* *McGraw-Hill .*

- *Mintzberg, H. (1978). Patterns in strategy formation. Management science, 24(9), 934-948.*
- *Nanni, A. J., Dixon, J. R., & Vollmann, T. E. (1992). Integrated performance measurement: management accounting to support the new manufacturing realities. Journal of Management Accounting Research, 4(1), 1-19.*
- *Porter , M . E ., 1980 . Competitive Strategy : Techniques for Analyzing Industries and Competitors , New York , The Free Press .*
- *Porter , M . E ., 1985 . Competitive Advantage : Creating and Sustaining Superior Performance, New York , The Free Press .*
- *Simmonds , K ., 1981 . Strategic management accounting, Management Accounting (CIMA), April .*
- *Simmonds , K ., 1982 . Strategic management accounting for pricing: A case example , Accounting and Business Research, Summer, 206 – 214 .*
- *Shank, J. K. (1989). Strategic cost management: new wine, or just new bottles. Journal of Management Accounting Research, 1(1), 47-65.*
- *Govindarajan, V., & Shank, J. K. (1992). Strategic cost management: tailoring controls to strategies. Journal of Cost Management, 6(3), 14-25.*
- *Simons , R ., 1987 . Accounting control systems and business strategy : An empirical analysis , Accounting , Organizations and Society , 12 (4) , 357 – 374 .*
- *Simons , R . L ., 1992 . The Strategy of Control , CA Magazine , March .*
- *Taylor , B . and Graham , C ., 1992 . Information for strategic management, Management Accounting (CIMA) , January .*
- *Tricker , R . I ., 1989 . The management accountant as strategist, Management Accounting (CIMA) , December .*
- *Wilson, R. (1990). Strategic cost analysis. Management Accounting, 68(9), 42-43.*



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Enterprenurship & Start-Ups - Oportunities Unfolded & Role of CMAs

Indian is one of the largest Start-up eco-systems in the world but, it is found that 90% of them fail within the first five years (Study by IBM Institute of Business Value and Oxford Economics). The main reasons which emanated for failure of start-ups are firstly, the type of business module which the start-ups adopt, secondly, the poor fund management and the last and very important is poor costing and pricing of products and services. If we closely look at the reasons for failure, then it is clear that we as a Cost and Management Accountants can play a major role in helping the start-ups in overcoming these problems and thereby we can also be part in National Building activities.

As a practicing Cost Accountant, I hereby share few of my experience as a Consultant to many start-ups and MSME sectors. In my last five years of association with the District Industries Centre (DIC, MSME) and with many incubation centres, I find that there are lot of scope available for our professionals who can act as a guiding force in Start-up revolution. Here, Start-ups what I am referring to is not only the one according to the definition given by the Department of Industrial Policy and Promotion of Ministry of Commerce and Industry but also, it includes all other new enterprises which are setup which do not fall under the definitions of Start-ups.

Ever since the idea of Make in India and Start-up India schemes were launched to promote domestic industries, many enthusiastic young minds started thinking in innovative ways through various research and development activities and got stuck in the process of converting ideas in to a proper business model. The survey on start-ups failure indicates that 29% of the total failures is because of Start-ups not adopting a proper business model. The main reason for the failure is that, the young entrepreneurs could not get proper guidance from the knowledgeable persons or it is difficult for them to take the advisory services as the cost of such services is beyond their reach. So, as a Cost and Management professionals we are more competent to give them basic advisory services by hand holding the start-ups in designing a proper business model. Out of my experience, the young entrepreneurs are sound in technical knowledge and in the business ideas but, they lack in proper vision of having a good business model. Most of the business at first instance fails because of lack of proper understanding of the model and they don't have any guidance from experts as to how to proceed. Business model depends on different types of products and services and this requires assistance from professionals who can help in designing a proper business model according to the industry needs. As Professionals, we can be of helping hand to give advisory services in the form of planning, forecasting and allocation of various expenses and scheduling proper investment planning.

Professional assistance is also required in Fund and Working Capital management. The main problem with the start-ups is that of working capital crunch. On one side, getting working capital itself is difficult and the other part is that they lack in disciplinary way of managing working capital. Most of the start-ups use their own funds to kick start the business and they find it difficult to pump in money whenever it is required for them to do so. The lack of understanding of various funding schemes available with various financial institutions (various schemes) and the different modes through which they can source funds (like, Venture Funding, Angel Funding, and Crowd funding) is one big issue with all the start-ups. Many of the request I quite often come across, is that many stats-ups gets started with own investment and later they find it difficult when it is required for them to position themselves in the market. This is a stage where most of the start-ups collapse and even the best ideas get defeated because of lack of funds. There are many schemes available for funding at the initial stages of business and many new entrants are not aware of the same. There are many collateral free loans available with minimum basic documentation and this can boost up the small enterprises. In order to avail such loans, it is important that a project proposal needs to be prepared and set of documentation required for processing the loans needs to be identified. As a professional, we can help in preparing the project proposal and also vetting the documents for loan assessments. As we are statutory recognised professionals, there is a lot of weightage for the documents and project proposal certified by us. Seed funding and Series A. B and C funding requires a very good business presentation and as a professionals we can support Start-ups by helping them in designing a good business presentation and also can present ourselves to the funders on behalf of the start-ups. My experience shows that the funders and the financial institutions are more positive and convinced when we as professionals go and make representations on behalf of clients.

Costing and Pricing is one important areas where our services will be of much demand. It is found from survey that 19% of the start-ups fail because of wrong pricing of their products and services. Today, it is Cost Competiveness which matters; most of the start-ups are not cost conscious. This is not their fault; many of the start-ups are floated by youngsters who are not having thorough knowledge and experience in costing. As a Cost Accounting professional, we are the right people to advice on the need and importance of costing and help them in setting up a simple costing system to suit the requirement of Start-ups. It is our responsibility to develop the culture of costing at the embryonic stage of developing the business mode. Timey advice on cost related issues and ensuring proper cost management will make start-ups more cost competitive.

As professionals, we can pay a significant role in Start-ups eco system and following are some of the other areas where we can add more values –

Financial Literacy and Awareness: It is important that all the stake holders of Start-ups have basic understanding about the Balance Sheet, Profit and Loss account and other Financial Statements. They should also have some basic knowledge about the types of Finances, working capital management and financial analysis. We as professionals can help the entrepreneurs in creating this awareness on basic financial needs and requirements.

Schemes related Advisory Services - There are lot of schemes announced by Central government, State Governments and the Financial Institutions to encourage start-up business. Schemes can be in the form of financial incentives, credit assistance and subsidy in nature. Most of the entrepreneurs are not aware of the schemes and there are no proper agencies to guide and help entrepreneurs in understanding and recommending the proper schemes. As a professional, we are more competent to give advisory services in terms of selecting the proper schemes by the entrepreneurs. For eg, many of the entrepreneurs are not aware of the schemes like getting subsidies on Quality Certifications, Bar Codes, Intellectual property rights etc..

Incorporation related services – Many entrepreneurs are not clear about what type of business they need to Start-up with. Many times they are confused and they think that sole proprietorship is a form of company. They are not aware of the existence of LLP and OPC and they realise only when they go to government asking for schemes or approach banks and funders for financial assistance. As a professional, we can help them not only in suggesting the form of business to be setup and also can get the business incorporated ourselves. This is a very important service we can offer to the start-ups.

Statutory Registrations - It is highly important that statutory registrations are very important for any start-ups as failure to comply with will have huge repercussion to business. Many start-ups have no idea about what all the statutory registration they are suppose to adhere in order to carry out the business. There are many licenses which the various acts mandate for certain types of business and if not obtained may invite serious actions. Some of the license/registrations are like, FSSAI license, Corporation Licenses, PF, PT, ESI, IEC registration etc. As a professional, we can understand the nature of business and accordingly help the entrepreneurs in getting the required certifications. Some of the documents to be submitted for registration are to be certified by professionals and also the financial information required needs to be checked and verified to make it more authentic.

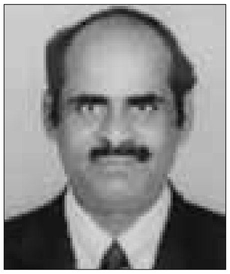
Statutory Compliances – The objective of Government is to see that the statutory provisions are followed and complied by the business. As a professional, we stand in between Government and the business. Our role is to ensure that we educate the entrepreneurs and also see to it that they follow the compliances. Many start-ups are not aware of the statutory provisions and they are not updated with the changes taking place in statutory compliance. Failure to comply with the statutory compliances may lead to paying huge penalty, embarrassment and some time even cancellation of registration itself. So, we can play a major role here and by giving timely advisory services on statutory compliances and helping in following all the compliances well within due date we can make the business more Statutory Compliant.

Accounting and Taxation Services – Most of the start-ups ask for end to end services and accounting and taxation services is one important services which we Cost Accountant can help start-up in maintenance of correct records of transactions and also proper computation and remittance of taxes to the Government. Many of the start-ups are not aware of various provisions in Income Tax which are available for claiming exemptions. They are also not clear about the minimum set of books of accounts to be maintained.

Management Consulting Services - Decision making is one of the challenging areas in a start-up environment. At the initial stage of business it becomes very important in start-up environment that the entrepreneurs keep changing his business decision to make it suitable to market forces. Such frequent changes in decisions are due to lack of experience and exposure in business. As a professional, we can give time to time constructive suggestions in managing the business in a better way. Role of professional is also useful in acquiring new technology, resource planning, optimum use of capacity, economies of scales in operation, constraints management and other areas. Out of my experience, I find more and more professionals are now becoming strategic advisors for start-ups and their role is to make start-ups more competitive in market.

Conclusion

Recent developments in India shows that we are moving towards more localisation, we are becoming more completive market in the world as we have highest consumption rate. Market potentiality is huge and the positive side of the Economy is giving more opportunities for people to be passionate of starting new business. Zeal to setup new business is encouraging many entrepreneurs to innovate new products and services. More competitive business models mean more demand for professionals to help in managing the business. It is high time that we are heading towards Start-ups revolution and in this process of revolution, the role of Cost and Management accountant is vital and we can also be part of the revolution and our services in the form of consulting, advisory and as hand holding will definitely help in building in strong start-up culture and which in turn help to drive sustainable economic growth and generate large scale employment opportunities.



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Health Management Through Stress Management

The most appropriate word to describe our daily lives today would be "stressful". A very large segment of our society, today, ignores their health. Most people are working towards materialistic happiness. We work towards name and fame by not caring about our personal health for which we end up paying a heavy price in the old age.

What is Health: World Health Organization (WHO) defines Health as, "A state of complete physical, mental, and social well being and not merely the absence of disease or infirmity". One must be physically, mentally, spiritually, ethically, socially, financially, morally and psychologically healthy. Health means balancing the body and mind.

When one is healthy, he can manage his family, work and other activities, otherwise he ends up being stressed. Stress is like a leech that clings on to you and does not leaves until the proper medicine is given. "Chinta goes with chita" which means stress will go only when we are dead. Nobody can be free of stress, but we can manage stress.

To manage stress one should keep himself busy by always doing something productive. Positive stress is good for a healthy growth of the being but negative stress is very bad for mental and physical health. As stated in the holy Shrimad Bhagvat Gita, "Karmanyevaadhikaraste Maa Phaleshu Kadaachana, Maa karmaphalahetur Bhoor maa Te Sango'stwakarmani" which means one should do his duty without expecting any result out of it and he must believe in the quality of his work. Work done with enthusiasm and love continuously, by following proper ethics will definitely give good result but patience is required to enjoy the fruits of that work.

"Seal the dead past, do not worry about unborn future, be in realistic present". Do not think of past or future as creates more stress. Over 70,000 thoughts occur in our minds and most of them are either negative or repetitive in nature. Reminding of our painful pasts and also thinking what would happen in future which makes our life miserable. A stressful mind exaggerates every small thing into a big one. Good Karma will result in good and bad karma will give bad result.

"Love All Hurt None". Loving everybody can reduce stress. One should love himself first, then his or her family and then society. Spending some time with family and friends everyday can help to manage stress.

"Nobody is superior, nobody is inferior to me, I am what I am and nobody should be compared with others. All are unique creations by God.

Choose your own stress relieving activity. You could sing a song, dance, play mridangam, table, or write something. Be creative, take a new project and work on what keeps your mind busy. Go for a long walk, drive once in a month with family and friends, visit places near rivers or hills. Being in the greenery every day in the morning relaxes the mind and body.

As stated in Shrimad Bhagvat Gita, "Yuktaahaarabihaarasya Yuktacheshtasya Karmashu, Yuktaswapnaavabodhasya Yogo Bhavati Duhkhahaa" means eat moderately, eat when you're hungry.

"Eat to live, and do not live to eat". Sleep as much as required and do yoga and meditation regularly. Be consistent with your habits and see the change.

Indian food is a medicine and Indian dinacharya is best yoga for physical and mental health. Fasting is the best medicine to clean our bowels and it heals more than a hundred diseases in our stomach.

Yoga is the only solution to connect body and mind for a healthy life. It is a very ancient therapy to treat diseases holistically. Yoga means union of body and mind, the universe, with each other, and with the nature. The goal of yoga is to maintain vibrant physical health and mental well being by proper meditation, breathing, asanas and exercise. Daily Practicing of Yoga is considered as panacea.

These are only a few ways for stress management that I have learnt over the years. But mainly stress management is subjective and depends on how one can perceive something. A positive outlook on the society can never give stress whereas negative perception of things can give birth to repetitive and stressful thoughts.



References :

» *Srimad Bhagbat Gita*
» *Be Happy and live long By Dr G Francis Xavier*

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Cost and Management Accountants: Power of the Past– Force of the Future

(I) INTRODUCTION - HISTORY OF CMA PROFESSION:

The importance of the costing dates to the early years of Second World War i.e. 1939-45. The defense purchase contracts were made based on cost-plus method owing to the reason that the cost of defense purchase was prohibited. The ravaging effects of the World War II lead to destruction of the economies of the Nations. The war had put an end to colonialism which made these countries Independent to overcome this devastation of Nation's economy they started Industrialization at large scales. This laid down the foundation stone for opportunities for the rapid growth of CMA profession. During that period Cost Accountants had played a pivotal role in the formation of government policies. Later this also increased the scope for profession in the management fields like increase in efficiency, optimum utilization of resources, reducing cost, management decisions, etc. In those days, formation of government policies was based on the cost accounting, which leads the foundation stone for the rapid growth of the profession. What began as a mere exercise in estimating the cost later developed into a movement for efficiency and optimum utilization of scarce resource, etc.

India has also considered the importance of the Cost Accounting and with an objective of promoting, regulating and developing the profession of Cost Accountancy, The Institute of Cost and Works Accountants of India was established as registered Company (ICWAI/Institute) in 1944 under Companies Act in India even before Independence. Looking at the importance of the institute and give greater independence, a Special Act was passed in the Parliament and the Institute was established on 28th May 1956 as "The Institute of Cost and Work Accountants of India". Since then CMA profession is continuously increasing its importance in various areas involving the costing or pricing of goods and services or the preparation, verification or certification of cost accounting and related statements. As on date CMAs' are not only contributing their services in the field of Costing but in many areas of Management Accounting, which result into the change of designation of professionals as "CMA" i.e. "Cost and Management Accountants" from erstwhile "CWA" i.e. "Cost and Works Accountants'.

(II) TRADITIONAL AREA OF CMA'S PRACTICE:

In earlier days, services offered by CMA's were mainly confined as Cost Accountant, being responsible for determining the Cost and Price of the goods and services. CMA also played an important role in developing an appropriate structure and system of cost accounting, compliances of various law, analysis and devising ways for rationalization of cost. Under the Companies Act and erstwhile Excise Act, CMA is the only professional who is authorized to carry out verification, auditing and certification of cost accounting and other related financial statements for registered companies in the specified sectors. Various roles of CMAs are discussed hereunder:

(1) ROLE AS A COST ACCOUNTANT:

Cost accounting is a very important branch of accounting. In fact, it is an area in accounting that works out the cost of the product, processes and project, reduce expenses per unit and increase the profitability by using costing methods, principles and techniques. Therefore, Cost accountants are responsible to maintain cost information for every product, process or project undertaken. Allocation of cost, standard costing, activity costing, comparison of actual costing, study the reasons of variance, budgeting, etc, are the various techniques which were used by the cost accountants to determine the cost of the product, process or project. To keep up-to-date and accurate product costs, CMA must consistently review the actual cost with existing standards with respect to changes in processes or products which result in a change of cost.

In new era CMA are not only work on the costing but also take effective part in the decision-making activities which relates to the price fixation of the product, project selection, marketing, valuation of brands and intangible assets etc., which directly relates to the profitability and management of the organization.

Over the period, the importance of cost accountant is increased in the manufacturing sector. As the service sector has grown rapidly, the importance of cost accountant is also has gained vital role in this sector. To analysis and determine the cost of service sector is highly technical and require the expertise in the subject. CMA being specialized in the field of costing is the right profession.

(2) ROLE AS A DATA ANALYST:

Influx of various software tools has simplified the role of the Cost Accountant. Increase in availability of the data has increase the pressure the pressure of accuracy to determine the cost and to analysis the over run of the cost than the expected level. These software tools not only help in determining the cost but also provide the guideline for the areas where the cost can be brought down in an organization. These software tools also help to determine the standard cost of the project which is the toughest job for the cost accountants.

The data analysis helps in to control the cost by work out the variances between the standard cost, budgeted cost and actual cost. They not only give the variances but also help to find out the reasons for such variances and to control the adverse effects of various activities.

(3) ROLE AS A COST AUDITOR:

Under the Companies Act, CMA is the only profession who are authorized to carry out the audit of the cost records kept by the Companies. Based on the audit, CMA prepare the cost audit reports. These reports help the board of director's in reviewing their own performance and in identifying the weak areas, where enough control measures may be taken in future for the improvement in the profitability of the organization.

(4) ROLE IN LEGAL COMPLIANCE

CMA plays an important role in the management and helps the organization in various legal compliances. CMA support top management in providing cost reports relates to cost of various products, profitability, breakdown, variance analysis, prepare and maintain cost records etc. for legal compliance. Based on these reports, management identify/implement various corrective measures for control of the cost and to achieve the cost targets.CMA analysis the cost and assist the top management with cycle count/physical inventories and maintain and test internal control documents etc.

(5) ROLE IN EFFICIENCY IMPROVEMENT

CMA evaluates operating efficiency and effectiveness of production and service management in different departments of an organization. CMAs helps in comparing financial performances, making assessments and projections, providing figures for future costing and pricing policies and other related managerial decisions. CMA is the first whistleblower, who indicates the adverse effects of the costing of purchase price, inventory management, human costs and other related costs on the profitability of the company. CMAs is also plays a role of efficiency auditor, which gives the report on the efficiency of the company in different field.

(III) FUTURE AVENUE OF CMAs

Landmark reforms like GST, IBC, New Companies Act, simplification of various laws, steps towards ease of doing business, Start up activities, launch of Digital India, Make in India and skill Development programs, the resolute crackdown against corruption and black money along with seamless collaboration and coordination between the Centre and States towards ensuring national welfare and advancement has opened various opportunities and new avenues are opened for CMAs. They are treated as front runners to achieve sustainable economic growth and prosperity. The new roles and avenues for the CMAs are described here below:

(1) CATALYST FOR ECONOMIC GROWTH WITH EASE OF DOING BUSINESS:

In the coming days, CMAs plays a vital role in the economic development of the country. CMAs are fully committed to making the Indian business environment as investor friendly with fundamental change in a business environment, use of technology, simplified tax structure, transparent and firm government policies, etc. Government has taken various initiatives to boost the growth rate of the Indian economy, including giving a fillip to manufacturing, concrete measures for transport and power sectors as well as other urban and rural infrastructure, comprehensive reforms in the foreign direct investment policy and special package for textile industry etc. On the economic fronts, the government is still taking various measures to push the infrastructure development by giving infrastructure status to affordable housing, higher allocation to highway construction and focus on coastal connectivity, Improvement in the financial discipline, bank recapitalization, etc. In all those areas, the role of CMA is very much important and the instrument to achieve the government target and become a partner in the national building.

(2) INVESTING IN INDIA: A MEGA OPPORTUNITY:

Today with the increasing demand of various products, implementation of the Make in India and Skill India mission, relaxation of investing norms, improvement in ease of doing business conditions, government support to manufacturing facilities, etc, India is a hub for manufacturing facilities. Today India is become an investment destination for the large global companies.Investors' confidence to invest in India has seen tectonic boost in the last few years, which shows the good growth in the FDI in India in various new sectors including real sector, banking, animation and aviation etc. With the liberalization of various sector India has become a favorite investing hub for the global companies and they see mega opportunities in investing in India.

CMAs will guide prospective investors in India in optimum utilization of the resources available based on cost effective methods. CMAs will help to cut down the various costs in the field of manufacturing and service sector.Being an expert in the field of costing and management accountancy, CMAs are more capable and helpful to make the business environment, investor friendly.

(3) ROLE OF CMAs IN INDUSTRIAL REVOLUTION 4.0

The main technology of Industry 4.0 is the Cyber-Physical System (CPS), which is defined as thecombination of physical and cybernetic systems (Lee et al., 2015). The two systems act as if they were one: everything that happens in the physical impacts on The main technology of Industry 4.0 is the Cyber-Physical System (CPS), which is defined as thecombination of physical and cybernetic systems (Lee et al., 2015). The two systems act as if they were one: everything that happens in the physical impacts on Fourth Industrial Revolution is based on Cyber Physical System, which is nothing but a combination of physical and cybernetic systems. The digitization of the manufacturing facility brought a significant transformation in the manufacturing process. The manufacturing process has now ready to adopt the atomization with the help of computers which is smart and autonomous systems fueled by data and machine learning. In this system, computers are so connected that they communicate with one another to take ultimate decision, where no human interference o involvement is required. Therefore, this combination of cyber-physical systems, the internet of things and the internet of systems make the smart factory as a reality. As the smart machines get access to more data, they become smarter which result into the more efficient and productive factories.

This industrial change brings more opportunities for the CMAs as this brings the challenge to provide more and more data and information to the digital computers so that they can take the decisions. Any wrong information or inadequate decision may effects the efficiency and quality of the product. As it involves a sharing of the information, which are connected with the internet and various data sources, the cost analysis and allocation between the activities is going to be a specialize area where the CMAs can perform their expertise. To determine the cost of the product and service under Cyber Physical System will change the whole traditional concept of costing and role of CMAs in the coming years.

(4) ROLE OF CMAs IN ARTIFICIAL INTELEGENCE (AI)

Kaplan and Haenlein define AI as *"a system's ability to correctly interpret external data, to learn from such data, and to use those learnings to achieve specific goals and tasks through flexible adaptation"*

Therefore, in the coming days, AI plays a vital role in the decision making process of the management, where the machine with the help of data analysis take the decisions which is going to be more accurate and effective. Moreover, in-spite of all these capabilities of the computer and technology still human intervention is required to interpret the decision. The role of CMAs will increase manifold as providing the information related to the cost of the product and others will be provided by the CMAs. The accuracy level of the data or information will directly affect the decision of the AI machines. The success of the AI machine will depend upon the quality of the data. More accurate data will give most effective result. The quality of the data is directly linked with the eco-feasibility analysis, where CMAs will be more helpful. This will open the more opportunities and challenges for the CMAs.

(5) ROLE OF CMAs IN BIG DATA ANALYSIS

Traditionally also CMAs has to play the role of data analyst. Moreover, with the increase in technology the data analysis becomes easy. Moreover, with the introduction of Artificial Intelligence and Cyber-physical system, the data importance of data analysis has increased. Data size has increased and to analysis the big data is a complex process. It is always a difficult task to uncover the information including hidden patterns, unknown correlations, market trends, customers preference and so on. In this process of data analysis, CMAs will play a major role as they are expertise in the data analysis since years. CMAs are fully equipped not only to analysis the data but also to interpret the result of the analysis. The cost of data analysis and the impact of the same on the management decision to be further analyzed before its implementation, where CMA are more capable.

(6) ROLE OF CMAs IN CLEMATE CHANGE

We are aware that there is huge change in climate conditions. Global warming is a great challenge for the world. Climate change cost can be measured as economic cost and has a direct effect on the cost of the product. Impact on the GDP and monetary measures of other aspects can be valued easily but the impact on human health and ecosystem are difficult to calculate. The impact of the climate change is difficult to value as it depends upon the future predictions and circumstances. It may increase the maintenance and renewal cost in future or makes the product obsolesce. CMAs will pay an important role to estimate the effect of the climate change and to give effect of the same on the cost of the product.

(7) CHALLENGES IN DOUBLING INDIA FARMERS' INCOME: Role of CMAs

The Niti Aayog during the year 2017 has set the target to double the incomes of India's farmers by 2022. To achieve the above target various steps has been taken by the government for the agriculture sector with a focus on high-value crops and rain-fed areas, non-farm occupations, agro-industrialisation, and strengthening and innovating producer and worker institutions, remunerative prices in the market, in crop insurance support, to improve the market infrastructure, to reduce in input costs, easy finance at subsidized low interest cost, etc. The minimum support prices (MSPs) has increased to 150% of the cost of production for all crops by the government.

To determine the cost in the agriculture sector is highly technical and can be find out with the science of cost accounting, where CMAs plays a major role. CMAs are capable to evaluate various cost involved in the direct farming, hiring of equipments, manufacturing of fertilizers, power consumption, labour cost involvements, irrigation facilities, etc. CMAs can suggest various strategic ways to reduce the cost and to provide more effective and efficient market infrastructure. Calculation of cost for different livestock or poultry products is necessary, where CMAs can play a vital role and value the livestock.

(8) INSOLVENCY AND BANKRUPTCY CODE – CHALLENGES FOR CORPORATE AND BANKS:

IBC is implemented with the single aim to speed up the debt recovery process. Insolvency Resolution Professionals (IRP) will play a vital role in the recovery of long due outstanding from various business debtors. It will help to improve the financial position of the corporate, banks and financial institutions. This law is going to be a great weapon in the hands of the operational creditors, banks and financial institutions. CMAs are professionally capable and notified under IBC to work as an Insolvency Resolution Professional under the IBC. They play a vital role to safeguard the interest of the operational creditors, banks and financial institutions.

(9) INCOLVENCY AND BANKRUPCY CODE 2016(IBC): CMAs Reviving Businesses

IBC is a mechanism to facilitate a better and faster debt recovery of debt. It is going to be the first choice of the businessman to recover the debts. Under IBS the concept of Business Revival Plan is introduce where the insolvency professional is responsible to submit the business revival plan before the company go into the liquidation. CMAs being expert in determining and ascertain the cost of various activities of the business, can play a vital role in framing the business revival plan under IBC. It is also important that CMAs are qualified to be appointed as IP with the certain conditions as prescribed in IBC

(10) GST:ROLE AS AUDITOR AND ANTI-PROFITEERING COMPLIANCE:

The Indian GST Lawmakers have aptly introduced anti profiteering measures under section 171 of the CGST Act 2017. CMAs are expert in determining the cost of the product and based on their expertise they can work out the correct impact of the GST credit on the profit by the business unit and then to determine whether the same has been passed on to the customer of not. In the coming days, CMAs will play a great role to determine and implement the Anti Profiteering clause under the GST.

Under the GST, new responsibility as the Auditor is also given to the CMAs, where the CMAs are also authorized to conduct the Audit under GST and submit the report for the compliance of the GST Act by the business units.

(11) VALUATION: A New prospective

In the coming days valuation of the assets is a sheer need of every organization. In coming days, regulatory compliances require to evaluate the fair value of tangible and intangible assets on regular basis. Even in IBC valuation of the asset is one of the foundation pillars of the corporate insolvency resolution process. Section 92 C of the income Tax Act i.e. transfer pricing valuation is an important part where the arms length price is to be determined based on various valuation methods and criteria. Therefore, valuation of business under IBC, Companies Act-2013, Ind AS, Income Tax, etc. has openup numerous professional opportunities.

As a valuer CMAs are having unparalleled specific experience with valuation of both tangible and intangible assets and meet the corporate need.

(12) STRATEGY TRENDS TO TRANSFORM INDIA

Today the biggest challenge for the Indian Government is to improve the living standard of people, improving the urban and rural infrastructure, improving the business environment, increasing the rural income and unlocking the women potential for which India needs to adopt new approaches to governance and the provision of services, Private sector–style procurement and supply-chain expertise, deep technical skills for planning portfolios of infrastructure investments, and strong project-management capabilities. CMAs being a management accountant are having many capabilities and efficiency to have strategic management of various methods and policies through which the India can transform to New India.

(13) INDIAN RAILWAYS: CMAs as Game Changer

Indian railway is continuing incurring losses irrespective of all its efforts and growth. There are various activities involved in railways from manufacturing to service. Energy – petroleum products and electricity consumption are the biggest cost in the railway. In past opening of few activities like coach building were opened up for the private sector, which has shown great change in quality and cost. There is a great scope for cost reduction and improvement in India railway. Therefore, it is high time for the government to implement strategic decision making process based on cost effective analysis. It was also emphasized in the Rail Budget speech 2015-16, when the adoption of Activity based costing in Indian railways was highlighted. Hon'ble Minister of Railways has stated in his speech:

"We have limited resources and thus must ensure that all public expenditure results in an optimal outcome. We, therefore, intend to set up a working group to modify the present system of accounting, to ensure tracking of expenditure to desired outcomes. The data on costing would be available online including costs incurred on constructing, augmenting, maintaining and operating railway lines. This would also help in undertaking post asset commissioning evaluation studies."

CMAs are expert play in the activity based costing and identify gaps in the existing cost system. They also helps in finding out the areas where cost can be reduced effectively, develop cost methods and techniques, analysis the PERT and CPM methods with respect to cost effectiveness, cost effective resource allocation, cost control, Activity based break even study, effective business plan, effective strategic decisions making, effective time management, etc.

CMA can bring paradigm shift from the present accounting and costing system to new and effective integrated accounting and costing system, accrual based costing, performance costing, budget outcome analysis etc. in railway.

(14) MANAGEMENT ROLE

In the recent past, CMAs has achieved the new heights in the employment and at present they are holding key positions such as Chairman, Managing Director and Finance Director, Chief Finance Officer, Chief Executive Officer and Finance Manager etc. in MNCs, Private and Public Sector, Central and State Government Institutions. In the field of education, cost accountants can be appointed as Assistant Professor, Professor and Principal/Director/Head of an institution in Universities and colleges in the areas of Management, business and administration.

In a nutshell, CMA is an ALLROUNDER rather than mere a batsman or a bowler, -apart from cost related assignments, CMAs are into employment as Managers in the fields of Taxation, Accounts, Credit etc in many companies.

(15) ROLE IN GOVERNMENT DEPARTMENTS:

Realizing the importance of the profession of the CMA in the economic development of the nation, the Central Government has constituted an All India Cadre known as Indian Cost Accounts Service (ICAS) at par with other Class-I services such as IAS, IFS etc. to advise the Government in cost pricing and in framing the appropriate fiscal and tax policies. CMAs are eligible for Indian Cost Accounts Service/Job.

Since years, CMAs have been playing a key role in facilitating and ensuring the effectiveness implementation of government programs including skill development, investors' awareness and financial literacy campaigns. Government has shown its faith and cast upon the various responsibilities to CMAs under the various new laws including IBC, GST, banking sectors, etc. With casting various responsibilities on CMAs, Government of India wants to transforms the role of the professions.

(IV) CONCLUSION:

Since independence CMAs are playing a great role in the economic development of India. As the new economic avenues are developed, CMAs have equipped them self to take the new responsibilities. CMAs are the front runners to implement the new laws and make the society as law compliant. The role of CMAs has undergone a various changes and shifted from use of resources in optimum manner to maximization of stakeholder's value. With the increase in financial compliance and investment, the role of CMAs has increased. In the recent past government has given more and more responsibilities in various laws on the CMAs including educating the business community to comply with the law, bring them to the tax base, facilitate the government by extending their support in the better implementation of the tax reforms and collection of revenue

Today CMAs are playing a vital role for the better and effective implementation of all the government policies. CMAs are providing their expertise to reduce the cost, better utilization of resources, helpful in various strategic decision making process, educating the business community to comply with the law, bring them to the tax net, and facilitate the Government by extending their support in the better implementation of the tax reforms and collection of revenue

New responsibilities are given to CMAs in new laws such as GST, Insolvency and bankruptcy code, banking sector, etc. government has shown its faith in the CMAs. Today, CMAs are authorized to audit the books of account under the GST, can be appointed as Insolvency Professional under IBC, do stock and forensic audit under banking regulation, etc. Today, CMAs work as an ambassador of government for Ease of Doing Business.

With the introduction of the new technology i.e. Cyber Physical system, Artificial Intelligence System, Big Data Analysis etc., the traditional role of CMAs has also changed. These make them more responsible for the accurate and timely data information to the system, failing which the whole system become ineffective and useless.

To transform the India, CMAs equipped themselves through education and knowledge and performing their duties with new responsibilities and continuing to be an ambassador partner in the nation's economic growth. With the **POWER OF PAST** i.e. knowledge and experience, CMAs are ready to **FORCE THE FUTURE** i.e. to boost the economic development with the new opportunities and challenges with the new developments.

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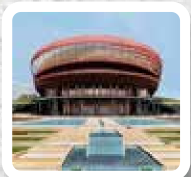
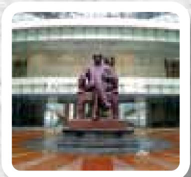


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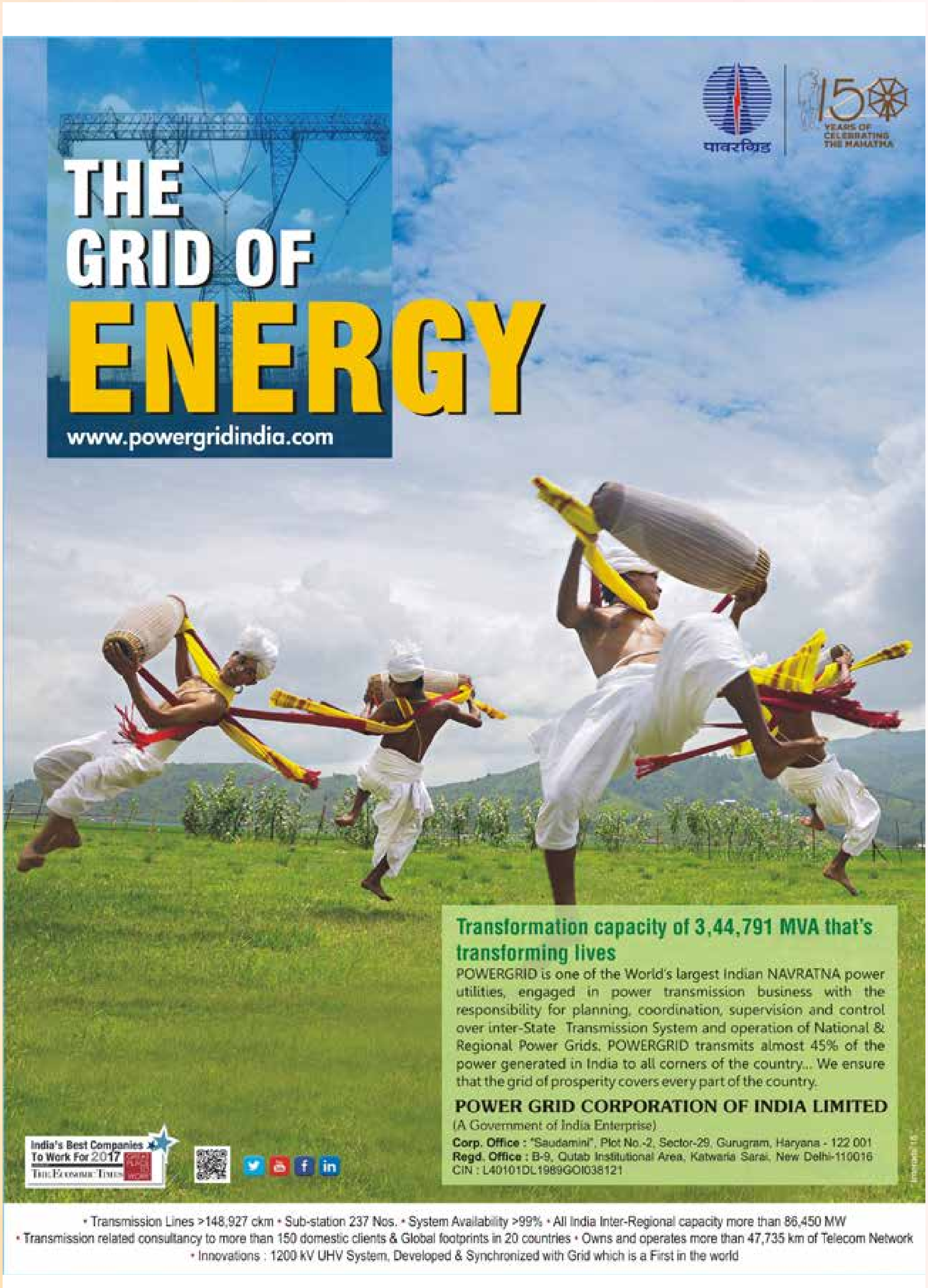

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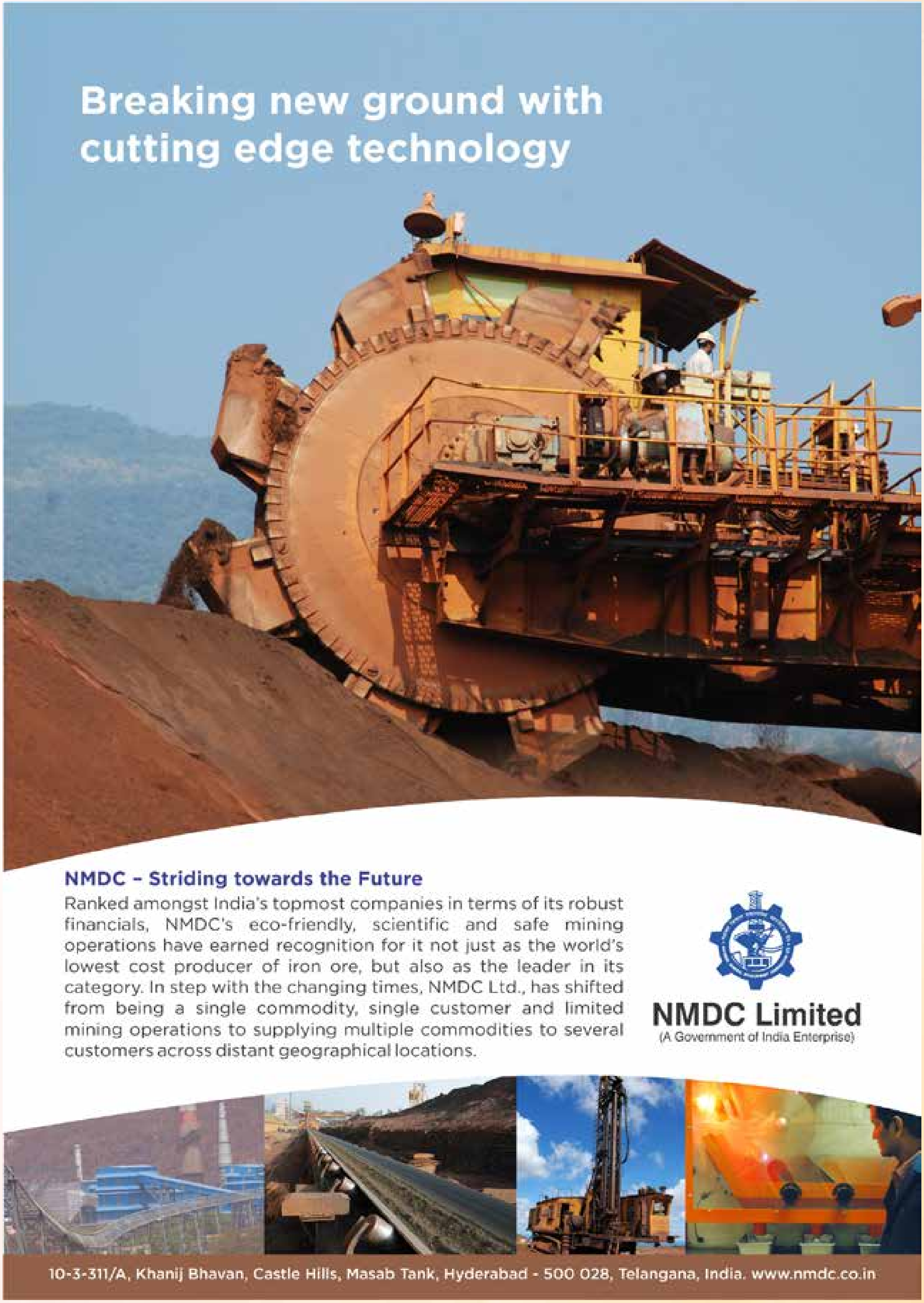

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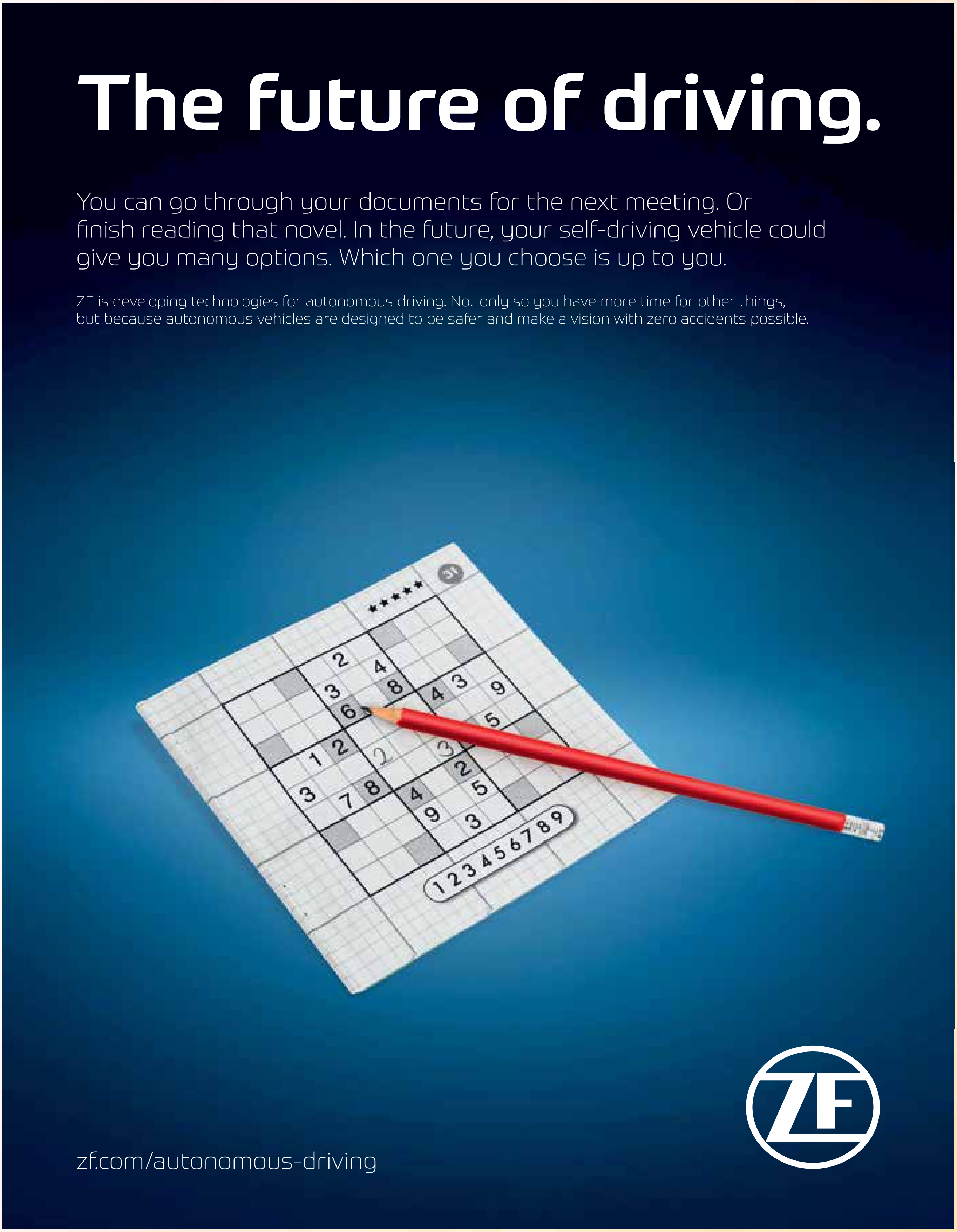
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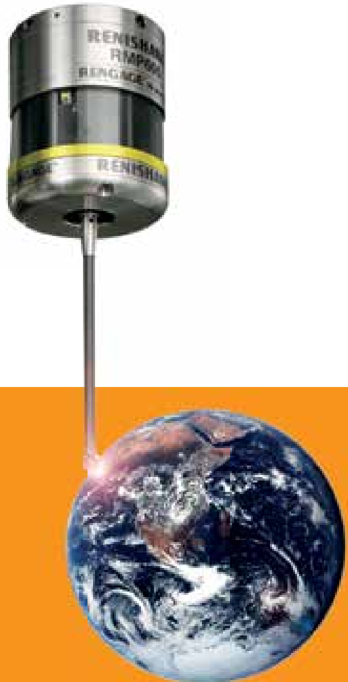

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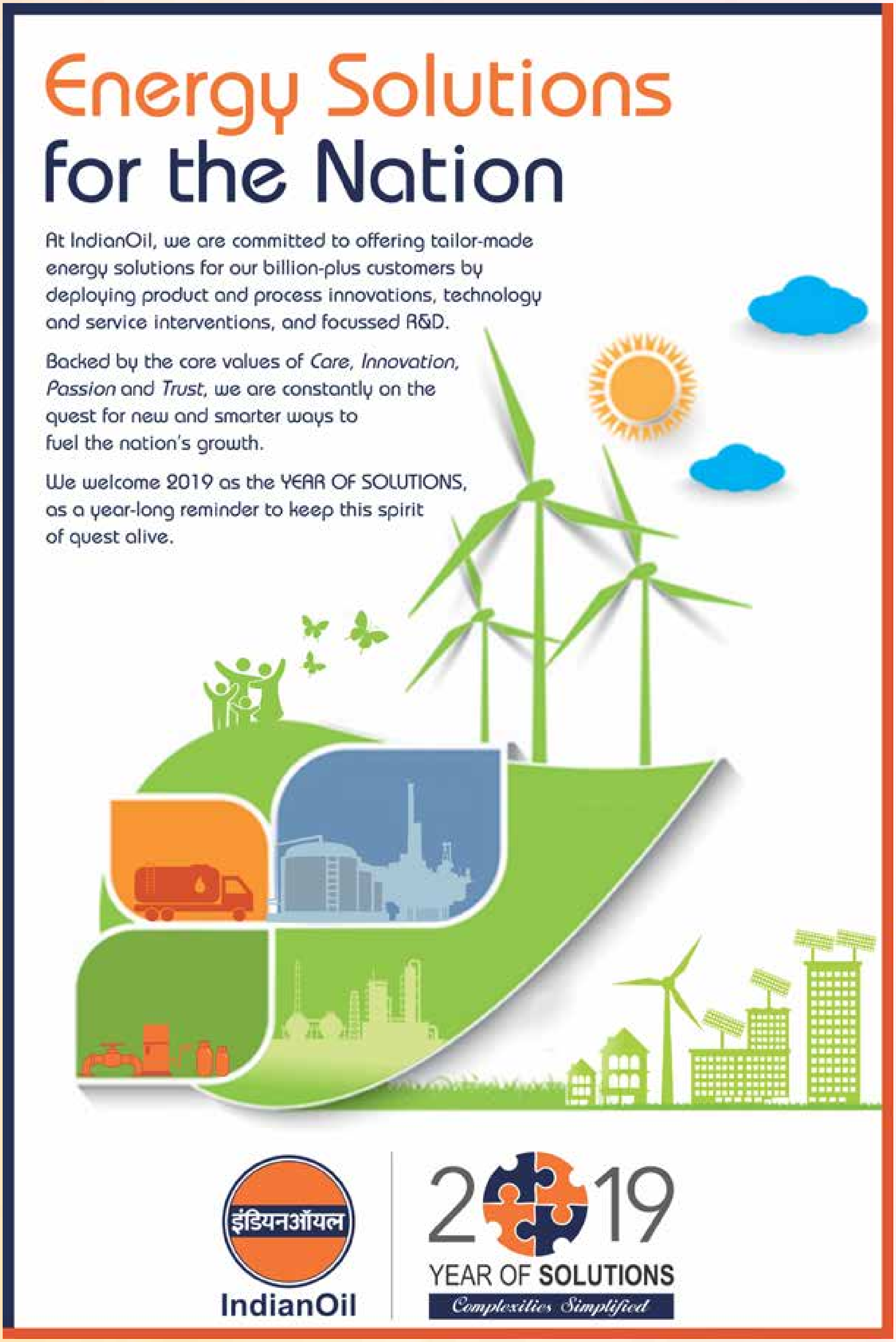
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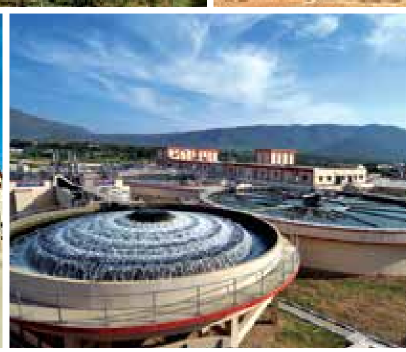


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