



# GLOBAL SUMMIT 2020

## MISSION 5 TRILLION CMA AS A CRYOGENIC FORCE

January 9-11, 2020  
The Ashok Hotel, New Delhi



**THE INSTITUTE OF COST ACCOUNTANTS OF INDIA**

(Statutory body under an Act of Parliament)

[www.icmai.in](http://www.icmai.in)

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### THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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Behind every successful business decision there is always a **CMA**

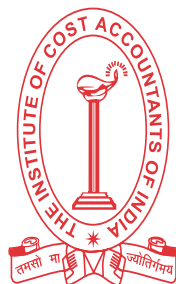
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GLOBAL  
SUMMIT 2020



## 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.”

## Institute Motto

असतोमा सद्गमय  
तमसोमा ज्योतिर् गमय  
मृत्योर्मा मृतं गमय  
ॐ शान्ति शान्ति शान्तिः

From ignorance, lead me to truth  
From darkness, lead me to light  
From death, lead me to immortality  
Peace, Peace, Peace

## Disclaimer

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GLOBAL  
SUMMIT 2020





भारत के उपराष्ट्रपति  
VICE-PRESIDENT OF INDIA  
MESSAGE

The Institute of Cost Accountants of India organized Global Summit 2020 on the theme "Mission 5 Trillion – CMA as a Cryogenic Force" this year that aligns with the goal set by Hon'ble Prime Minister of India to achieve USD 5 Trillion Economy by 2024.

The government has done a lot for digitizing India. Direct benefit transfer and digital payment are to name a few. People have seen several websites, mobile applications, e-Commerce sites and use of social media in government and political scenario during the last five years. Certainly, these are helping India in its GDP growth, ease of living and ease of doing business. In World Bank's annual Ease of Doing Business index, India is stepping up the rankings, which signifies that a lot has been done and a number of initiatives and positive steps have been taken in this regard.

The Institute of Cost Accountants of India and its members have been wholeheartedly supporting the Government in implementing these national programs successfully. The CMA fraternity is duty bound for capacity building of the nation.

It is my hope that they will continue to reinvent themselves while developing the professional body of members and equip them fully to discharge their functions as well as fulfill the objectives of the Institute in the context of the developing economy, moreover keep abreast of the latest developments in the cost and management accounting principles and practices, incorporate essential changes for sustained vitality of the industry and other economic activities in the years to come as well.

My best wishes for successful conduct of the event.

  
(M. Venkaiah Naidu)

New Delhi  
28<sup>th</sup> December, 2019.



सत्यमेव जयते

प्रधान मंत्री  
Prime Minister



**MESSAGE**

It is a pleasure to learn that The Institute of Cost Accountants of India is hosting the Global Summit 2020 with the theme "Mission 5 Trillion-CMA as a Cryogenic Force".

In the last five years now, our Government's approach has been to 'Reform with intent, Perform with integrity and Transform with intensity'. Our focus is on governance that is professional and process driven.

We are acting as Enabler, Facilitator and Promoter to realise the dream of a five trillion-dollar economy. From improving physical and financial infrastructure of the country to promoting Indian industry at global platform, from repealing 1500 obsolete laws to simplification of rules and procedure, we are moving ahead with all-round approach.

For us, target of five trillion-dollar economy is a milestone to achieve larger goals. Besides size of the economy, this target is directly connected with ease of living and better tomorrow for 130 crore Indians.

The participants at the Summit will discuss the way forward to achieve this goal and propel economic growth to a higher trajectory. The deliberations will come up with suggestions for an implementable roadmap to fast-track economic growth.

I wish the discussions at the Global Summit 2020 all success.

(Narendra Modi)

New Delhi  
पौष 18, शक संवत् 1941  
8<sup>th</sup> January, 2020

नितिन गडकरी  
NITIN GADKARI



सत्यमेव जयते



मंत्री  
सड़क परिवहन एवं राजमार्ग और  
सूक्ष्म, लघु और मध्यम उद्यम  
भारत सरकार  
Minister  
Road, Transport & Highways and  
Micro, Small & Medium Enterprises  
Government of India



### MESSAGE

I am delighted to know that the Institute is organizing a three day Global Summit on the theme "Mission 5 Trillion – CMA as a Cryogenic Force" from 9-11th January 2020 in New Delhi.

In today's globally competitive business environment, all the constituents' of the economy have to work in sync with each other and play an active role to propel various engines of the economy and generate sustainable momentum for equitable development and growth of economy in the country.

India needs to modernize its agriculture, manufacturing industries, construction, and service sectors. Adoption of new and modern technologies such as blockchain, big data, artificial intelligence, etc will lead India to its destination of \$5 trillion economy by 2024. It is commendable that the Institute has already been taking initiatives to raise professional awareness through various programmes. .

My best wishes for the success of the event.

(NITIN GADKARI)

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सबका साथ, सबका विकास, सबका विश्वास  
Sabka Saath, Sabka Vikas, Sabka Vishwas



## डॉ हर्ष वर्धन Dr Harsh Vardhan

स्वास्थ्य एवं परिवार कल्याण, विज्ञान और प्रौद्योगिकी  
व पृथ्वी विज्ञान मंत्री, भारत सरकार

Union Minister for Health & Family Welfare,  
Science & Technology and Earth Sciences  
Government of India

### MESSAGE

I am delighted to know that the Institute of Cost Accountants of India is going to organise a three day Global Summit on the theme "Mission 5 Trillion – CMA as a Cryogenic Force" during January 9 – 11, 2020 at New Delhi.

2. In today's globally competitive business environment, all the constituents of economy have to work in sync with each other and play an active role to propel various engines of the economy and generate sustainable momentum for the progressively faster economic growth of the country. Cost and Management Accountants (CMAs) have a vital role to play in this aspect by supporting the policy makers and various business entities in devising cost effective business models for all sectors of economy.

3. I whole-heartedly look forward to the CMAs professional involvement and assistance for the various Government projects. I hereby congratulate the organisers and extend my wishes for the success of this Global Summit.

(Dr. Harsh Vardhan)

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पीयूष गोयल  
PIYUSH GOYAL



रेल और वाणिज्य एवं उद्योग मंत्री;  
भारत सरकार  
MINISTER OF  
RAILWAYS AND COMMERCE & INDUSTRY;  
GOVERNMENT OF INDIA



**MESSAGE**

Hon'ble Prime Minister Shri Narendra Modi ji has set an ambitious goal of becoming a \$5 trillion economy. With several reforms by the Government in recent years that have resulted in conducive business environment, better job & living opportunities, infrastructural growth, higher investment and modernisation, the Indian economy is poised to grow further in the years to come.

In this context, The Institute of Cost Accountants of India is organising a Global Summit in New Delhi from 9-11 January, 2020 with focus on the theme of 'Mission 5 trillion- CMA as a Cryogenic Force'. The theme for this year rightly reflects our extraordinary growth in terms of providing a conducive environment for conducting business and marching towards achieving the \$5 trillion economy target.

I look forward to the CMAs professional involvement and assistance in various projects of the Government. It is commendable that the Institute has already been taking various initiatives which is in line with the vision of a 'New India'. I wish all the success to the organisers and participating delegates at the Global Summit, and am confident that it will act as a vibrant forum for exchange of ideas and exposure to the latest innovations.

Piyush Goyal

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प्रकाश जावडेकर  
*Prakash Javadekar*



मंत्री  
पर्यावरण, वन एवं जलवायु परिवर्तन और  
सूचना एवं प्रसारण  
भारत सरकार

MINISTER  
ENVIRONMENT, FOREST &  
CLIMATE CHANGE AND  
INFORMATION & BROADCASTING  
GOVERNMENT OF INDIA



**MESSAGE**

I am glad to note that Institute of Cost Accountants of India is organising Global Summit on the theme "Mission 5 Trillion - CMA as Cryogenic Force" from 9 to 11<sup>th</sup> January, 2019 at New Delhi.

In today's globally competitive business environment, a collaborative effort is needed to ensure speedy and sustainable economic growth. Cost & Management Accountants play an important role in this by way of devising innovative business models to ensure improved performance, sustainability & efficient recourse utilisation.

I convey my best wishes to the organizers for the grand success of the event.

**(Prakash Javadekar)**



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नरेन्द्र सिंह तोमर  
NARENDRA SINGH TOMAR



कृषि एवं किसान कल्याण,  
ग्रामीण विकास तथा पंचायती राज मंत्री  
भारत सरकार  
कृषि भवन, नई दिल्ली  
MINISTER OF AGRICULTURE & FARMERS' WELFARE,  
RURAL DEVELOPMENT AND PANCHAYATI RAJ  
GOVERNMENT OF INDIA  
KRISHI BHAWAN, NEW DELHI

### MESSAGE

It gives me immense pleasure to know that the Institute of Cost Accountants of India is organizing a three day Global Summit on the theme "Mission 5 Trillion – CMA as a Cryogenic Force" from 9-11<sup>th</sup> January, 2020 in New Delhi.

In today's globally competitive business environment, all the constituents economy have to work in sync with each other and play an active role to propel various engines of the economy and generate sustainable momentum for the progressively faster economic growth of the country.

India needs to modernize its agriculture, manufacturing industries, construction and service sectors. It needs modern types of machinery as well as modern methods and management. Modern methods of agriculture can lead to a high yield. Technologies like CAD/CAM can revolutionize manufacturing industries, especially the MSMEs. Adoption of new and modern technologies will lead India to its destination of \$5 trillion economy by 2024.

I whole-heartedly look forward to the CMAs professional involvement and assistance for the Government projects. It is commendable that the Institute has already been taking a number of initiatives to raise awareness through various programmes that they have been organizing.

I extend my best wishes to the organizers of the event

  
(Narender Singh Tomar)

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रमेश पोखरियाल 'निशंक'  
*Ramesh Pokhriyal 'Nishank'*



सत्यमेव जयते

मंत्री  
मानव संसाधन विकास  
भारत सरकार  
MINISTER  
HUMAN RESOURCE DEVELOPMENT  
GOVERNMENT OF INDIA



### MESSAGE

I am delighted that the Institute of Cost Accountants of India (ICAI) is organising a three day Global Summit on the theme "Mission 5 Trillion – CMA as a Cryogenic Force" from 9-11 January, 2020 in New Delhi.

In today's globally competitive business environment, all the constituents of the economy have to work in sync with each other and play an active role to propel the economy and generate sustainable momentum for the faster economic growth of the country. India is laying great stress on modernisation of agro-economic sectors, industries and management tools and methodologies. Besides, the stakeholders need to modernise constantly, the storage, packaging and the distribution chain, in keeping with the needs of the times. The Government is committed to double the farmer's income and accelerate all round and inclusive economic growth having regard to the vast potential of Indian economy including its great demographic potential. With the adoption of new and modern technologies such as blockchain, big data, artificial intelligence, etc. and the added focus on digital India and ease of doing business and given the resolute-unflinching resolve of the Government to pursue its developmental goals within the framework of sustainable development goals, India is poised to become a \$5 trillion economy by 2024. I am optimistic that the Conference will have very fruitful and enriching discussions.

I congratulate the ICAI, the participants and wish the event a grand success.

(Ramesh Pokhriyal 'Nishank')

सबको शिक्षा, अच्छी शिक्षा।



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गजेन्द्र सिंह शेखावत  
Gajendra Singh Shekhawat



जल शक्ति मंत्री  
भारत सरकार  
Minister for Jal Shakti  
Government of India

02 JAN 2020



**MESSAGE**

It is undeniably a great pleasure to know that the Institute organized a three day Global Summit on the theme "Mission 5 Trillion - CMA as a Cryogenic Force" from 9-11<sup>th</sup> January, 2020 in New Delhi.

In today's globally competitive business environment, all the constituents of economy have to work in sync with each other and play an active role to propel various engines of the economy and generate sustainable momentum for the progressively faster economic growth of the country.

India needs to modernize its agriculture, manufacturing industries, construction, and service sectors. It needs modern types of machinery as well as modern methods and management. Modernization is much awaited in storing and packaging facilities and distribution systems. Modern methods of agriculture can lead to a high yield. In turn, that can level up farmer's income and solve several economic and political problems. Simply, technologies like CAD/CAM can revolutionize manufacturing industries, especially the MSMEs. Adoption of new and modern technologies such as blockchain, big data, artificial intelligence, etc will lead India to its destination of \$5 trillion economy by 2024 and \$10 trillion economy by 2032.

I whole-heartedly look forward to the CMAs professional involvement and assistance for the Government projects. It is commendable that the Institute has already been taking a number of initiatives to raise awareness through various programmes that they have been organizing.

I extend my warmest wishes to all the organizers of the event.

(GAJENDRA SINGH SHEKHAWAT)



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संतोष कुमार गंगवार  
Santosh Kumar Gangwar



श्रम एवं रोजगार राज्य मंत्री (स्वतंत्र प्रभार)  
भारत सरकार  
Minister of State Labour & Employment  
(Independent Charge)  
Government of India




**MESSAGE**

I am happy to know that the Institute of Cost Accountants of India is organizing a knowledge-sharing forum in the form of Global Summit on 9-11<sup>th</sup> January, 2020 at Hotel Ashok, New Delhi. I am also happy to know that the theme of the Summit is to achieve the goal 'USD 5 Trillion Economy by 2024' of Hon'ble Prime Minister of India.

I appreciate the Institute of Cost Accountants of India for organizing this Summit, which will help in generating employment, GDP growth and faster economic growth of the country.

I extend my heartiest congratulations to the organizers and participants and wish the Global Summit 2020 a great success.

  
(Santosh Kumar Gangwar)

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अर्जुन राम मेघवाल, आई.ए.एस. (रिटायर्ड)  
Arjun Ram Meghwal, IAS (Retd.)



भारी उद्योग एवं लोक उद्यम और  
संसदीय कार्य राज्य मंत्री  
भारत सरकार, नई दिल्ली-110011  
MINISTER OF STATE FOR  
HEAVY INDUSTRIES & PUBLIC ENTERPRISES  
AND PARLIAMENTARY AFFAIRS  
GOVERNMENT OF INDIA, NEW DELHI - 110011



### MESSAGE

India has emerged as the fastest growing economy in the world. The improvement in India's economic fundamentals has accelerated in the current year with the combined impact of strong government reforms.

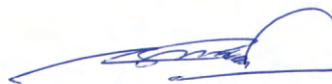
The Government of India has taken significant initiatives to strengthen the economic credentials of the country and make it one of the strongest economies in the world. India is becoming home to start-ups focused on high growth areas such as mobility, e-commerce and other vertical specific solutions - creating new markets and driving innovation.

Owing to higher infrastructure spending, increased fiscal devolution to states, and continued reforms in fiscal and monetary policy, the Indian economic outlook has strengthened. The Government of India is striving to move steadily to minimize structural and political bottlenecks, attract higher investment and improve economic performance

As envisioned by Hon'ble Prime Minister Shri Narendra Modi Ji the target for achieving \$ 5 trillion economy, 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. Role of cost and management accountants is very significant in the initiatives of Government and it has been proven that the association of CMA fraternity with Government is very fruitful and fulfilling. In pursuit of excellence, the CMA professionals have accepted the responsibility to act in public interest.

I am happy that The Institute of Cost Accountants of India is organizing such a thought-provoking event Global Summit on the theme "Mission 5 Trillion – CMA as a Cryogenic Force" and firmly believes 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.



(Arjun Ram Meghwal)

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अनुराग सिंह ठाकुर  
Anurag Singh Thakur



वित्त एवं कारपोरेट कार्य राज्य मंत्री  
भारत सरकार  
नई दिल्ली-110001  
MINISTER OF STATE FOR FINANCE  
AND CORPORATE AFFAIRS  
GOVERNMENT OF INDIA  
NEW DELHI-110001

### MESSAGE

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The Government of India has taken significant initiatives to strengthen the economic credentials of the country and make it one of the strongest economies in the world. India is becoming home to start-ups focused on high growth areas such as mobility, e-commerce and other vertical specific solutions - creating new markets and driving innovation.

Owing to higher infrastructure spending, increased fiscal devolution to states, and continued reforms in fiscal and monetary policy, the Indian economic outlook has strengthened. The Government of India is striving to move steadily to minimize structural and political bottlenecks, attract higher investment and improve economic performance.

Government alone would not be able to meet the target of achieving the \$ 5 trillion economy. 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. Role of cost and management accountants is very significant in the initiatives of Government and it has been proven that the association of CMA fraternity with Government is very fruitful and fulfilling. In pursuit of excellence, the CMA professionals have accepted the responsibility to act in public interest.

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

(Anurag Singh Thakur)

New Delhi  
01.01.2020

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जी. किशन रेड्डी  
G. KISHAN REDDY



गृह राज्य मंत्री  
भारत सरकार  
MINISTER OF STATE FOR  
HOME AFFAIRS  
GOVERNMENT OF INDIA



MESSAGE

India has emerged as the fastest growing economy in the world. The improvement in India's economic fundamentals has accelerated in the current year with the combined impact of strong government reforms.

The Government of India has taken significant initiatives to strengthen the economic credentials of the country and make it one of the strongest economies in the world. India is becoming home to start-ups focused on high growth areas such as mobility, e-commerce and other vertical specific solutions - creating new markets and driving innovation.

Owing to higher infrastructure spending, increased fiscal devolution to states, and continued reforms in fiscal and monetary policy, the Indian economic outlook has strengthened. The Government of India is striving to move steadily to minimize structural and political bottlenecks, attract higher investment and improve economic performance

Government alone would not be able to meet the target of achieving the \$ 5 trillion economy. 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. Role of cost and management accountants is very significant in the initiatives of Government and it has been proven that the association of CMA fraternity with Government is very fruitful and fulfilling. In pursuit of excellence, the CMA professionals have accepted the responsibility to act in public interest.

I am happy that The Institute of Cost Accountants of India is organizing such a thought-provoking event Global Summit on the theme "Mission 5 Trillion – CMA as a Cryogenic Force" and firmly believes 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.

G.KISHAN REDDY

Hyderabad  
30.12.2019

**Injeti Srinivas, IAS**  
Secretary



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



**MESSAGE**

7<sup>th</sup> January, 2020

It is a pleasure to learn that the Institute of Cost Accountants of India is organizing a three day Global Summit on the theme “Mission 5 Trillion – CMA as a Cryogenic Force” from 9<sup>th</sup> - 11<sup>th</sup> January, 2020 in New Delhi.

In today's globally competitive business environment, all the constituents' economy have to work in sync with each other and play an active role to propel all engines of the economy and generate sustainable momentum for the economy to grow at a higher trajectory. Cost competitiveness contributes to productivity, efficiency and profitability.

I whole-heartedly look forward to the CMAs professional involvement and contribution in making Indian Industry globally competitive.

I extend my best wishes to the organisers and participants.

  
(Injeti Srinivas)

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**Icon of the CMA Profession**

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December 14, 2019

### MESSAGE

It gives me great professional and personal satisfaction to contribute this Message to the Souvenir of our Institute's Global Summit 2020. The top Leadership teams of the Institute and the Summit have chosen a most important and urgent theme around the challenges of making our contribution to the nation's Mission of a 5 Trillion dollar economy. The CMAs have to be no ordinary contributors, but a Cryogenic force, the kind of force that launches satellites.

The primary requirement of actualizing the above GDP Mission is to reach the "escape velocity" for mega growth of 8% plus. This calls for expanding the domestic market, as well as export competitiveness. For both these national and corporate strategies, Optimal Cost Management is crucial. Our members should help implement this OCM model in all organisations – Business, Government, Non-Profit, Academic, etc. It has three key components – creating Cost Consciousness at all levels; achieving Cost Control, through standards on global competitive benchmarks; and Cost Reduction, by innovation, reengineering, rightsizing etc, especially in relation to our formidable eastern neighbour China.

The second imperative is to ensure that the above growth is "inclusive". It should not be "jobless" or worse "job-loss", but, job creation and multiplier growth. We should fully utilize our one time historic, demographic dividend of the world's youngest population. That requires creative blends of both technology and human resources. The vast employed talent will also reinforce the demand side of our economy. Further, it will reduce the growing inequality, which is a source of individual stress and social conflict.

The third requirement is to make the high growth "sustainable". The term "climate change" has given way to more serious expressions like "climate crisis" and "climate emergency". With 1.3 billion people, melting glaciers in the Himalayas, on the northern side; and rising sea levels around our very long coastline, we have to have our own strategies and road map for prevention, mitigation and management. We are already among the world leaders in solar and wind energy. We should balance the cost-benefit factors, by going three for strategies – Cleaner Coal; Safer Nuclear; and Affordable Renewable Energy.

The combined energies of Indian CMAs can provide the cryogenic thrust required. We should all aspire to evolve from *Karmacharis*, working mainly for monetary rewards, into *Karmayogis*, who serve the organization and nation with total commitment and concentration. The nation will achieve high growth and our rewards are bound to come out of that.

I wish the "Global Summit 2020" resounding success.

**Dr. M. B. Athreya**





## THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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### MESSAGE

It gives me immense pleasure to pen the following few lines by way of Message to the Souvenir of **Global Summit 2020** scheduled to be held from 9<sup>th</sup> -11<sup>th</sup> January 2020 at New Delhi being organized by our Institute on the theme “**Mission 5 Trillion – CMA as a Cryogenic Force**” which is highly aligned with the goal set by Hon’ble Prime Minister of India to achieve USD 5 Trillion Economy by 2024.

India is one of the fastest growing major economies and is currently ranked as the world’s sixth largest economy. India’s commitment to fiscal discipline, sound external position, unprecedented foreign direct investment (FDI) inflows, comprehensive structural reforms, and enhanced emphasis on social protection and financial inclusion have provided a robust framework for sustaining strong and inclusive growth going forward.

India’s potential to achieve a USD 5 trillion GDP by 2024-25 is within the realm of possibility. Government’s efforts towards accelerating growth and development are ongoing, and there is a sense of dynamism and optimism in the country. India’s performance in the Doing Business Ranking, Global Competitiveness Index, Logistics Performance Index and Global Innovation Index are all positive and encouraging.

There are several underlying strengths that are indicative of the latent potential of the economy. India is currently bestowed with a “youth bulge” – by 2020, the average age in India will be 29 years. India offers an expanding market with income levels and size of the middle class increasing. Investments in infrastructure are projected to lead to better connectivity and reduced logistics costs for businesses. State Governments have been proactive in helping improve business environment. Digital technology has led to positive disruption in both governance and businesses.

At this outset, we, the CMA professionals can act as a cryogenic force to make India cost competitive to achieve global scales. We can facilitate the government to catalyse wider employment generation and improve GDP growth with simultaneous advancement towards achievements in sustainable development.

I wish this historic event a grand success.

**CMA Balwinder Singh**  
President



## THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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### MESSAGE

I am extremely happy and pleased to note that the Institute is organizing a **Global Summit** on the theme **“Mission 5 Trillion – CMA as a Cryogenic Force”** on 9<sup>th</sup> -11<sup>th</sup> January 2020 at New Delhi.

Innovation and start-ups play a crucial role for India to become a \$5-trillion economy by 2024. India is already among the top three start-up-friendly ecosystems and during the last five years, the government had given great emphasis to encourage innovation and incubation. Startup India, the flagship initiative of the government was launched in January 2016 with the intent to build a strong ecosystem for the growth of start-up businesses, to drive sustainable economic growth and generate employment opportunities.

Taking a closer look at the Indian business eco-system, the year 2019 unfurled innovative business models as business leaders, conglomerates and the Government are coming together to embrace new thoughts. Simplifying reforms, affordable smartphones, heightened awareness about education are few of the prominent factors leading the ‘new-age’ revolution. The Government has proposed a host of measures such as tax incentives to promote budding entrepreneurs as part of the ‘Startup India Vision 2024’. It aims at facilitating setting up of 50,000 new start-ups in the country by 2024, and creating 20 lakh direct and indirect employment opportunities. Hence, Employment generation, wealth-creation, innovation and problem solving with a global applicability in mind, these are some of the most-desired outcomes from a strong economy and start-ups play an integral role in achieving the same.

The Technical Sessions of the Summit would emphasize on varied aspects concerning achievement of Mission 5 Trillion and how the Cost & Management Accountants can act as a cryogenic force to generate adequate force that is required to give a big push to the economy.

I convey my best wishes for successful conduct of the Global Summit

**CMA Biswarup Basu**  
Vice President



## THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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### MESSAGE

I am happy to convey that the Institute is organizing such a thought-provoking event ***Global Summit*** on the theme “***Mission 5 Trillion – CMA as a Cryogenic Force***” and firmly believe the Conference will provide beneficial insights to the delegates; moreover the souvenir brought out on this occasion will be useful and informative as well.

Cost Governance can act as a powerful tool or weapon or as an ‘Expressway’ towards reaching the destination of USD 5 trillion economy by 2024-25. Cost Governance is all about monitoring of costs on a continuous basis and consistent evaluation of costs that leads the pathway to cost governance, which helps to control the utilization of resources by following certain set of policies, customs and prevailing laws. Cost Governance fosters cost competency. Good Cost Governance is conducive to successful economic development. Application of Costing Methods and Techniques helps to govern the Industry, Economy and Society at large and for the Capacity Building of the nation, Cost Governance will be a new horizon.

The Institute and its members have been continuously and wholeheartedly supporting the Government in implementing these national programs successfully. The CMA fraternity is committed for capacity building of the nation.

I wish this event all the success.

**CMA Vijender Sharma**

Chairman, Organising Committee





## THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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### MESSAGE

It is a matter of great pleasure to note that ***Global Summit 2020*** scheduled to be held from 9<sup>th</sup> - 11<sup>th</sup> January 2020 at New Delhi being organized by our Institute on the theme “***Mission 5 Trillion – CMA as a Cryogenic Force***”.

India's digital transformation saga has only just commenced. The creation of a nationwide digital infrastructure, allied with potent new tools and technologies that are on the anvil: AI, Big Data, and the Internet of Things [IOT] are expected to galvanise sectors that affect the well-being of every Indian, ranging from agriculture, that can benefit from the infusion of technological intelligence, to natural-resource management, energy-use, transportation, urban-infrastructure and manufacturing. India is striving to become one of the early adopters of 5G technology, and its induction is expected to multiply possibilities and opportunities across the spectrum in ways that we cannot fathom now.

There is a little doubt that the refreshed 'Digital India' programme plays a critical role in realising the audacious ambition of India becoming a 5 trillion dollar economy by the year 2024, a new national goal set by the Hon'ble Prime Minister of India.

Ground realities, strategies, opportunities and mapping of CMA competencies to achieve the dream of \$5 trillion economy form the agenda for discussion. I am sure, the deliberations from eminent speakers should be intellectually stimulating and professionally enriching.

I firmly believe an event of this magnitude does create long lasting memories and a strong legacy to emulate.

Best Wishes,

**CMA Ashwin G Dalwadi**  
Chairman, Technical Committee



## 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 Accountant fraternity through this Souvenir which is being released on the auspicious event of **Global Summit 2020** scheduled to be held from 9<sup>th</sup> -11<sup>th</sup> January 2020 at New Delhi organized by our Institute.

The Convention is on the theme “**Mission 5 Trillion – CMA as a Cryogenic Force**” which is highly aligned with the goal set by Hon'ble Prime Minister of India to achieve USD 5 Trillion Economy by 2024. This vision of making India a \$5 trillion economy and a global economic powerhouse by 2024-25 resultantly moving it from the 7<sup>th</sup> to 3<sup>rd</sup> position at world ranking, is challenging and to realise this dream more reforms are on the anvil in near future. India has already become a \$2.7 trillion economy in 2019. Realisation of this goal is connected to a single-minded dedication to reforms.

Role of cost and management accountants is very significant in implementing the initiatives of the Government and it has been proven that the association of CMA fraternity with the Government is very fruitful and fulfilling. In pursuit of excellence, the CMA professionals have accepted the responsibility to act in public interest.

Many professional Gurus from abroad have consented in principle to share their knowledge and experience at the Summit. We are sure that the presence and visionary address of these stalwarts will indicate the next course of action to fellow CMAs and all other attendees.

My sincere gratitude to all the Contributors, Sponsors, Advertisers and all the esteemed Council Members of the Institute for their earnest effort for publishing this souvenir in time. Further, take this opportunity to express my sincere gratitude to CMA Dr. D.P. Nandy, Sr. Director and staff members of the Journal & Publications department of the Institute for their earnest and untiring effort to publish this Souvenir in time.

Also wish this event a grand success!!!

**CMA P. Raju Iyer**  
Chairman, Souvenir



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## THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

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### ABOUT THE INSTITUTE

The Institute of Cost Accountants of India (ICAI) is a statutory body set up under an Act of Parliament in the year 1959. The Institute as a part of its obligation, regulates the profession of Cost and Management Accountancy, enrolls students for its courses, provides coaching facilities to the students, organizes professional development programmes for the members and undertakes research programmes in the field of Cost and Management Accountancy. The Institute pursues the vision of cost competitiveness, cost management, efficient use of resources and structured approach to cost accounting as the key drivers of the profession. In today's world, the profession of conventional accounting and auditing has taken a back seat and cost and management accountants increasingly contributing towards the management of scarce resources like funds, land and apply strategic decisions. This has opened up further scope and tremendous opportunities for cost accountants in India and abroad.

After an amendment passed by Parliament of India, the Institute is now renamed as "The Institute of Cost Accountants of India" from "The Institute of Cost and Works Accountants of India". This step is aimed towards synergizing with the global management accounting bodies, sharing the best practices and it will be useful to large number of trans-national Indian companies operating from India and abroad to remain competitive. With the current emphasis on management of resources, the specialized knowledge of evaluating operating efficiency and strategic management the professionals are known as "Cost and Management Accountants (CMAs)". The Institute is the 2nd largest Cost & Management Accounting body in the world and the largest in Asia, having more than 5,00,000 students and 85,000 members all over the globe. The Institution operates through four regional councils at Kolkata, Delhi, Mumbai and Chennai and 101 Chapters situated at important cities in the country as well as 10 Overseas Centre headquartered at Kolkata. It is under the administrative control of Ministry of Corporate Affairs, Government of India.

Our Institute apart from being a member of International Federation of Accountants (IFAC), South-Asian Federation of Accountants (SAFA), Confederation of Asian & Pacific Accountants (CAPA), National Advisory Committee on Accounting Standards (NACAS), and National Foundation for Corporate Governance (NFCG) is also a member of Government Accounting Standards Advisory Board (GASAB).

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- केन्द्रीय भण्डारण निगम, भारत सरकार का अनुसूची-'क' मिनी रत्न श्रेणी उपक्रम।
- पूरे देश में 10 मिलियन मी0 टन क्षमता के 422 वेअरहाउसों का नेटवर्क।
- खाद्यान्न, बीज, उर्वरकों आदि सहित लगभग 400 वस्तुओं के लिए वैज्ञानिक भण्डारण की सुविधाएं प्रदान करना।
- वेअरहाउस रसीद को गिरवी रख कर किसानों को ऋण सुविधा के लिए सहायता प्रदान करना।
- जमाकर्ताओं द्वारा आवश्यकता पड़ने पर रख-रखाव एवं परिवहन सुविधाओं की व्यवस्था करना।

- लाखों निर्यातकों तथा आयातकों के लिए 31 कंटेनर फ्रेट स्टेशन/अन्तर्देशीय क्लियरेंस डिपुओं का परिचालन।
- ग्राहकों के परिसरों में पैस्ट नियंत्रण सेवा उपलब्ध कराना।
- बन्दरगाहों तथा अन्तर्देशीय स्टेशनों पर अपने 52 बाण्डेड वेअरहाउसों में बाण्डेड वेअरहाउसिंग सुविधाएं प्रदान करना।
- लोनी तथा गेटवे बन्दरगाहों के बीच कंटेनर रेलगाड़ियों का परिचालन
- एकीकृत चैक पोस्ट टर्मिनल-आयात-निर्यात व्यापार के लिए सड़क मार्ग के माध्यम से भारत-बंगलादेश सीमा पर पैदापोल, अगरतला तथा भारत-पाकिस्तान सीमा पर अटारी में ट्रक परिचालन।



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## **Management Audit A Force to Achieve \$5 Trillion Economy**

**Abstract**

*To achieve the economic growth to US\$ 5.00 trillion, India not only requires fresh capital infusion of nearly Rs.150 lakh crore into the economy, but also they should be effectively utilised in economic and efficient manner. This article explains how the Management Audit as one of the tool to identify uneconomic spending, weak management practices, investment in unviable projects, diversion of borrowed funds outdated irrelevant policies, growing NPAs in financial sector, low growth in manufacturing sector due to uneconomic outdated production process and frauds and recommend to mitigate them. It also explains the differences between Management and traditional Internal and Statutory Audits The importance, scope and methodology of Management Audit is also discussed.. If this type of audit is implemented in India, there is no doubt, that a lot of unviable projects could be dropped, NPAs in Banks could be curbed and resources could effectively be used which would result in higher economic growth.*

**Introduction**

The Government of India (GoI) had set target that the Indian Economy should grow to US\$5tn by 2024. To achieve this, various industries (both manufacturing and Service sectors) and agriculture have to perform to the expectations with an annual CAGR to the extent of atleast 10 per cent. Though some areas in information technology may grow beyond 10 per cent, growth in other manufacturing sectors are far behind of 10 per cent and in some sectors there is negative growth. After Agriculture, the automotive sector is one of the largest sector in the growth. But due to strict implementation of emission norms, the auto sector has to switch over to BS VI norms which it did not achieve for want of huge fresh investments. This did not occur in one day but due to lack of constant investments in upgradation of technology, the auto sector is struggling. This had a cascading effect on other allied industries like auto components and their raw materials in metal sector. Also increased NPAs in Financial (like ILFS) and Banking sector, failure in NBFCs resulted in slow credit growth which were some of the causes of slower economic growth. It requires at least Rs. 120 lakh crore of fresh investments in the next few years in infrastructure sector alone and out of which investments from private sector is required to the extent of atleast Rs 20 lakh crore. The failure rate could have been to some extent identified in the earlier stages itself and curtailed or rectified had a proper Management Audit system is in place in these sectors. This article tries to highlight how the of Management Audit as one of the tool as a cryogenic force to identify the wrong policies and priorities adopted by the Managements and improve the economic and efficient usage of resources effectively which would result in faster economic growth.

**Definition**

According to CIMA's official terminology, "Management Audit can be defined as an objective and independent appraisal of the effectiveness of managers and the effectiveness of the corporate structure in





the achievement of company objectives and policies. Its aim is to identify existing and potential management weaknesses within an organization and to recommend ways to rectify these weaknesses.”

### **WHAT IS MANAGEMENT AUDIT?**

Management Audit is a critical analysis on the functioning of an enterprise as a whole or some of the cost/profit centres. It critically examines the overall economy efficiency and effectiveness in usage of enterprise's resources (human, money, machinery and infrastructure) and policies to achieve its objective. It is a form of appraisal of the total performance of the management by means of an objective and comprehensive examination of the organization structure, its components such as department, its plans and policies, methods of process or operation and controls, and its use of physical facilities and human resources. Management Audit is an important tool for the continuous appraisal and evaluation of the methods and performance of an enterprise. The prime objective of Management Audit is to locate defects or irregularities in the areas covered by the audit and to suggest possible improvements. It assists the management in managing the operations of an undertaking in the most efficient manner practicable. Management Audit is nothing but a critical evaluation of not only the functioning of an enterprise but on Corporate Governance also. It involves evaluation process of both financial and non-financial functions of an enterprise.

### **WHY MANAGEMENT AUDIT?**

During last decade, there was a growing importance to corporate governance apart from robust internal control automation, cost control etc. The past decade witnessed bankruptcy of certain big companies and Net Non-Performing Assets in the Commercial Banks grew to a whopping level which virtually eroded the capital base of many banks. As per RBI's Statistics<sup>1</sup> the commercial banks' lending to non-food sectors at the end of October 2019 stood at Rs. 97.71 lakh crore and out of which nearly 10 per cent are net non-performing assets to be written off. The NPA occurred mainly due to the following reasons.

- Mostly Family controlled private sector which lacks professional approach and management.
- Outdated business models and techniques.
- Very less investment in Research & Development.
- Very less investment in upgradation of technology
- Less productivity.

Which means that a lot of capital has to be infused into banking sector to enable them to expand their lending.

As far as Public Sector Enterprises are concerned, their management decisions were accountable to the legislature. Their performance and practices were evaluated by different agencies like CVC, CAG, Departmental Committees CBI etc., and they were reported to the stake holders through Legislature. This is done apart from internal audit and certification audit. As far as Private Sector Enterprises are concerned, the scope of internal audit is restricted as they perform audit mainly to ensure compliance to the Management's policies and decisions. Certification by Statutory auditors are restricted to ensure correctness of the financial statements only. Secretarial Audit ensures compliance to the provisions of the Companies Act 2013. To some extent cost audit (which is restricted to hardly 35 industries which should have annual turnover of more than Rs. 100 crore), identifies the degree of efficiency in operation level but there is no evaluation by these audits on the soundness of management practices, corporate governance, business models, effectiveness of investments etc., Clause 49 of the Listing Agreement by SEBI also didn't mention about such transparent Audit for atleast listed companies.

Even internationally, importance was given to Statutory and Internal Audit only and the Management Audit is only in theoretical level. The Ireland is the first European Country to pass atleast the rules for Corporate Governance and issued guidelines. In the United States, after the fall of Enron, the SOX Act

was enacted in 2002 to empower the Securities Exchange Commission to make rules to suggest improvement in the Corporate Governance. This act empowers the Audit Committee of the enterprise to oversee transparency in the management and prevention of frauds by employees and managers. But that Act also did not give any solution for evaluation of failed management practices and identification of failures of the enterprises due to the reasons like weak management, outdated policies, undertaking unviable projects, high cost of finance, inadequate internal control system, uneconomic usage of resources etc., These are some of the causes for collapse of banking system in the USA in 2008.

### **OBJECTIVES OF MANAGEMENT AUDIT**

The main objectives of Management Audit are as follows:-

- (a) To ensure optimum utilization of resources in economic efficient and effective manner.
- (b) To point out deficiencies in objectives, policies, procedures and planning and their effect in the profitability of the enterprise as a whole or of a particular segment of operation
- (c) To suggest improved methods of operations and business models.
- (d) To point out weak links in organizational structure and in internal control system and suggesting improvements and
- (e) To help management by providing early signals of sickness, ways and means to avoid the same.

### **AUDIT PROGRAMME COVERAGE**

- a) The Management Audit should make sure of the policies that these are suitable or not in achieving organisational objectives.
- b) The Audit team should make sure that all levels of management are following these policies or procedures.
- c) The Audit Team should test the effectiveness of the system of communication.
- d) The Audit Team should also verify that all levels of management follows the techniques of management control.

### **AREAS OF MANAGEMENT AUDIT COVERAGE**

The Management Audit should review the following areas to get best results.

- The chosen Mission and Vision of the enterprise
- Management evaluation of the SWOT analysis of the enterprise
- Policies with regard to capital expenditure.
- Policies with regard to purchases.
- Policies with regard to selection, Recruitment and training.
- Pricing policies of commodities and services.
- Effectiveness of Research and Development.
- Comparison of performance of the enterprise with industry norms/ average on parameters like capacity utilisation, profitability, ROCE, etc.,
- Internal check to control errors and fraud.
- Product Planning, and Product control
- Proper insurance coverage of Assets.
- Inventory management, Marketing Management
- Maintenance of Security of the Data etc.,



## SCOPE OF MANAGEMENT AUDIT

The primary object of Management audit is to find out the efficiency of every segment, from low level to high level of the business. Thus, the study is of each and every aspect of the enterprise. The following aspects are to be studied in Management Audit.

- a) **Study of Demand of Business:** The present organisational structure is reviewed in relation to current and prospective demands of the business. The study of organisation should be undertaken in relation to the aims and objectives of the enterprise to be cherished.
- b) **Study return on Capital employed:** It will include the study of present return on investors capital. Whether the return is adequate, fair or poor should be determined by the Management auditor.
- c) **Established relation to outsiders:** Management audit also requires the study of relationship of the business with the shareholders and investing public in general.
- d) **Performance Comparison:** The performance of the organisation should be compared with other firms in the same field. The ratios like operating returns on sales and return on Capital employed, capital invested etc., should be compared to find out the Comparative position of a similar organisation.
- e) **Study Management duty:** The aims, objectives and duties of the management should be studied by management auditor. This exercise should be undertaken at the Board of Directors level to keep them within the limit.
- f) **Financial Planning:** The study of financial planning and control forms the part of management audit. The efficacy of sources of finance and the use of funds for capital and other expenditure should be evaluated to determine the efficiency in raising and utilising the funds. The cost of each source of capital be taken into account.
- g) **Highlight production and sale:** The review of production and sales function is also an important aspect of management audit whether the production is as per schedule or not. Whether economy in production was achieved or not to be studied. Similarly, the performance of sales department should be judged by looking at its post-performance and future possibilities. The sales should be quick and efficient and distribution channels should be as economical as possible to meet the demand of pre-set and prospective buyers.

## MANAGEMENT AUDIT METHODOLOGY

Before starting the work of management Audit, the Auditor should focus on the following:

- a) Aims and objects of the organisation, policies and procedures, planning, communication and its effectiveness, managerial control devices.
- b) The Team leader should possess the knowledge of the industry. If he is from accounting profession, then the members of the Audit team should be chosen with persons having of right kind of qualification and experience in the industry.
- c) The Management should present the audit team about the objectives and policies of the enterprise- what is their targets and achievements, implementation of projects, etc.
- d) The Team should collect the required basic data from the enterprise as well as data from other established sources like chamber of commerce, industry regulatory authority if any, published data of comparative enterprises in the industry, Government Sources etc.
- e) Internal control system existed in the enterprise to be studied and deficiencies if any to be noted.
- f) Based on the above, the Audit team should set audit objectives and set criteria to test the objectives.
- g) The audit team should explain the objectives of audit to the respective management level and add or modify the audit objectives.

- h) Then audit team should do sampling wherever necessary to test the audit hypothesis. The sampling may be a particular cost/profit centre, or a set of transactions of the enterprise as a whole.
- i) Audit would cover major policies of the enterprise on how they formulated, what is the objective, whether they were achieved, if not what are the reasons for shortfall, who are responsible and effect, efficiency and effectiveness in usage of resources/
- j) The draft report should be discussed at head of each unit audited and their views to be recorded in the report. If their views are acceptable, the same need not be included in the final report.
- k) There should be proper documentation and each audit observation should be supported by documentary evidence. All the meetings are to be minuted and acknowledgment should be obtained.
- l) The final report should not only contain the short fall in achievements and their effects, but also includes appreciation for the best practices followed. It should also include the recommendations for improvements and should be submitted to the audit committee and the Board of Directors to take appropriate action.
- m) The Audit team should do a follow up audit to check whether the recommendations of the audit as well as the Audit Committee were implemented and the results there of. For this a time gap of atleast two years to be given.

### HOW THE MANAGEMENT AUDIT WOULD BE A CRIOTIC FORCE

The usefulness of management Audit can be felt by studying the following:

- i. Management audit enables external appraisal of performance of managers at various levels. The standards for every manager are predetermined and their performance has to be compared in view of these targets. There should be a regular system of evaluation for keeping efficiency standards. Various Incentive plans may also be linked with such reports.
- ii. The management Audit is useful in knowing the efficiency and productivity of any organisation. When these are not within the satisfactory limit, the suggestions/ recommendations of Management Audit on implementation would improve their efficiency.
- iii. **Management audit is result oriented.** The performance is judged on the basis of rates of inputs and outputs. It does not give much importance to the procedures followed and formalities completed which is generally said that when Management audit is introduced then managers be more particular about completing the file work only.
- iv. **Satisfies Investors:** When a concern approaches various investors for funding, then the investors would like to see the performance of the business. If Management Audit System is already in existence, their report would satisfy the investors that the enterprise is following best practices in managing the affairs.
- v. **Basis for Critical Evaluation.** Management Audit is needed for dynamic management to know what are the deficiencies exist and how to mitigate them. The management Audit is useful in knowing the reasonable return on capital employed. Therefore is very useful to the prospective investors.
- vi. **The Management Audit needed for Change.** The Management Audit is very useful for knowing the effect of changes in organisational structure such as: change is useful or not.
- vii. **Helpful in entering Foreign Collaborations.** Whenever there is a proposal to enter into a foreign collaboration then collaborators will not find any difficulty in assessing the managerial potentials of the party. They can be provided with management audit report (if the same can be shared with third party) which will enable the parties to form a judgement about the concern.





The failure of the management in policies framed and followed as well as outdated technology and management practices they could not sustain in this competitive economy. Thus these enterprises face closure or go bankrupt. Due to this, unemployment increases and the demand for products and services are diminishing and hindrance to economic growth. As a chain effect, their investments were blocked/idle and the borrowed capital become NPA. Thus these cascading effect in the economy is leading to slower economic growth. To mitigate this, to take timely corrective action to sustain, there is urgent need by the enterprises to conduct Management Audit at their enterprise level as it reviews not only financial aspects but also non-financial aspects in the enterprises which hampers the growth of the organisation.

### **Conclusion**

The concept of Management Audit, though, is well defined, exists only in literature. This Article tried to explain how the concept of Management Audit, as one of the cryogenic force would try to achieve the desired growth in the economy. It explains the need for such audit, its importance, scope and methodology. The review of management policies and practices of India Public Sector are reviewed periodically through the Performance Audit by CAG and reported to Legislature. Since Management Audit is not compulsory under any Act or Regulations, no private sector Management is interested in such audit. But Indian Banks and financial institutions like ILFS are in dire need on a broader review of their lending policies and pattern to mitigate the NPA problems. Also these banks and Financial Institutions should insist on Management Audit of their borrowers at regular intervals to prevent the diversion of borrowed funds and other resources by them in order to ensure that the borrowed funds were utilised economically and efficiently to achieve the purpose for the borrowing. In order to improve the overall efficiency of the enterprises which would result in cost cutting, demand push and better usage of technology, it is high time that Standards and Regulations are framed for Management Audit and insist on the enterprises and place before stake holders.

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# The Four Way Test of Enterprise Competency

## Abstract

*The term 'Enterprise Competency' is coined to denote the "Entrepreneurial Output" achieved by means of "Prudent Deployment and Optimum Utilisation of the Available Resources". The components of Enterprise Competency can be visualized through its simple, but vital, quadrants comprising:*

- Revenue Management that leads to Revenue Augmentation;*
- Capability Engineering that propels the Maximum Productivity;*
- Cost Synergy that fosters Least Cost Combination; and*
- Brand Positioning that firms up Stakeholder Bonding.*

*It would be an added advantage if a 'Test of Enterprise Competency' can be applied to every entrepreneurial activity, at the start up stage itself, to elicit answers to the four simple related questions derived from the Competency Quadrants. The test is presented by means of a diagram that follows:*



## The Four Way Test of Enterprise Competency

Of the Resources, We Deploy and Utilise

1. Will the Activity BETTER Revenue Management?
2. Will the Activity PROPEL Capability Engineering?
3. Will the Activity FOSTER Cost Synergy?
4. Will the Activity ELEVATE Brand Positioning?

## 01.0 Enterprise Competency

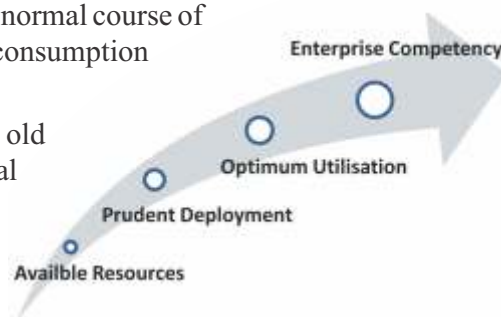
The term 'Enterprise Competency' is coined to denote the "Entrepreneurial Output" achieved by means of "Prudent Deployment and Optimum Utilisation of the Available Resources". In this context, Enterprise reflects the resources; and Competency refers to effective application of capabilities. Enterprise Competency, thus, signifies the synergic output arising from the prudent deployment and optimum utilisation of the available resources. The key words are 'Available Resources, Prudent Deployment, and Optimum Utilisation'.

'Available Resources' refer to all the Resources, present and future, in whatever form – Machine, Material, Men, Money, and so on – available at the disposal of an entity; 'Prudent Deployment' refers to diligent distribution of the resources, amongst the activities that are being undertaken, in a manner as

would be done by an entrepreneur of ordinary prudence in the normal course of business; and ‘Optimum Utilisation’ refers to best possible consumption of the resources so distributed.

“Unlimited Wants and Limited Resources” is an age old economic fundamental. “Limited Resources” is a perpetual truth and forms the basic constraint for any economic activity. The contours, for the entrepreneurial outputs, are, thus, set by the limited availability of the desired resources. “Prudent Deployment” and “Optimum Utilisation” are the strategic means that are adopted by the enterprise to derive maximum benefits from the “Available Resources” that are limited by nature.

The superior outcome achieved by means of prudent deployment and through the process of optimum utilisation reflects the impact which we propose to call as ‘Enterprise Competency’. In other words, Enterprise Competency reflects the competitive edge scored over the peers over a period of time.



## 02.00 The Four Quadrants of Enterprise Competency



The functions of ‘prudent deployment’ and the ‘process of optimum utilisation’ of the available resources are continuous and never ending. The enterprise competency must, therefore, be articulated and executed in an incessant manner. The components of Enterprise Competency can be visualized through its simple, but vital, quadrants comprising:

- Revenue Management that leads to Revenue Augmentation;
- Capability Engineering that propels the Maximum Productivity;
- Cost Synergy that fosters Least Cost Combination; and
- Brand Positioning that firms up Stakeholder Bonding.

These are the quadrants that comprise the pillars of performance of each and every entity, of each and every sector, and from each and every segment of the economy. Revenues lead to Profits; Capability enables Productivity; Costs are the Inputs; and Brand brings Recognition. These are the pillars that hold the structure of the ‘organizational growth’ together.

### 03.01 Revenue Management

Revenue refers to the outcome value, of the products or services, realized during the course of business. ‘Revenue’ is the primary factor that indicates the financial stature of an entity. Movements of

*Revenue Management impacts the scale of operations.*



the Revenue Generation reflect the track record of the organization. Revenue forms the top line in the evaluation of enterprise performance and leads the way towards the path of prosperity. Revenue Management impacts the scale of operations.

In its role as a component of enterprise competency, the term Revenue Management refers to all those activities that are adopted by an enterprise in pursuit of augmenting the revenue inflows from the existing pool of resources. The term is broad enough to include revenue maximisation measures across various streams as also control measures that arrest revenue leakages.

It is a universal truth that value of a function can be improved either by enhancing the value or reducing the cost or by doing both at the same time. Revenue Management, in our perception, endeavours to improve the value by improving the revenues without consuming any additional resources. The input resources remaining constant, every additional bit of revenue is bound to prop up the kitty of profits and improve the performance of the enterprise.

Unique practices of Revenue Management include Product Differentiation as in the case of Apple; Price Perfection as in the case of Big Bazaar; Value Chain Management as has been prevailing in many a successful corporate entities; Ancillary Revenue Creation as in the case of Aviation Industry; and so on.

The key functions of Revenue Management revolve round the theme of enhancing the revenues through prudent deployment and utilisation of available resources. The focus is on making efficient and effective use of the right opportunities for right revenues. The test question is **“Of the Resources, we Deploy and Utilise: Will the Activity BETTER Revenue Management?”**

### 03.02 Revenue Management Indicators

Revenue Management Indicators are that set of financial measures that reflect the trend and impact of the Revenue Management. The trend can be gauged by means of annual changes relating to Sales, Value of Production and Gross Value Added whereas the impact can be visualized through Profit to Value of Production. Quantum of additional inflows into revenue basket can be observed through the movements in Other Income.

In general, value of production is assumed to fluctuate in cohesion with the volumes of sales. The first impact of any phase of prosperity or recession is normally indicated by increases or decreases in volumes of sales and production. It is a traditional assumption that any changes in volumes would result in corresponding changes in profits.

For instance, any growth phase is assumed to be reflected by absolute and progressive annual increases in sales, value of production and gross value added, thereby increasing the profit after tax and any recession phase is assumed to be reflected by absolute and progressive annual decreases in all these measures of performance. New vistas of ancillary revenue props up other income whereas obsolete ideas ignite a leaky basket.

Hence, we consider the following five measures as the key indicators for the purpose of visualizing the competency of Revenue Management.

- (i) Percentage of Change in Sales
- (ii) Percentage of Change in Gross Value Added
- (iii) Percentage of Change in Profit After Tax
- (iv) Profit to Value of Production
- (v) Other Income Ratio

The formulae that may be adopted to compute the Revenue Management Indicators are as follows:

Percentage of Change in Sales	=	(Annual Increase or Decrease in Sales / Sales for Previous Year) X 100
Percentage of Change in Gross Value Added	=	(Annual Increase or Decrease in GVA / GVA for Previous Year) X 100
Percentage of Change in Profit After Tax	=	(Annual Increase or Decrease in PAT / PAT for Previous Year) X 100
Profit to Value of Production	=	(Profit After Tax / Value of Production) X 100
Other Income Ratio	=	(Other Income / Value of Production) X 100

Volumes of sales and value of production are expected to grow or decline in line with market movements. Any change in value of production is expected to lead to a proportionally higher change in gross value added and in turn to a propelling a change in profit after tax. In the current scenario 12% is considered as normative growth for sales and value of production. The resultant changes in GVA and PAT are estimated to be 16.55% and 56.80% respectively on the basis of impact analysis that has been carried out with reference to an exclusive normative model.

The norms for Profit to Value of Production and Other Income Ratio are product / service specific, and may differ from industry to industry. The normative model adopted by the author for the competency computations considers a standard of 5.49% in case of Profit to Value of Production, and a parameter of 1.00 for Other Income.

#### 04.01 Capability Engineering

Capability refers to the ability to perform; Capability denotes achieving the outcomes through a set of controllable and measurable faculties, features, functions, processes, or services; Capability is the basic trait of competency; Capability is the beginning, Competency is the End. Capability Engineering impacts the size of the operations.

*Capability Engineering impacts the size of the operations.*

Engineering the capabilities in relation to enterprise competency refers to rediscovering the hidden potential of the existing resources with a view to optimise the outputs. Resources, in this context, pervade physical such as infrastructure facilities; human such as employees; and financial such as capital employed. Our perception of Capability Engineering, thus, implies not only making full use of the existing infra, but also drawing full potential out of it.

Idle resources have always been a pain in the neck of every enterprise. The biggest challenge, at times, could be tracing such of these idle resources and put them to proper use.

**A number of strategic initiatives, as listed below, of Indian Railways may be cited as emulative examples of Capability Engineering.**

- (i) Gauge Conversion, Track Multiplication, and Electrification;
- (ii) Modernisation of Rolling Stock of Locomotives, Passenger Carriages, and Wagons
- (iii) Creation of Speed Corridors, High Speed Trains, Dedicated Freight Corridors, etc.
- (iv) Prevention of Disruptions and Elimination idle runs
- (v) Enrichment of Human Capital
- (vi) Better Utilisation of the Infra and Yield Management

Evidently, these are the initiatives that keep the Indian Railways get-going, despite the legacy costs loaded on it for vested considerations.

**The key functions of Capability Engineering revolve round the theme of enhancing the productivity through prudent deployment and optimum utilisation of the resources on hand.** The objective is drawing more economic value out of the existing resources. **The emphasis is on unleashing the untapped potential towards achieving the competitive advantage. The test question is “Of the Resources, We Deploy and Utilise: Will the Activity PROPEL Capability Engineering?”**

#### 04.02 Capability Engineering Indicators

Capability Engineering Indicators consist of those of the financial measures that compute and compare productivity and efficiency of the resources utilized in the process of value addition. The outcome of the Capability Engineering exercise would always crystallise in terms of higher productivity.

Higher Productivity is the focused goal of capability engineering, and any activity that enables enhanced productivity shall be deemed as a initiative of Capability Engineering. Productivity enhancements result from better capacity utilization, technology advances, supply chain and logistics improvements, and increased skill levels of the workforce.

The key measures that can be used as indicators of capability engineering may consist of:

- (i) Operational Productivity
- (ii) Fixed Capital Productivity
- (iii) Employee Productivity
- (iv) Cash Return on Net Fixed Assets
- (v) Cash Return on Total Capital Employed

The formulae that may be adopted to compute the Capability Engineering Indicators are as follows:

Operational Productivity	=	Value of Production / Operating Cost
Fixed Capital Productivity	=	Value of Production / Gross Fixed Assets
Employee Productivity	=	Value of Production / Employee Cost
Cash Return on NFA	=	(Cash Profit After Tax / Net Fixed Assets) X 100
Cash Return on Total Capital Employed	=	(Cash Profit After Tax / Total Capital Employed) X 100

Operational Productivity reveals output levels from the consumption of operating resources; Fixed Capital Productivity reflects the levels of utilization of all the fixed assets; Employee Productivity reflects the capability status of the human resources; Cash Return on Net Fixed Assets relates the return to the funds locked in net fixed assets; and Cash Return on Total Capital Employed gives out the cash profit with reference to the total capital deployed which includes equity as also the debt.

The norms for the Operational Productivity, Fixed Capital Productivity and Employee Productivity are industry specific whereas the standards for Cash Return on Net Fixed Assets and Cash Return on Total Capital Employed are set by the benchmarking rates of the financial markets and tend to remain uniform across all the industries.

The normative model adopted for the competency computations considers 1.08 towards Operational Productivity, 2.00 towards Fixed Capital Productivity, 10.00 towards Employee Productivity, 19.98% of Cash Return on Net Fixed Assets and a Cash Return of 15.84% on Total Capital Employed.





### 05.01 Cost Synergy

The costnomic definition states that Cost is a Resource consumed in the process of Value Addition. Synergy is the creation of a whole that is greater than the simple sum of its parts. Accordingly Cost Synergy is conceived to reflect the Synergic Impact arising from the chain of Cost Management Activities carried out during the course of Value Addition.

*Cost Synergy leads to Competitive Advantage.*

Cost Synergy, in a way, is the savings in operating costs arising out of a situation wherein cost management activities compliment each other's strengths collectively. Cost Synergy, thus, implies the most efficient utilisation of the input resources whereby the matrix of the Least Cost Combination is achieved. In the ultimate, Cost Synergy leads to competitive advantage.

Could it be McDonald's Cost Leadership Strategy; or Containing the 'Cost-per-Touch' as was evolved by IKEA; or Walmart's Supply Chain management Strategy; or the industry practices of man power cost containments by means of Learning & Experience Curves – all are the examples that highlight the cost synergy practices in vogue.

The primary idea is on looking beyond any of Cost Management Activities singularly; and targeting for an integrated unidirectional approach that would foster a synergic impact from the combination. The focus of Cost Synergy is directed towards achieving synergic cost combination. The test question is “**Of the Resources, We Deploy and Utilise: Will the Activity FOSTER Cost Synergy?**”.

### 05.02 Cost Synergy Indicators

Cost Synergy Indicators consist of the financial measures that compute and compare cost servicing and cost combination. The outcome of the Cost Synergy exercise would always crystalise in terms of least cost combination.

The tools and techniques of Cost Synergy are many; some are traditional and so many advanced. To name a few, the list begins with Traditional Cost Controls and keeps moving yonder the modern Cost Leadership, Activity Based Management, Balanced Score Card, Lean Management and so on. The outcome depends upon the ability to identify the best of the feasible practices suitable to the entity and adopt them. Inventions and innovations can keep happening perpetually.

The key measures that may be chosen as indicators of cost synergy may be listed as:

- (i) Factor Cost Cover
- (ii) Employee Cost Cover
- (iii) Finance Cost Cover
- (iv) Equity to Debt
- (v) GVA Leverage

The formulae that may be adopted to compute the Cost Synergy Indicators are as follows:

Factor Cost Cover	=	Gross Value Added / Factor Cost
Employee Cost Cover	=	Gross Value Added / Employee Cost
Finance Cost Cover	=	Cash Profit Before Interest / Finance Cost
Equity to Debt	=	Net Worth / Debt
GVA Leverage	=	Gross Value Added / Profit Before Tax

Factor Cost Cover highlights the number of times that GVA provides cover towards servicing the factor costs; Employee Cost Cover signifies the number of times that GVA covers employee commitments;

Finance Cost Cover throws up the ability to service the finance charges; Equity to Debt provides an idea about the range of cost of capital; and GVA Leverage relates the GVA towards servicing of the profits and taxes.

The norms for the Factor Cost Cover, Employee Cost Cover, Finance Cost Cover and GVA Leverage are industry specific whereas the standards for Equity to Debt are set by the benchmarking rates of the financial markets and tend to remain uniform across all the industries.

The normative model adopted for the competency computations considers 1.41 towards Factor Cost Cover, 2.90 towards Employee Cost Cover, 2.40 towards Finance Cost Cover, 0.68 of Equity to Debt and a GVA Leverage of 3.43.

### 06.01 Brand Positioning

Branding brings recognition to the entity from the stakeholders; and Brand Positioning leads to Brand Elevation. Brand positioning creates a bond between the stakeholders and the business. It is that friend of the customers who would always stay in their subconscious mind and will make them recall about the company whenever they hear about the any of its product or a particular feature which makes it stand out.

*Brand is the unique output that keeps stakeholders bonded to the enterprise.*

In relation to the Enterprise Competency module, Brand positioning refers to the strategic ranking awarded to the entity by the basket of stake holders. In other words, Brand Positioning reveals the superior acclamation of the enterprise over its competitors.

Brand positioning highlights the value created by the entity for its stakeholders. Brand Positioning is the performance parameter that reflects the overall outcome of the competency module. Brand is the unique output that keeps stakeholders bonded to the enterprise.

The age old confidence and trust gained by Tata Concerns from their stakeholders; the Birla's business acumen emanating from the concept of "Purta Hai Kya"; the Reliance's meteoric growth over the last four decades; etc. are a few of the notable quotes that reflect the brand positioning.

Brand Positioning provides the strength for a premium pricing of the equity shares, differential pricing of the products, market credibility of the enterprise and overall societal valuation of the entity; and thus forms one of four founding pillars of Enterprise Competency. Brand Positioning needs to be perceived as a means of product promotion and cost cutting. The test question evolved in this context is **"Of the Resources, We Deploy and Utilise: Will the Activity ELEVATE Brand Positioning?"**

### 06.02 Brand Positioning Indicators

Brand Positioning Indicators consist of the financial measures that pinpoint the general stakeholder servicing and confidence building. Brand Positioning implies doing different activities than the competitors or doing the same activities differently.

Growth implies a growing balance sheet that is propelled by continuous generation and accretion of resources. Any contraction in the generation and accretion of the resources is the signaling point for the onset of problematic future.

The key measures that may be chosen as indicators of brand positioning may be stated as:

- (i) Dividend Payout Ratio
- (ii) Market Value to Book Value
- (iii) Solvency Ratio
- (iv) Current Ratio
- (v) Economic Wealth Ratio

The formulae that may be adopted to compute the Brand Positioning Indicators are summarized below:

Dividend Payout Ratio	=	(Dividend per Share / Earnings per Share) X 100
Market Value to Book Value	=	Market Price per Share / Book Value per Share
Solvency Ratio	=	Total Assets / Total Liabilities
Current Ratio	=	Current Assets / Current Liabilities
Economic Wealth Ratio	=	(Economic Wealth Created / Tangible Net Worth) X 100


Dividend Payout Ratio reflects the annual appropriations to the shareholders; Market Value to Book Value reflects the level of market confidence; Solvency Ratio reveals the solvency posture in relation to the lenders and vendors; Current Ratio depicts the liquidity status of the entity; and Economic Wealth Ratio shows the contribution towards additions over and above normative expectations.

The normative model adopted for the competency computations considers a Dividend Payout of 40%; a relationship of 2 between the Market Value and Book Value; a Solvency of 1.6 times; a Current Ratio of 1.54 and an Economic Wealth Ratio of 7.85%.

#### 07.00 The 4 Way Test of Enterprise Competency

The tools and techniques of achieving enterprise competency could be many; but the objective is singular – “Gaining a competitive edge by unveiling and unleashing the untapped potential of the available resources”. It is, therefore, warranted that a diligent analysis be carried out in relation to each of the components of enterprise competency before the commencement of any of the entrepreneurial activities.

It would be an added advantage if a ‘Test of Enterprise Competency’ can be applied to every entrepreneurial activity, at the start up stage itself, to elicit answers to the four simple related questions derived from the Competency Quadrants. The test is presented by means of a diagram that follows:



**The Four Way Test of Enterprise Competency**

Of the Resources, We Deploy and Utilise

1. Will the Activity BETTER Revenue Management?
2. Will the Activity PROPEL Capability Engineering?
3. Will the Activity FOSTER Cost Synergy?
4. Will the Activity ELEVATE Brand Positioning?

The questions are formulated to invoke a proactive thinking towards achieving the organisational competitive edge. It shall be remembered that the activities are worthy of acceptance only if the answers to the relevant test questions are positive.

(Appended hereto, for reference, are the model norms adopted for a normative Enterprise Competency Module.)

#### 08.00 Bottom Line

Enterprise Competency fosters Entrepreneurial Advantage.



## Appendix

### Model Norms for Enterprise Competency

#### I. Revenue Management Indicators

Serial	Indicator	Norm
1	Percentage of Change in Sales	12.00%
2.	Percentage of Change in Gross Value Added	16.55%
3.	Percentage of Change in Profit After Tax	56.80%
4.	Profit to Value of Production	5.49%
5.	Other Income Ratio	1.00%

#### II. Capability Engineering Indicators

Serial	Indicator	Norm
1.	Operational Productivity	1.08
2.	Fixed Capital Productivity	2.00
3.	Employee Productivity	10.00
4.	Cash Return on Net Fixed Assets	19.98%
5.	Cash Return on Total Capital Employed	15.84%

#### III. Cost Synergy Indicators

Serial	Indicator	Norm
1.	Factor Cost Cover	1.41
2.	Employee Cost Cover	2.90
3.	Finance Cost Cover	2.40
4.	Equity to Debt	0.68
5.	GVA Leverage	3.43

#### IV. Brand Positioning Indicators

Serial	Indicator	Norm
1	Dividend Payout Ratio	40.00%
2.	Market Value to Book Value	2.00
3.	Solvency Ratio	1.60
4.	Current Ratio	1.54
5.	Economic Wealth Ratio	7.85%

An important note of caution is that the norms evolved, as above, are based on an exclusive model and are general in nature. Some of the ratios are bound to differ from industry to industry, enterprise to enterprise and situation to situation. In such an eventuality industry specific, enterprise specific and situation specific model performance needs to be constructed and relevant norms evolved.



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## **Data, Analytics, Technology and Automation (D.A.T.A) – Driver For Mission 5 Trillion**

### **Abstract**

*The economy of any nation is driven by the vision of thought leaders emerging from the stake holders of the nation. This in turn leads to industry revolution which contributes significantly to the growth of every nation. Now, we are in the Industry Revolution 4.0 and the key drivers for this revolution are Data, Analytics, Technology and Automation (D.A.T.A.) that includes Machine Learning (ML) and Artificial Intelligence (AI). With data being the key to decision making, it becomes pertinent for every CMA professional to stay abreast with the current trends and disruptive technologies of Industry Revolution 4.0 in order to support, contribute and drive the economy of this country on the MISSION 5 TRILLION TARGET and do justice to the caption, “Behind every successful business decision, there is a CMA”*

### **Introduction**

Management is all about decision making. For effective decision making, the key ingredient is information. And information can come only from data. Traditionally, information was sought from the various functional departments and was tabulated, analyzed and finally decisions were taken. With the advent of computerization and Information Technology, at the end of the earlier century, evolved Management Information System (MIS) which was used to draw information from the various departments. Later on, with the support of Enterprise Resource Planning (ERP) for operations within the organisations, Supply Chain Management (SCM) that handled operations across the supply chain of both procurement as well as sales and distribution, and Customer Relationship Management (CRM), the decision making process on the MIS platform became more robust and timely. But, with the influx of disruptive technologies, the whole environment of economics has changed the business landscape, brought out sea-change in the way of doing business and also made economic challenges sky-high.

### **Data**

The current advancements in technology has transformed the way business is being done. The adoption of e-commerce, e-payments and other digital modes of business has contributed to creation of enormous data in the form of text, audio, pictures, videos and data collected through sensors. In fact, the technology of data capturing through sensors and connecting to the internet has evolved the new field of Internet of Things, which many organisations have started adopting. Slowly, it looks like it is getting into the mode of Internet of Everything! Coming back to the data creation, in India alone, there are more than 800 million smart phone users, over 560 million internet subscribers, in addition to the usage of laptops, tablets, counting to billion devices and all chewing out data of all types.

### **Analytics – Big Data Analytics**

The data from which information is culled out, is generated in big volume, high velocity and multiple variety. The volume, velocity and variety are the attributes that explain Big Data. The analytics of such

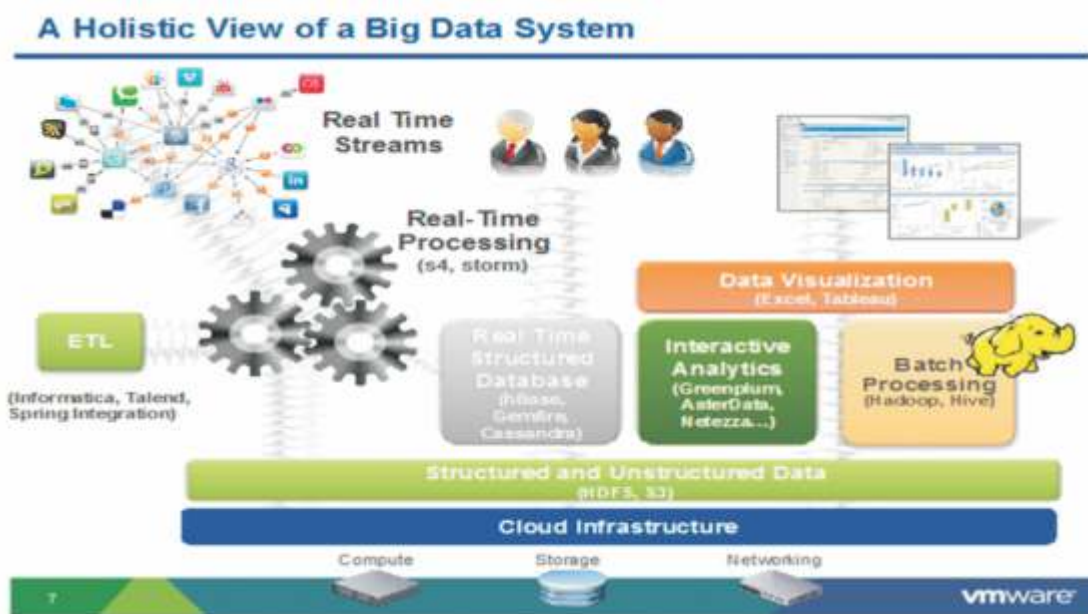
huge data sets is called Big Data Analytics. There is a science behind this who analytics and that's why it is also termed as Data Science. Therefore, any organisation or entity having access to data are considered to be sitting on "gold mines" with huge potential for analyzing, interpreting and predicting outcomes that facilitate effective decision making.

### The Big Screen



### Technology

The storage of huge volume of data for productive applications is a challenge. That's where technologies like Cloud Computing, Hadoop Architecture, Spark and Scala play significant role and considered the back-bone for Big Data.





## Automation

The repetitive tasks can be automated through instructions. But, in the current context, automation does not stop with just repetitive tasks like replying to emails, raising of purchase orders, invoices, or receipts. It does go step further by making machines to learn by itself by reading the data signals and this is called Machine Learning. The next in the stage of simulating natural intelligence for solving complex problems is Artificial Intelligence. This ultimately helps in the decision making process.



## How D.A.T.A. can be the Driver for Mission 5 Trillion?

If every organization and entity leverage the advantages arising out of D.A.T.A, the development of the economy will surely be augmented at a rapid pace. Some of the key advantages or positives are :

### Understanding of market conditions

The workings of current market conditions can be better understood with the help of big data analytics. Today, predominantly, business are customer centric and it is a customer driven market. Therefore, with the Big Data Analytics too, it will become possible to understand the insights of the market and consumer behavior such as attitudes and preferences, so that the organization can be making more compelling offers that are relevant, timely, valuable with a right price.

### Product and Service Marketing Made Easier

Machine Learning can play a positive role in analyzing customer behavior and spending pattern and thereby modify their sales and marketing strategies. It does away with the complex and lengthy integration, thereby allowing businesses to concentrate on focused data feeds and reach out to the right customer at the right place and at the right time.

### A rupee saved is a rupee earned!

Every organisation shall be able to reduce its cost of operations using Big Data Analytics by optimizing its resources and operations. Harnessing of any technology always acts for the betterment of society that includes business and organisations.

### Business expansion using sentiment analyses

The public opinion about new products and services or regions are important factors that needs to be considered while planning business expansion. Big data technology tools have the ability to draw data

from social and other public medium that enable to carry sentiment analysis. Alternatively, the organisation can also seek responses from the larger community to understand and interpret those responses through sentiment analysis. Big Data Analytics, supported by big data technologies involves analyzing the existing trends in the market, consumer behavior, propensity to buy, financial capacity, design preferences and so on. Therefore, for successful launch of new products or new services, Big Data Analytics acts as a launch pad. Business expansion is one of the key factors for economic growth.

### **Helps faster and more informed decisions**

Businesses are in a better position to analyze information instantly. The organisation which are ahead and quick to respond to the needs of the market, technology and the environment, end up becoming leaders in their chosen field. This will in effect contribute substantially to the growth of the economy.

### **And more....!**

In addition to the above direct economic factors, the other factors that propel growth are social and environmental factors. D.A.T.A. has brought in revolution in the following fields also, to list a few.

#### **Healthcare**

The health care industry can benefit tremendously from machine learning. It can help practitioners and health care professionals identify high-risk patients and ensure accurate diagnoses. They will also be able to prescribe the right medication and predict when a patient will be returning for readmission. These factors hasten patient recovery without having to spend a lot of money.

#### **Agriculture**

Machine Learning and AI can bring in tremendous benefit to the agriculture sector which is the backbone of our country. Already, progress has been made by using D.A.T.A, to analyze soil, ground water, moisture conditions and help in prescribing the right crop in the right soil. The meteorological predictions is improving in its accuracy of predictions by using D.A.T.A. to forecast weather and monsoon.

#### **Governance**

Smart cities and smart villages concept is built on the platform of Data, Analytics, Technology and Automation for quick response system for the citizens of the country as well as to ensure the necessary creation of infrastructure to support all aspects of governance that include health, water supply, hygiene, sanitation, roads, drainage and other public works services.



Source: Data.gov

### **Conclusion**

It is widely accepted that Data is the fuel and Analytics is the Engine of any economy. It is now added that Technology is the Platform and Automation is the Driver. Together, Data, Analytics, Technology and Automation (D.A.T.A.) can propel this country's growth to the visionary mission of a 5 Trillion dollar economy by the year 2024-25!!



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## Mission \$5 Trillion Economy: Role of Women Entrepreneurs

### Abstract

*The Prime Minister of India has given a goal of \$ 5 Trillion economy of the country by 2024. Promoting female entrepreneurship is one of the key factors in economic development of any country. The journey towards the \$5 Trillion economy cannot be achieved without active participation of women entrepreneurs. Women entrepreneurs face a lot of challenges in starting and running their businesses but in spite of all these challenges women have proved themselves. Efforts need to be made by the family, society and Government to promote gender equality in entrepreneurship to reach the goal of \$5 trillion economy*

***“If we recognize that economic growth requires the efficient allocation of resources, then how can half of the world’s population be prevented from making a full contribution? We acknowledge that women are different, yet fail to realize their potential as equals.”***

*Anjali Hazarika wrote in her book titled Walk the Talk: Women, Work, Equity, Effectiveness.*

### Introduction

The Prime Minister of India has given a goal of \$ 5 Trillion economy of the country by 2024. The journey towards the \$5 Trillion economy cannot be achieved without active participation of women in all aspects of life. Promoting female entrepreneurship is one of the key factors in economic development of any country. Everyone agrees that gender equality is necessary and women entrepreneurs are necessary for the growth and economic development of the country. Women constitute about fifty percent of the world population but their potential and strength has not been recognized and utilized because of their confinement to houses.

### Definition

Women Entrepreneurs have been defined by the Government of India as ***“an enterprise owned and controlled by women having a minimum financial interest of 51 per cent of the capital and giving at least 51 per cent of the employment generated in the enterprise to women.”***

### Reasons why women entrepreneurs should be the part of \$5 Trillion Mission

1. **About half of the Population:** Women constitute about 50% of the total population. Ignoring women means ignoring 50% of the human resources of the country.
2. **Different skill set:** Women possess skills which are unique to them. These skills help women to work in particular industries much better than men. Some of these industries include fashion industry and pharmaceutical industry.
3. **Generation of employment:** Entrepreneurial activities give rise to employment opportunities. The women entrepreneurs become the job creators and not job seekers. Naturally the economic growth will be accelerated by generating employment.



4. **Better standard of living:** Women working in small scale industry produce various products which are offered to the people at reasonable rates. This is because of the low cost of production in small scale industries. No cost is involved in brand building or advertisement of products. These small scale industries remove scarcity of essential commodities and facilitate improvement in standard of living.
5. **More entrepreneurial activities result in increase in per capita income:** More entrepreneurial activities result in better and cost effective utilization of idle resources including land, labour and capital. This results in more manufacturing and services which increases the per capita income and the net national product.
6. **Capital Formation:** The idle savings lying in the household can be invested in some productive activities. This will lead to the optimum utilization of national resources which ultimately accelerates the economic growth.
7. **Innovations:** Innovation is very necessary for any entrepreneurial activity. Thinking out of the box is required. Women think differently than men. This skill can help women create new products and services. Women if given chance to become entrepreneurs can transform families and society, besides making contributions to business development.

### **Challenges women face in becoming entrepreneurs**

An important factor which contributes to the gender gap in entrepreneurship is to obtain funds required for starting and running the business. Research has proved that ventures led by women find it difficult to obtain funds. This gap is more evident in startup ventures led by women. If women receive as much external fund as the ventures led by male entrepreneurs, they are likely to perform equally if not better.

A research by Boston Consulting Group found that if female entrepreneurs received as much support as male entrepreneurs the global economy could experience a \$ 5 trillion boost. The same could become applicable to India also. If the mission of \$5trillion economy of India is to be achieved by 2024 women entrepreneurs need to be supported. It is determined by research that women led businesses experience more positive outcomes and outperform their peers. But due to various barriers and obstacles women constitute a very small percentage of entrepreneurs. Some of the ways to overcome the barriers faced by women entrepreneurs are as follows:

1. **Increased awareness and education:**

Unconscious gender bias means unintentional mental associations based on gender. It has been found to be a key factor impeding the progress of women entrepreneurs. It is necessary to educate our girls and develop confidence in them to use their acquired skills.

2. **Skill development programmes for women entrepreneurs :**

Skill Development programmes need to be launched by the government to train prospective women entrepreneurs to help them acquire and develop the skills needed to successfully start and run businesses with high growth potential. The programmes can include managerial skills, leadership skills, marketing skills etc. These women oriented programmes can help women in overcoming barriers which they face in becoming first generation entrepreneurs.

3. **Dedicated Incubators for women**

Dedicated incubators for women entrepreneurs are required to provide support according to the specific requirement of women entrepreneurs. Such incubators can offer the usual business incubator support like training, skill development workshops, networking but tailor made according

the needs of women entrepreneurs. Such incubators can understand the requirements of women entrepreneurs more than the main stream incubators.

#### **4. Availability of capital**

One of the most important barrier a women faces when starting a new business is easy availability of capital. Funds are required for starting a business and also for expanding. But it is not easy for women to get access to capital. Options for gender rebalancing include attracting more women investors and advisors as part of traditional venture capital and angel networks, and forming women's venture capital funds led by women and specifically directed at investment in women-owned enterprises. Formation of women-focused venture capital investments which provide funds for investment in women-owned or women-led start-ups, early-stage and expansion-stage ventures should be encouraged.

#### **5. Providing women specific loan guarantees**

An important method of providing capital to women entrepreneurs is bank financing through loan guarantee. Research in different countries has proved it to be a successful method for providing capital to entrepreneurs.

#### **6. Engaging in startups**

The number of women engaging in startups in India is much less than men. The primary reason for this may be low confidence in business skills, difficulty it getting seed capital, little or no support from family, looking after the family and children and lack of safety at work place. To minimize these constraints support from government, society and family is essential.

#### **7. MSME and Women Entrepreneurs:**

Medium, Small and Micro (MSME) industries play an important role in the economy of any country. MSME sector plays a significant role in promoting entrepreneurship at comparatively low cost. This sector helps in setting up of industries in rural and backward areas and thus helping in minimising regional imbalance. Though the contribution of women entrepreneurs in this sector cannot be ignored but the growth has been slow. More and more efforts should be made by reducing the barriers women face and taking initiatives for the growth and development of women entrepreneurs

#### **8. Improve the institutional conditions.**

Influence of role models cannot be denied in any field. Hence it is necessary to promote women entrepreneurs as role models. A gender neutral education system is necessary which insures that women are not prohibited from entering any field including science, technology, engineering etc.

#### **Women are more suitable for becoming entrepreneurs**

Women make better entrepreneurs than men. For India to achieve the goal of \$5 Trillion economy, it is required that more and more women should make active participation. Some of the reasons why women make better entrepreneurs than men and are better equipped to do business are

##### **1. Women are better calculated risk takers**

Women are perceived to be risk averse which is not good for entrepreneurship. But this perception is not correct. Women conceive risk taking differently. Instead of taking a random decision, women take calculated risks. Women make a realistic assessment of the dangers ahead before taking a decision specially the financial decisions.

## **2. Women are more likely to take the long term view**

Every entrepreneur male or female is interested in growing its business. But their views on the type of growth are different. Research suggests that whereas women view their business in long term and generally invest their business profits to maintain a steady growth, men look for faster growth and quicker exit.

## **3. Women appreciate the value of creativity**

Creativity is a very important for running a business and women are more creative by nature. Businesses that have creativity shortage will find it very hard to survive in the coming years.

## **4. Women value relationships and well being more than the business.**

Women entrepreneurs have to make a work-life balance which is very difficult since both these matters demand time. But the main priority of women is always home and family. The nature of women to be sensitive to the needs of others helps them in becoming better entrepreneurs.

## **5. Women succeed despite facing more barriers than their male counterparts**

Female entrepreneurs have to work harder than the men to make a success of their businesses. Lack the technical knowledge, lack of capital, social constraints are the barriers women face while starting or running a business. But these problems have not got in the way of women succeeding. It has been proved that female entrepreneurs have succeeded in spite of the various barriers.

## **6. Female owned businesses are more likely to have positive and steady revenues.**

Women are generally risk averse and whenever they do take risks, they are calculated risks. They prefer to settle for lower returns instead of high risk opportunities. The female entrepreneurs have created big businesses with limited resources and limited support from family.

## **7. Women possess strong communication skills and social intelligence.**

Starting and running a successful business requires strong communication skill and social intelligence. Women enjoy a slight edge over their male counterparts according to various studies done. These skills make women better entrepreneurs.

## **How to motivate and include more women in the economic development**

There is no doubt in the fact that women have the potential and the determination to set up, uphold and supervise their own business successfully. Support and encouragement from the society and family members is required to help the women entrepreneurs get success in their ventures. The right kind of assistance from family, society and Government can make these Women Entrepreneurs an integral part in the economic progress of India in the coming years.

## **Conclusion**

***“Women are the largest untapped reservoir of talent in the world” Hillary Clinton***

The role of women in the economic development of the nation cannot be neglected. In fact they have to be encouraged and motivated to take active part in any business activity. Increasing the number of women entrepreneurs is essential to accelerate the economic growth of the country to reach the target of \$5 trillion economy. Women entrepreneurs are assets of the nation as they are engaged in certain productive activity and also the create job opportunities for others. This leads to poverty reduction and minimising the problem of unemployment.





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# **Cashless India & Digital Banking: Levers for Mission 5 Trillion**

## **Abstract**

*In this study an attempt is made to discuss the concept cashless economy and how is it impacted by demonetisation in India. The article also enumerates modes of digital banking for cashless India. Benefits of cashless economy to the country, business enterprises and common men are elaborated in this article. This article concludes with critical evaluation of India's progress towards cashless economy and various suggestions for focusing on robustness of digital banking as a lever of Mission 5 Trillion.*

- 1. The Concept of Cashless Economy:** Cashless economy does not discourage cash transactions by promoting barter system; rather it discourages use of hard cash viz. currency notes and coins by encouraging maximum use of digital platforms. In a cashless economy absolute absence of hard cash is not essential rather it is to be kept to the barest minimum (Kumari & Khanna, 2017). “A cashless economy is one in which all transactions are made using credit/debit cards or digital devices (e.g., point-of-sales machines, digital wallets, etc.), and the circulation of liquid money or paper currency is minimal.” (Singh, 2017).
- 2. Demonetisation and Cashless India:** Among the various flagship programmes started by the Indian government, Digital India is prominent one. Its vision is to transform India into a knowledge economy and a digitally empowered society. “Faceless, Paperless, Cashless is one of professed role of Digital India” (Ministry of Electronics and Information Technology, Government of India, 2017). According to (Maiti, 2017) demonetisation may boost use of technology in transactions. The dream Cashless India seems to become a reality with digital payments booming with galloping pace post demonetisation (Kumar & Chaubey, 2017). Demonetisation definitely attacked on cash economy and pushed the objective of digitalization and cashless economy which in turn will reap long term benefits (Jain, 2017). According to (Digital Payments India, 2018) total transaction value in the digital payments segment amounts to US\$50,215m in India.
- 3. Digital Banking Modes for Cashless India:** To make cashless economy successful the Government of India predominantly with the domain authority of Reserve Bank of India boosted the digital banking by enabling large number of alternatives for digital transactions which are described by (Shastri & Vaidya, Cashless India: The Way Ahead, 2019) e.g. Banking Cards, Unstructured Supplementary Service Data (USSD), Aadhaar Enabled Payment System (AEPS), Unified Payments Interface (UPI), Mobile Wallets, Banks Pre-Paid Cards, Point of Sale, Internet Banking, National Electronic Fund Transfer (NEFT), Real Time Gross Settlement (RTGS), Electronic Clearing System (ECS), Immediate Payment Service (IMPS), Mobile Banking, Micro ATMs Etc.
- 4. Benefits of Cashless Economy:** The cashless economy offers a large number of benefits to all the stakeholders of the society. Here few important benefits to the country at a large, to the business enterprises and to common men are discussed:-

#### 4.1. Benefits to the Country:

- 4.1.1. Positive Effect of Economy and Growth:** Cashless economy has higher potential to grow faster than traditional cash based economy. (Oyewole, J.G.El-Maude, M., & Onuh, 2013). The digital payment helps the government to maintain a record of all transaction and thereby prevents black money market (Kumar & Chaubey, 2017) which in turn reduces real estate prices and improves affordable housing (Shastri & Vaidya, 2019), reduces tax avoidance and money laundering (Agrawal, 2017). Easily traceable transactions make people accountable, which in turn reduce corruption and improve service time (Shastri & Vaidya, 2019).
- 4.1.2. Economies of Scale in Banking Services:** Cashless economy enhances the volume of digital transactions, gives economies of scale to digital banking architecture and thereby makes scope for efficient utilisation of digital banking infrastructure, which in turn brings down cost of banking services (Kumari & Khanna, 2017). In cashless economy more money lies with banks for longer time which in turn leads to larger liquidity in monetary system and would ultimately lead to lesser interest rates. This also controls physical cash related robberies and improves hygiene as less number of currency notes and coins exchange hands and therefore probability of bacterial spread reduces (Shastri & Vaidya, 2019).

#### 4.2. Benefits to Business Enterprises:

- 4.2.1. Time, Cost & Efforts Reduction:** Cashless system enhances transaction efficiency by reducing time and cash handling costs and physical risks e.g. theft, embezzlement etc. It reduces lot of accounting burden (Shastri & Vaidya, 2019).
- 4.2.2. Helps in Management Information and Decision Making:** Cashless processing of transactions gives real time management information which helps the management in quick decision making. (Benefits of Cashless Payment Systems to your Company, 2006). Big Data proposing a lot of opportunities in accounting and auditing (Shastri, Kumar, & Shaw, 2019), will get a boost from cashless transactions being recorded in detail and thereby generating big data.
- 4.2.3. Helps in Human Resource Management:** Human resource management is not only important for organisations looking for standalone growth but also for inorganic growth e.g. it is very important to bring coordination in HR issues even for better synergy in Mergers & Acquisitions (Shastri & Shastri, 2014).

India is likely to have the world's largest workforce by 2027, with a billion people aged between 15 and 64 (India's Burgeoning Youth are the World's Future, 2017). Cash based system may create a Skill gap for such Millennials (Shastri & Vaidya, 2019). Skill gap is not only harmful for career prospects of the employee but also create hindrances for firm performance, value and growth (Shastri, Wadhwa, & Rampal, 2018). Cashless system helps in bridging the skill gap (Shastri & Vaidya, 2019). Employee engagement has a significant positive impact on firm value (Shastri & Rajpurohit, 2017). Use of technology is important in engaging Millennial employees (Shastri & Rajpurohit, 2018). Thus cashless system helps a firm in improving engagement levels of its employees (Shastri & Vaidya, 2019). It can be inferred that cashless system helps in bringing superior HR practise (Shastri & Vaidya, 2019), and it is vital, as inferior HR and Ethical practices may even lead to corporate frauds (Mittal & Shastri, 2018).

- 4.2.4. Helps in Enhancing Investor Trust:** According to (Eccles, 2001) companies with fuller disclosure win more trust from investors e.g. (Shastri, Shastri, & Agrawal, 2015) found that mandatory cost audit enhances investor trust if investors are educated about cost audit and its reports are made public. Since cashless system also brings better disclosure and transparency, it is likely to improve investor trust (Shastri & Vaidya, 2019).



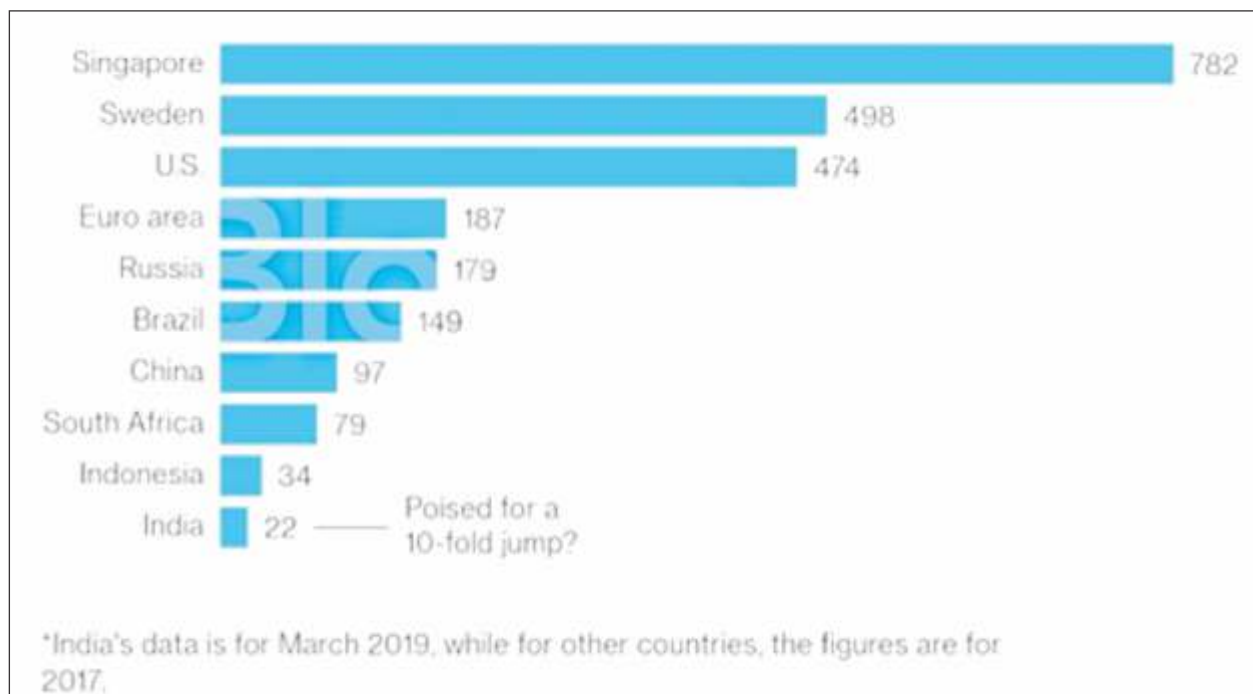
### 4.3. Benefits to Common Men:

- 4.3.1. Ease of Transacting and Savings:** In cashless payment there is no need to carry currency notes or coins even while travelling (Shastri & Vaidya, 2019), further there are lot of saving opportunities through discount and waivers while paying for service tax, fuel, rail tickets, tolls, insurance, electricity, gas, telephone etc. (Cashless Payments Benefits, 2016).
- 4.3.2. Track on Spending & Receipts:** Individuals may easily track their spending and receipts as every transaction is recorded online and can be retrieved anytime. (Kumari & Khanna, 2017).

- 5. Cashless India The Way Ahead:** A useful metric to measure the growth of digital transactions in the country is the number of digital transactions per capita on which India is yet far behind in comparison with global level of penetration in digital transactions as shown in figure 1 below:-

**Figure 1: Annualised Digital Payments Per Capita in India V/S Around the Globe**

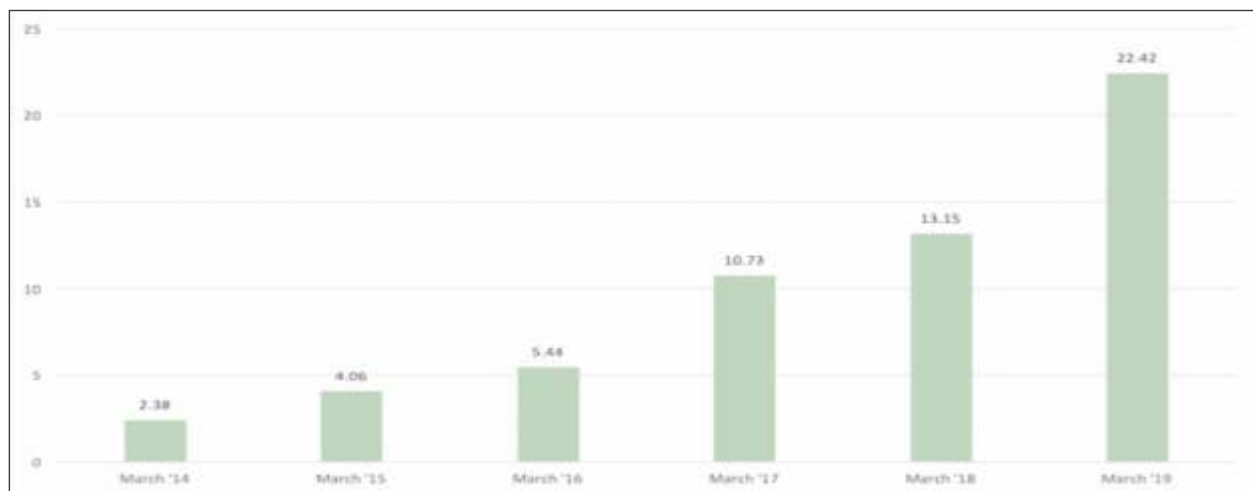
(Committee on Deepening of Digital Payments, 2019)



However if the speed of year on year growth in digital payments per capita in India is observed as shown in figure 2 below, it seems to be very fast. Almost 10 fold growth is there in past 5 years. The High Power Committee on Deepening of Digital Payments recommended various reforms so as to achieve the target of Government aim for Annualized Per Capita Transaction Volume to reach 220 by March 2021. Out of 73 different recommendations given by the High Power Committee the focus is on modernizing public accounting system, promoting financial literacy, improving financial inclusion, enhancing transaction security, augmenting digital infrastructure, offering direct and indirect tax concessions on digital transactions and digital infrastructure development are most striking areas. Online frauds (Dave, 2016) to be controlled and high Merchant Discount Rates needs to come down so as to boost cashless economy. (Jasjeet, 2017).

**Figure 2: Year on Year Growth of Digital Payments Per Capita in India**

(Committee on Deepening of Digital Payments, 2019)



“Although cashless transactions have gone up in recent times, a meaningful transition will depend on a number of things such as awareness, technological developments and government intervention .A material transition to a cashless economy will depend on a number of factors. First, the availability and quality of telecom network will play an important role. Presently, people face difficulties in making electronic payments even in metro cities because of poor network. Second, as one of the biggest beneficiaries of this transition, banks and related service providers will have to constantly invest in technology in order to improve security and ease of transaction. People will only shift when it’s easier, certain and safe to make cashless transactions. Third, the government will also need to play its part. It will have to find ways to incentivize cashless transactions and discourage cash payments. The government will have to create conditions—not necessarily by creating cash shortages—to push cashless transactions to a threshold level after which the network effect will take over. Further, the cashless initiative needs comprehensive planned awareness, especially in more rural areas. Participation by rural and cooperative banks, post offices and other financial institutions to create awareness and education programmes will ultimately pave the way for a cashless economy. Training will be a necessity in urban parts of the country, too. Awareness is all well and good, but some people will still need help to understand how to install and use digital payment systems. Although it would be impossible for any country to become a cashless economy in the short amount of time since, it is definitely something the country can look forward to” (Kumari & Khanna, 2017).

In nutshell India is all set to grow towards a cashless economy, however financial literacy, basic awareness about digital transaction alternatives, robust IT and telecom infra, high end IT security and Government incentives certainly needs to be uplifted (Shastri & Vaidya, 2019). This holds true not only for monetary transactions system but also to Public Sector Accounting System where a shift from cash based system to accrual system is quite inevitable (Shastri & Jain, 2019). To conclude no stone should be left unturned towards Cashless India through Digital Banking as it is going to be a lever in USD 5 Trillion Mission by 2024.

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## **Nurturing the Startup Ecosystem - Key to Boosting Indian Economy**

### **Abstract**

*India is the third largest startup ecosystem after US and China, with 26,000+ registered startups and 24+ unicorns. Startups have been a source of mass employment & FDI in the country. CMAs can act as Mentors to the Startup founders who usually lack knowledge & experience, by providing them professional help in various matters like reviewing potential business structure, Seed funding, Cost management, Compliance with Regulatory issues e.g. IP Law, Data Protection, Consumer & Industry regulations. Start of an Online Portal by the CMA Institute, dedicated to the needs of Startups & MSMEs, can prove useful for both Startups & CMAs.*

India has become the fastest growing Startup Ecosystem in the World. Startups are an important driver for India's transformation into an economic powerhouse. India is the third largest startup ecosystem after US and China, with 26,000+ registered startups and 24+ unicorns. Delhi-NCR, Bengaluru & Mumbai have the largest number of startups in the country. These startups have ventured into various sectors from e-commerce, travel, education & financial services to sectors like blockchain, drones & AI. Companies like Paytm, Oyo, Ola Cabs, Byju's, Flipkart, Swiggy, Udaan, Zomato, Billdesk, Delhivery, etc. are some of the renowned Unicorns of India. Startups have been a source of mass employment in the country with the creation of over 560,000 jobs since 2016. They are further estimated to create 3 lakh new jobs by 2020. Startups have also made significant contribution to the growth of Foreign direct investment (FDI), as they have raised around \$55 billion across 4,700+ deals between the period of 2014 to Q3 2019. Government also provides a host of benefits to recognised startups like Self-compliance under various laws, IPR fast-tracking, rebate in filing patents, Income Tax Exemptions, Easier Public Procurement Norms & Easy Winding Up.

### **CMAs as Startup Mentors**

Founders of Startups are mostly engaged in implementing their business idea and are not aware of the importance of regulatory compliances. There are numerous Centre and State-level policies & regulations like registrations, returns, tax payments etc., the non-compliance of which attracts penalties and fines. Sometimes, startups are working in a sector for which laws & policies do not exist. Founders usually lack knowledge & experience in fundraising, tax matters & government regulations.. They mostly end up making the wrong business decisions like choosing the Wrong Legal Structure for their business (Proprietorship/ Partnership/ Company/ LLP), Non-protection of their Intellectual Property, etc. resulting in loss of business opportunities & financial damage.



CMAs can act as Mentors to the Startup founders. CMAs can handhold them as they are new to the business ecosystem. CMAs can provide them professional help beyond documentation, in various matters like reviewing potential business structure, Fund Requirement Analysis, Seed funding, Cost management, Corporate Governance, Compliance with Regulatory issues e.g. IP Law, Data Protection, Consumer legislation & Industry regulations. Services of a CMA can prove invaluable for these entrepreneurs at every stage of their Startup journey, as a CMA can provide insights to help in shaping the Startup's future.

An Online Portal & an App dedicated to the needs of Startups & MSMEs, can also be started by the Institute, which may host all the relevant information on applicable laws & regulations (Centre & State-wise), Compliance requirements and a Guide on how Startups & MSMEs can benefit from the professional services of a CMA, etc. This initiative can prove useful for both Startups & CMAs, which will also go down well with the Institute's efforts in boosting the Indian Economy.

I am certain that CMA fraternity would prove to be a pillar in supporting the Startup Economy.



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## **Single use Plastic: An Environmental Catastrophe The Hidden Cost of Plastic Planet**

### **Abstract**

*Our planet is drowning in plastic pollution and it is time for change. Around the world, one million plastic drinking bottles are purchased every minute, while up to 5 trillion single-use plastic bags are used worldwide every year. In total, half of all plastic produced is designed to be used only once and then thrown away. These single-use plastic products are everywhere. It has become integral to our daily lives. . In total today, we produce about 300 million tons of plastics waste every year that is nearly equivalent to the weight of entire human population. We need to slow down the use of plastic also need to improve the way we manage our plastic waste.*

*We as a society need to wake up and as transitioning to more eco-friendly alternatives can be a lengthy process, in the meantime, strengthening circular thinking and enhanced waste management systems can successfully help in reducing plastics pollution. We need to work together in an ecosystem framework, need to create space to have dialogues with leaders, activists and government to deal with this environmental issue.*

While plastic pollution in the oceans has become a high-profile concern, the effect on climate change of the ubiquitous use of plastic has not been a focus. Therefore, we can say that the contribution of plastic production and disposal to climate change has been largely hidden and proliferation of single-use plastic around the world is accelerating climate change and should be urgently halted.

While plastic has many valuable uses, and its benefits are undeniable. The material is cheap, lightweight and easy to make and these qualities have led to a boom in the production of plastic over the past century. **In short, we have become addicted to single use or disposable plastic.** This trend will continue as global plastic production skyrockets over the next 10 to 15 years. However, we are already unable to cope with the amount of plastic waste we generate, unless we rethink the way we manufacture, use and manage plastics.

Since the 1950s, growth in the production of plastic has largely outpaced that of any other material, with a global shift from the production of durable plastics to single-use plastics (including packaging). **Today we produce about 300 million tons of plastics waste every year, that is nearly equivalent to the weight of entire human population,** and one fourth of this single used plastic is manufactured in Northeast Asia (China, Hong Kong, Japan, Republic of Korea and Taiwan) followed by North America, middle east and Europe. Nearly 50% of plastic waste generated globally is plastic packaging. While China remains the largest worldwide generator of plastic packaging waste, the USA is the largest generator of plastic packaging waste on a per-capita basis, followed by Japan and the EU.

Out of the plastic produced since 1950s, about 60% of the plastic has ended up in either landfill or the natural environment. Only 9% of all plastic waste ever produced has been recycled. About 12% has been incinerated, while the rest 79% has accumulated in landfills, dumps or the natural environment. These

single-use plastic products are everywhere. For many of us, they have become integral to our daily lives. Drink bottles, bottle caps, food wrappers, grocery bags, drink lids, straws and stirrers were the next most common items. Many of us use these products every day, without even thinking about where they might end up.

As a society, we all need to slow down the use of plastics, and also need to improve the way we manage our plastic waste. Because right now, a lot of it ends up in the environment, rivers all around the world carry plastic waste to the ocean from inland and it makes them major contributors of ocean pollution. According to International Coastal Cleanup Report 2017 the most common finds during international coastal cleanups are, in order of magnitude, cigarette butts, plastic beverage bottles, plastic bottle caps, food wrappers, plastic grocery bags, plastic lids, straws and stirrers, glass beverage bottles, other kinds of plastic bags, and foam take-away containers.

Around 8 million tons of plastic end up in the world's oceans every year and 10 rivers alone carry more than 90% of the plastic waste that ends up in the ocean. River Ganga carries 72,845 tons of waste and stands at spot 6 out of 10 rivers. As Plastic bags and Styrofoam containers can take up to 1,000 years to decompose and around 1 to 5 trillion plastic bags are consumed worldwide every year. If tied together, 5 trillion plastic bags would cover an area twice the size of France. If current trend continues, our ocean could contain more plastic than fish by 2050.

Moreover, most plastic items never fully disappear; they just get smaller and smaller. Many of these tiny plastic particles are swallowed by farm animals or fish that mistake them for food, and thus can find their way onto our dinner plates. Micro plastics have already been found in common table salt and in both tap and bottled water. Along with this by clogging sewers and providing breeding grounds for mosquitoes and pests, plastic waste; especially plastic bags can increase the transmission of vector-borne diseases like malaria.

*As per a report of UN environment, by 2050, an estimated 99% of seabirds will have ingested plastic, marine litter harms over 600 marine species and 15% of species affected by ingestion & entanglement from marine litter are endangered.*

### **Harmful emissions from plastic lifecycle**

The production of plastic is largely reliant on fossil hydrocarbons, which are non-renewable resources. If the growth in plastic production continues at the current rate, by 2050 the plastic industry may account for 20% of the world's total oil consumption. Apart from oil consumption, a report says plastic contributes to greenhouse gas emissions at every stage of its lifecycle, from its production to its refining and the way it is managed as a waste product.

As per a report "At current levels, greenhouse gas emissions from the plastic lifecycle threaten the ability of the global community to keep global temperature rise below 1.5C". In 2019, the production and incineration of plastic will produce more than 850 million metric tons of greenhouse gases equal to the emissions from 189 five-hundred megawatt coal power plants and If plastic production and use grow as currently planned, by 2030, these emissions could reach 1.34 gigatons per year-equivalent to the emissions released by more than 295 new 500-megawatt coal-fired power plants. By 2050, the cumulation of these greenhouse gas emissions from plastic could reach over 56 gigatons-10 to 13 percent of the entire remaining carbon budget. Current estimates address only the one percent of plastic at the ocean's surface.

A study demonstrated that plastic at the ocean's surface continually releases methane and other greenhouse gases, and that these emissions increase as plastic breaks down further. Emissions from the 99 percent of plastic that lies below the ocean's surface cannot yet be estimated with precision as efforts to quantify those emissions are still in the early stages, but, significantly, this research showed that plastic on the coastlines, riverbanks, and landscapes releases greenhouse gases at an even higher rate.

## Plastic Mismanagement: the future cost

The future costs of removing all single-use plastics accumulating in the environment is estimated as higher than the costs of preventing littering today. As per European Commission report in 2015, in Europe alone, the estimated costs for cleaning shores and beaches reach €630 million per year and that the annual economic damage plastics impart on the world marine ecosystem is at least \$13 billion.

## Activism a key to change world

Over the past years, many activist and governments has raised their voices on the issues of climate change and environment but Greta Thunberg has arguably done more to galvanise global action on climate than any other single individual has. The Time Person of the Year, 2019 Greta Thunberg at UN climate summit accused world leaders of “stealing my dreams and my childhood”, and warned them “the eyes of all future generations are upon you. And, if you choose to fail us, I say: ‘We will never forgive you’”. By saying that she directly meant to address world leaders, economists, scientists who possess power to make change to the society and environment on the issues of climate change.

## Efforts to reduce unintended consequences

The global commitments against single-use plastics underline a general sentiment to act against plastic pollution. In an effort to reduce plastic pollution, many governments have outlawed conventional plastic bags, allowing only the use and production of “biodegradable” bags. Even Indian government is in process of banning of single use plastic. The following different set of actions taken by government, private and public sector entities aimed at minimizing the production and use of single use plastic.

- Bans on plastic bags and Styrofoam items can effectively counter some of the symptoms of plastic overuse. However, better waste management systems, along with circular thinking, can help achieve long-term
- By working together with industry, governments can support the development and promotion of sustainable alternatives in order to phase out single-use plastics progressively.
- Social awareness and education are essential to shape and encourage changes in consumer behavior.
- Voluntary reduction strategies and agreements to lessen the number of plastic bags and the amount of single-use plastic packaging. The promotion and adoption of reusable bags as alternatives to plastic bags is an example of a reduction strategy where the choice rests with the consumer.

In 2016, Switzerland’s largest supermarket chains introduced a plastic bag levy based on a voluntary agreement, which was approved by the parliament as an alternative to a total ban (Swiss supermarkets, 2016). As a positive impact of this demand for plastic bags dropped by 80-85%.

- Policy interventions to reduce single use plastic bags and Styrofoam products have been implemented at national and subnational levels.

Over the years, remarkable number of national and local governments have developed and implemented policies and economic measure to reduce plastic bags and Styrofoam products. Inspite, of such policies and measures the use of such products is keep growing.

In Asia, several countries have attempted to control the manufacture and use of plastic bags through levies, and some governments already introduced plastic bag bans more than a decade ago, such as in Bangladesh. Nonetheless, the enforcement of regulations has often been poor, and single-use plastic bags continue to be widely used and mismanaged despite prohibitions and levies. In contrast, another Asian



example is Japan, where no bans are in place on single use plastic, but thanks to a very effective waste management system and a high degree of social consciousness, the country accounts for relatively limited leakages of single-use plastics in the environment. In India, besides the national law, several states and cities have introduced bans on plastic carrier bags and other plastic materials on time to time basis.

Africa stands out as the continent where the most countries have adopted a total ban on the production and use of plastic bags. Of the 25 African countries that have banned the bags, more than half have done so in the last four years alone.

While the United States, Japan and many European countries generate significant amounts of plastic waste, they're also relatively good at managing it. About half of all of the plastic waste that ends up in the oceans comes from just five countries: China, Indonesia, the Philippines, Thailand and Vietnam. These countries are experiencing rapid economic growth, which is reducing poverty rates and improving the quality of life for hundreds of millions of people. But as these economies grow, consumption booms and so does the use of plastic goods. The global volume of plastic waste continues to grow and the one and foremost reason behind this is countries do not have effective waste management system.



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## Sustainability Accounting and Reporting

### Abstract

*Traditionally companies have been interested in single agenda for their business, the bottom line or the profit. And in long term the focus is always towards increase in the shareholder's wealth. But now business leaders are understanding the importance of holistic growth and are not satisfied solely with the financial performance. Sustainable growth, transparency and progress on environmental, social and governance issue is also important in the success of today's business. Sustainability accounting is a tool used by an organisation to become more sustainable. We all understand that Sustainability need to be measured, reported and evaluated. Corporate Sustainability Reporting (CSR) and triple bottom line accounting are few examples of Sustainability accounting. Richard Spencer, ICAEW's head of Sustainability is also of the opinion that the business need to focus on its impact on society, environment and governance. Accountants and experts have a big role to play in linking the impact of environment or society to the mainstream decision making. According to the Governance and Accounting Institute, ESG (Environmental, Social and Governance) reporting has increased by more than 4 times since 2011 in top 500 S&P companies, but still there are challenges which needs to be addressed. This paper is an attempt to highlight the role of accountants in the economies where sustainable reporting is an integral part of sustainable growth.*

### Introduction

The conception of Sustainable Development has been duly noticed but it is still at inception stage for company's management. Majorly, the notion of concept is abstract and conceptual. From the report titled "Our Common Future" (also known as Brundtland Report) by International Institute for Sustainable Development, defines it as a "development that meets the needs of the present without compromising the ability of future generation to meet their own needs". Like other countries, India has also signed the declaration 2030 Agenda for Sustainable Development on September 2015 at the Sustainable Development Summit of the United Nations which includes seventeen Sustainable Development Goals (SDGs). Every seventeen SDGs has definite goals to be accomplished by 2030 and accountants have to play a significant role in achieving these goals. From the point of Governance and Accountability Institute, ESG reporting has been manifold by 4 times in the S&P companies from the 2011 and increasing demand of it requires for more uniform metrics whereas ESG is defined as comprehensive set of environment, social and corporate governance factors that may have effect on company's business strategy whereas these factors are generally non-financial. The adaptation of non-financial reporting has been speedy and fragmented, but with the increase in transparency rules governed by regulatory and market forces, company's liabilities towards their ESG behaviour is increasing. The ESG Reporting Guide 2.0 issued by NASDAQ formed an ESG metrics which provides

insight to Key Performance Indicators (KPIs) of sustainability performance which are precedent, prevalence, potential, perspective and practicality. The Sustainability Accounting Standards Board and the Climate Disclosure Standards Board issued the Task Force on Climate-related Financial Disclosures (TCFD) Implementation Guide which directs accountants to transpose ESG factors from principle to practice. Despite that, rigorous training is required and the ICAEW is already working in this direction by proposing content related to ESG into their course whereas ACA already incorporated TCFD, the Natural Capital Protocol and Sustainable Development Goals into their courses.

### Sustainability and Corporate Reporting

Sustainability revolves around the idea that with increase in human demand and population, demand for resources will also grow and we have finite natural resources and to ensure our survival and a better future for coming generations, we need to adapt to sustainable practices. For business sustainability is about better business. Many companies have started disclosing everything in their reporting from the use of cleaner technology, water conservation to their efforts to solve local community issues. According to ACCA's policy paper *Sustainability Matters*, currently over 3,000 companies worldwide – including over two-thirds of the Fortune Global 500 – issue annual sustainability reports. There is increasing pressure on the business to provide for financial and non-financial disclosure. Government, Consumer, society, employer and local authorities also insist that companies are accountable for sustainable growth. Currently most of the companies are voluntarily disclosing their sustainability effort according to framework issued by Global Reporting Initiative (GRI). However, this voluntary adoption is not for long as few compulsory mandates are also issues for companies.

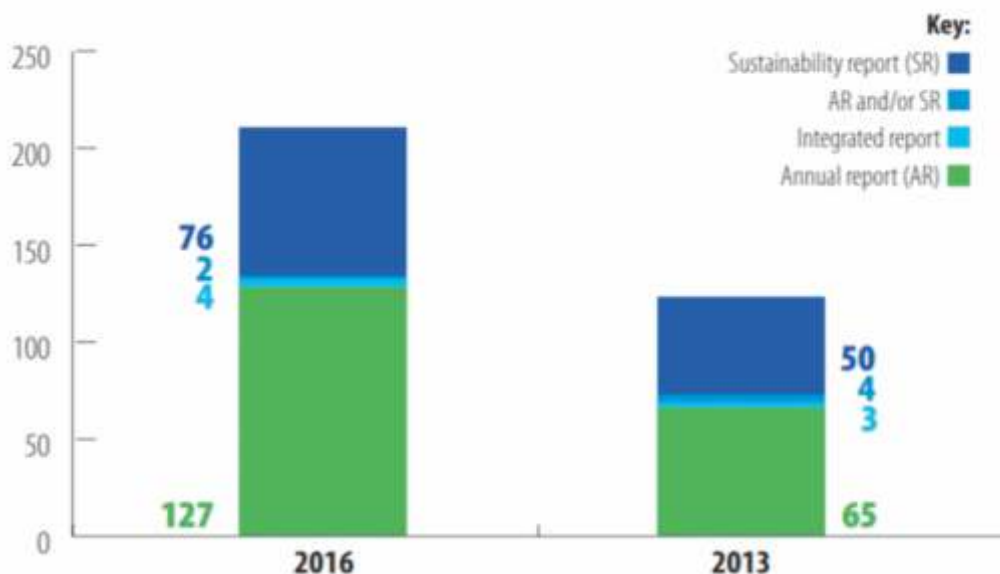


Figure 1: Format of reporting required by instruments, 2016 vs 2013

### Compulsory Mandates for Sustainability Accounting

Mandatory reporting regulations would likely take one of two forms:

1. Integrated reporting (annual financial reports that include sustainability information).
2. Reporting against a set of standard indicators in a format determined by the company.

Various Countries are understanding the importance of sustainability reporting and accounting and has come up with mandatory provisions which the companies has to follow.

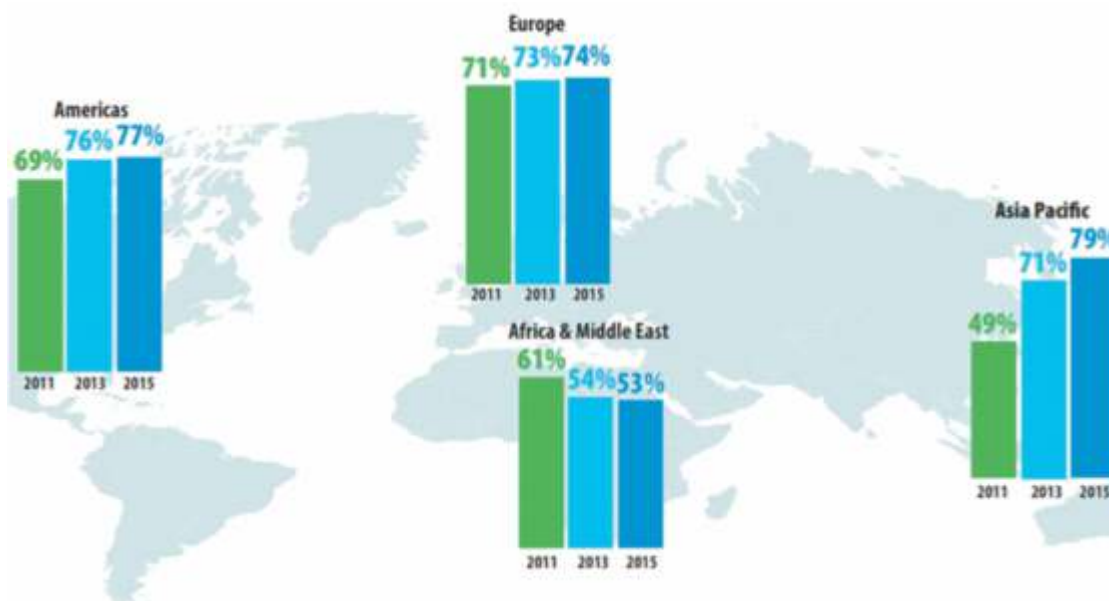


Figure 2: Rate of sustainability reporting among the 100 largest companies per country

Source: KPMG Survey of Corporate Responsibility Reporting 2015

- In France, the Grenelle Act II requires that companies' annual reports include information on their environmental and social performance.
- In Sweden, all state-owned companies are required to present a sustainability report using GRI guidelines on a 'comply or explain' basis.
- Certain stock exchanges, including the BM&F Bovespa in Brazil and the Johannesburg Stock Exchange in South Africa, are also working to increase levels of corporate sustainability reporting through their listing requirements.
- In the UK, all companies headquartered there and listed on the London Stock Exchange are required to report on their global greenhouse gases (GHG) emissions. This now applies to over 1,000 companies and there are suggestions that the GHG reporting scheme may be extended in 2016 to cover all large UK companies.
- Russia have already implemented requirements for the mandatory reporting of environmental issues by state-owned enterprises.
- Norway meanwhile has passed legislation requiring large companies to report on how they integrate social responsibility into business strategy
- South Africa was the first country to require an integrated report from listed companies, when the Johannesburg Stock Exchange (JSE) introduced a "report or explain" approach, using guidelines based on the King Report III
- In Brazil, BM&F BOVESPA launched its policy just before the Rio+20 Conference, and the number of companies adhering to "report or explain" rose from just over 45% in May to almost 58% in October 2012



- In the UK the government introduced new requirements for listed companies (on the London Stock Exchange) on disclosing greenhouse gases, and changes to the UK Company Act 2006 will require the disclosure of information regarding human rights, diversity and greenhouse gas emissions.
- Another important development within the sustainability space is the much anticipated IIRC's Integrated Reporting Framework (IR Framework) due in December 2013.

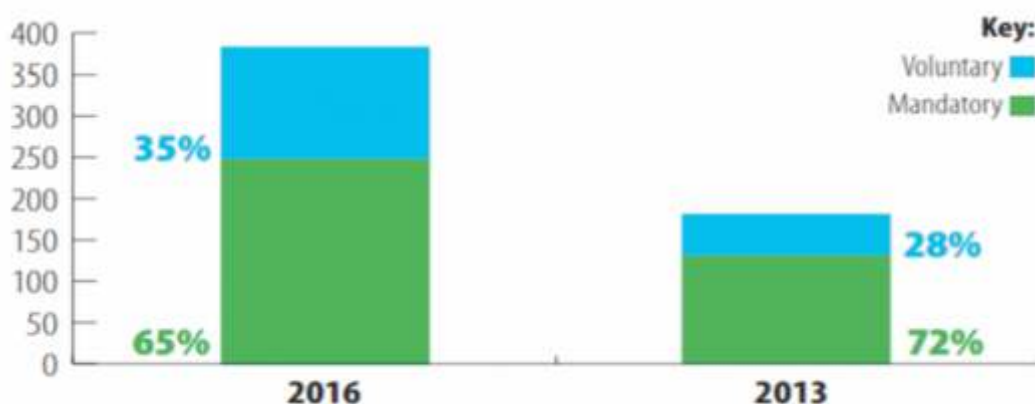


Figure 3: Mandatory vs voluntary instruments, 2016 vs 2013

Sustainability reporting appears to be reaching a “tipping point,” as it moves beyond the realm of the innovators and early adopters and into the mainstream. Failure to engage with the reporting process could have a negative impact on performance, reputation, and even the ability to raise capital. The development of the SASB standards is part of a movement where more and more regulators, governments and stock exchanges understand the importance of corporate disclosure of information regarding their non-financial performance.

### Role of Accountants in Sustainable Accounting and Reporting

Sustainability needs to be measured, reported and assured and all these areas fall under accountants' remit. Accountants work as a starting point in process of ESG, they help company's in predicting risk and opportunities and possess practical skillset to measure ESG, with little training they can become strategic partner. Gordon Hewitt, sustainability adviser at ACCA says that “Accountants have an important role to play in helping companies embed sustainability into their corporate strategies, and are very well placed to do so”. A company's finance function is responsible for producing much of the management information that forms the basis for internal strategy as well as reports for external stakeholders.

A business can only modify its behaviour if they have good quality and trusted information. When looking to address sustainability issues, companies can only manage what they can measure so it's important that accurate, complete and reliable information gets collected,’ says Hewitt. In organisations where sustainability reporting is yet to be adopted, accountants have just the right knowledge and skills to help develop a credible standard of reporting. They recognise the need to be accountable to external stakeholders and the need to operate to good governance and ethical standards; they can develop performance metrics and monitoring/auditing systems, they can set budgets, produce strategic plans and manage risk,’ says Conway.

Many accountants are also good team-players and able to work with colleagues in the areas of the business beyond the finance function, which is important as sustainability reporting requires inputs from across the organisation and incorporates a lot of non-financial data. ‘However, they must also be prepared

to acquire new skills in developing verifiable non-financial measures for issues that cannot be easily monetised, and in enhancing estimation techniques and forward planning, especially in areas that are more subjective than many traditional accounting measures such as environmental or health impacts,' points out Conway. Practice clients also now expect their accountants to be 'trusted business advisers', including on the issues of corporate sustainability, rather than just 'number-crunchers'. 'The accountant's role has shifted over the past 20 years from a reporter of historical performance to being much more the forecaster and the business planner,' says Russell. 'This trend will almost certainly continue as the financial services industry is now increasingly pointing out that historic performance is no indication of future performance.'

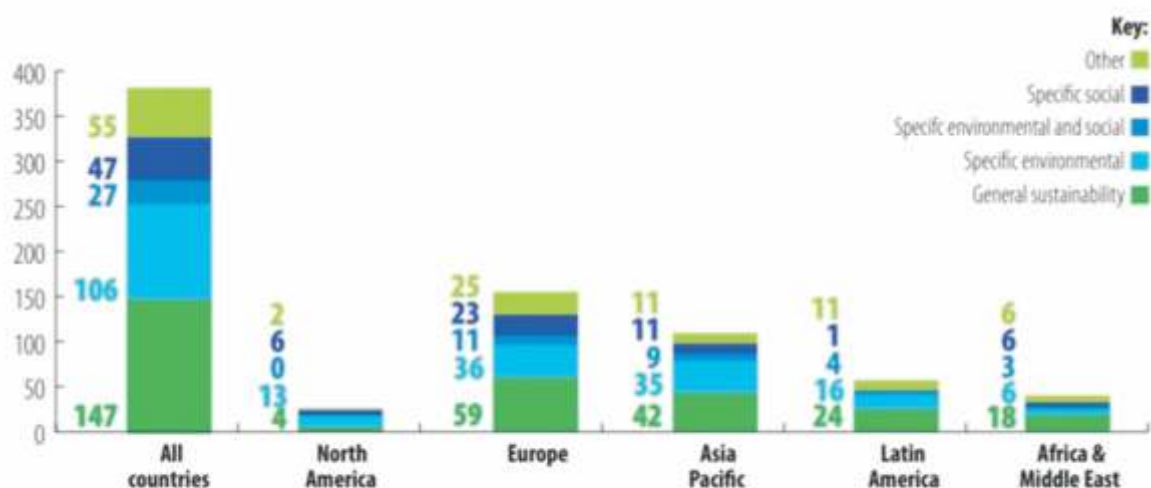


Figure 4: General sustainability reporting instruments vs instruments focused on reporting of specific environmental and social factors, 2016

According to research by PwC, 73% of investors consider the sustainability performance of organizations to mitigate risk. To date, the vast majority of organisations reporting on sustainability have been large, listed companies – very few small and medium-sized enterprises (SMEs) produce sustainability reports.

## Conclusion

This is encouraging given that only ten years ago such instruments were the exception rather than the rule. The findings reflect a commendable effort by governments, regulators, stock exchanges and others to implement sustainability reporting policies through regulation, guidance and other instruments. At the same time, 2016 reports paints a picture of a rapidly growing, increasingly complex and fragmented landscape of reporting instruments. Some duplication and overlap is inevitable. While the trend is in the right direction, an important next step is for the bodies that issue reporting instruments to focus on coordination and harmonization. That will require increased levels of collaboration and joint commitments between these bodies. More collaboration between reporting organizations would also benefit the process. At the same time as pressure grows for companies to be more transparent on a wide range of issues, there are also calls for reporting to prioritize and focus on the topics that are most relevant and material to the creation of long-term value both for businesses and their shareholders, and for society as a whole. Reporters and regulators will need to find a way to strike the right balance between what could be perceived as competing calls for comprehensiveness and focus.



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## Mission 5 Trillion Through Sustainable Development Goals *via* MSMEs

### Abstract

*MSMEs have encouraged every Indian that it is not the money that decides your job but the sheer passion and hardwork that enables you to scale great heights even if you are from a small, unknown village in India.*

As a secular, democratic nation with a huge number of population living in rural, suburban areas driving their livelihood through petty works or jobs MSMEs have encouraged every Indian that it is not the money that decides your job but the sheer passion and hardwork that enables you to scale great heights even if you are from a small, unknown village in India. MSMEs enable not only the concerned person but also the whole village and thereby the whole nation towards a glorious future where only talent and hardwork are sought after.

Other than being an tool of development and support MSMEs can be a lot more by enabling the nation to achieve its sustainable development goals at a much faster pace that can be imagined. This article is going to highlight some of the suggestions and ideas which is usually found in the mind of every common women and men, but are those which are usually not spoken of, or, are spoken of, but are like the droplets in the desert, whose existence vanishes within seconds.

As we are going to discuss about the many ideas to be implemented by the MSMEs for sustainable development thereby contributing to the 'Mission 5trillion', first lets get an idea about them.

So, what is a MSME ?

The Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, governs the coverage and investment ceiling of MSMEs in India.

According to the Act, there are two categories of MSMEs in the country – manufacturing and services.

For the manufacturing sector, the definition of an MSME is based on a company's capital investment in plant and machinery. The threshold limits are:

Micro: when investment does not exceed Rs 2.5 million (US\$34,040);

Small: when investment is more than Rs 2.5 million (US\$34,040) but does not exceed Rs 50 million (US\$680,875); and

Medium: when investment is more than Rs 50 million (US\$680,875) but does not exceed Rs 100 million (US\$1.3 million).

For the services sector, the definition of an MSME is based on a company's investments in equipment. The threshold limits are:



Micro: When investment does not exceed Rs 1 million (US\$13,617);

Small: When investment is more than Rs 1 million (US\$13,617) but limited to Rs 20 million (US\$272,350); and

Medium: When investment is more than Rs 20 million (US\$272,350) but less than Rs 50 million (US\$680,875).

Earlier this year, the union cabinet of India approved the changes in the classification of MSMEs. According to the revisions, both the manufacturing and services sectors will be classified based on the amount of annual turnover instead of the investment limits, as given below.

The new classification of MSMEs, however, is yet to be enforced by amendment.

Micro: a unit where the annual turnover does not exceed Rs 50 million (US\$680,875);

Small: a unit where the annual turnover is more than Rs 50 million (US\$680,875) but does not exceed Rs 750 million (US\$10.1 million); and

Medium: a unit where the annual turnover is more than Rs 750 million (US\$10.1 million); but does not exceed Rs 2.5 billion (US\$33.8 million)

Now that we've got an idea about MSMEs, let's see about sustainable development.

So, what is sustainable development ?

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

#### Sustainable Development Goals

The Sustainable Development Goals (SDGs) are a global agenda, adopted by countries in 2015, with a vision of ending poverty, protecting the planet and ensuring that all people enjoy peace and prosperity.

The 17 SDGs and 169 targets are part of what is known as the 2030 Agenda, which recognizes “that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development.” In adopting the agenda, countries resolved to take the “bold and transformative steps which are urgently needed to shift the world onto a sustainable and resilient path. As we embark on this collective journey, we pledge that no one will be left behind.”

The goals and targets are universal, meaning they apply to all countries around the world, not just poor countries. Reaching the goals requires action on all fronts – governments, businesses, civil society and people everywhere all have a role to play.

Ideas/suggestions for contributing to sustainable development by MSMEs

#### **SDG-1: No poverty**

Ideas/suggestions

1) MSMEs can provide English language or any other technical classes after work to enable their employees become more competent for higher posts and thus more income.

2) MSMEs could, as part of employees welfare, select and give suitable people of very low financial background goods or financial aid to improve their standard of living.

Facts and figures

\*80 percent of people living on less than \$1.90 are in South Asia and sub-Saharan Africa.



## **SDG-2: Zero hunger**

### **Ideas/suggestions**

- 1) MSMEs could, once in a month, request their employees to bring any single fruit or vegetable, making a collective basket, and thus give it to the needy families in the nearby locality.
- 2) MSMEs could, once in a year, ask their employees to bring a dish made in their house, make food packets from the collective pool and thus distribute it to the poor people of their locality.

### **Facts and figures**

\*The number of undernourished people reached 821 million in 2017.

## **SDG-3: Good health and well being**

### **Ideas/suggestions**

- 1) MSMEs can encourage each employee to grow small plants of their choice around the office compound and to take care of it.
- 2) Every MSME can give a 10minutes “take a step” break wherein the employees are encouraged to walk atleast a 100steps with the office compound freely, anywhere where they want to, thus removing their stress and to improve their health.

### **Facts and figures**

\*7 million people die every year from exposure to fine particles in polluted air.

## **SDG-4: Quality education**

### **Ideas/suggestions**

- 1) MSMEs can encourage their school dropout employees to complete their education by giving them ‘study/ exam holidays’.
- 2) MSMEs can conduct awareness programme for employees about the various free online courses, encouraging them to study.

### **Facts and figures**

\*103 million youth worldwide lack basic literacy skills, and more than 60 percent of them are women.

## **SDG-5: Gender equality**

### **Ideas/suggestions**

- 1) MSMEs should put up a board near their office, clearly stating the fair amount of wages as prescribed by the Government, and also state the Government website and phone numbers for reference and for registering complaints in case of non-compliance.
- 2) At the time of their appointment, every woman employee should be given a slip which contains the number and email id of Governments women helpline number.

### **Facts and figures**

\*Women earn only 77 cents for every dollar that men get for the same work.

## **SDG-6: Clean water and sanitation**

### **Ideas/suggestions**

- 1) MSMEs can install a water purifier in their compound and give to each employee a separate water bottle, in which they fill the water and use it and when leaving the office keep the bottle back in the shelves provided near the purifier.



- 2) MSMEs should try to separate their waste in terms of bio-degradable and non-bio-degradable things.

#### **Facts and figures**

\*The world has lost 70 percent of its natural wetlands over the last century.

#### **SDG-7: Affordable and clean energy**

##### **Ideas/suggestions**

- 1) MSMEs should construct their building such that its airy and direct sunlight comes in, thereby reducing the need to turn on the lights unnecessarily.
- 2) Once in a while, MSMEs could conduct 'energy audit', to curb down unnecessary wasting of energy.

#### **Facts and figures**

\*One in 7 people still lacks electricity, and most of them live in rural areas of the developing world.

#### **SDG-8: Decent work and economic growth**

##### **Ideas/suggestions**

- 1) MSMEs incubation for innovative green ideas must be provided.
- 2) MSMEs should opt more for green technologies.

#### **Facts and figures**

\*As a result of an expanding labour force, the number of unemployed is projected to increase by 1 million every year and reach 174 million by 2020.

#### **SDG-9: Industry, Innovation and Infrastructure**

##### **Ideas/suggestions**

- 1) MSMEs should keep an 'idea box' in which employees are encouraged to write and put in their innovative ideas.
- 2) MSMEs should keep a brainstorming discussion once in a month, where employees are encouraged to come up with ideas to improve the office functioning.

#### **Facts and figures**

\*The renewable energy sectors currently employ more than 2.3 million people; the number could reach 20 million by 2030.

#### **SDG-10: Reduced inequalities**

##### **Ideas/suggestions**

- 1) Once in a year, MSMEs can conduct an informal meeting where gender inequalities in the concerned office is discussed and employees are encouraged to come up with innovative solutions.
- 2) MSMEs could, once in a year, secretly assign an employee of the office to monitor and report inequalities, so that first hand information can be availed and suitable steps are taken.

#### **Facts and figures**

\*Under "business as usual", the top 1 percent global wealth will reach 39 percent by 2050

### **SDG-11: Sustainable cities and communities**

Ideas/suggestions

- 1) MSMEs as part of CSR, conduct cleanliness awareness drive, in the slums near their office complex.
- 2) MSMEs could raise funds and keep waste baskets on the streets near their office.

#### **Facts and figures**

\*828 million people are estimated to live in slums, and the number is rising.

### **SDG-12: Responsible consumption and production**

Ideas/suggestions

- 1) While conducting meetings, MSMEs should opt for buffet, so that there is less wastage of food.
- 2) MSMEs should encourage its employees to use cloth carry bags for work.

#### **Facts and figures**

\*If people everywhere switched to energy efficient lightbulbs, the world would save US\$120 billion annually.

### **SDG-13: Climate actions**

Ideas/suggestions

- 1) MSMEs should have installed a rain water harvesting system in atleast one of their office.
- 2) MSMEs can promote use of papaya straws and bamboo plates in its canteen and in company meetings too.

#### **Facts and figures**

\*To limit warming to 1.5C, global net CO<sub>2</sub> emissions must drop by 45% between 2010 and 2030, and reach net zero around 2050.

### **SDG-14: Life below water**

Ideas/suggestions

- 1) MSMEs working near any water bodies should not dump any plastic waste in it, but put it for recycling.
- 2) MSMEs near water bodies should conduct a “water audit”, i.e analysis of the processes of the enterprise to keep a check on adverse effects on the water bodies and take corrective actions.

#### **Facts and figures**

\*The ocean absorbs about 30 percent of carbon dioxide produced by humans, buffering the impacts of global warming.

### **SDG-15: Life on land**

Ideas/suggestions

- 1) MSMEs should have atleast a single tree, which, will take time to grow but the benefits of which can be reaped for many decades.
- 2) If possible, meetings of MSMEs should include a trekking/bird watching or such things in their locality, which will create an awareness and create a feeling responsibility of its protection.



### **Facts and figures**

\*Nature-based climate solutions can contribute about a third of CO2 reductions by 2030.

### **SDG-16: Peace, Justice and Strong institutions**

Ideas/suggestions

- 1) MSMEs should boldly report to the concerned institutions in case any woman is subject to harassment in its company.
- 2) MSMEs can annually mentor its women employees to report any type of work/domestic harassment that they undergo to take necessary actions.

### **Facts and figures**

\*49 countries lack laws protecting women from domestic violence.

### **SDG-17: Partnerships for the goals**

Ideas/suggestions

- 1) MSMEs can tap potential foreign investment by applying to the concerned Government opportunities and schemes.
- 2) Government can call for innovative proposals from MSMEs and the Government can arrange for foreign investment for novel, path breaking ideas.

### **Facts and figures**

\*The bond market for sustainable business is growing. In 2018 global green bonds reached US\$155.5billion, up 78 percent from previous year.

Thus, these were some of the ideas for MSMEs to contribute to Mission 5trillion by applying sustainable development ways. It will be enough even if any one of the above ideas are adopted, for as they say, little drops make a mighty ocean, similarly, a small step taken by all the MSMEs today can bring about a big radical change in the immediate future.

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## **Building sustainable business through Strategic cost considerations**

### **Abstract**

*Sustainable growth, transparency and concern on environmental, social and governance issues is becoming central in the success of today's business. Cost and Management Accountants have a key role to play in linking the impact of environment or society to the mainstream organizational decision making. Sustainability revolves around the idea that with increase in human population, demand for resources will also grow and since we have finite natural resources, to ensure our survival and a better future for coming generations, we need to duly consider impact of business outcomes on society and environment. Strategic Cost Management approach offers several action options for building a sustainable business.*

### **The Perspective**

Traditionally companies have been interested in single agenda of focusing on bottom line or the profit. But now business leaders are understanding the importance of simultaneous attention on social, and environmental dimensions as part of their growth plans and are not satisfied solely with the financial performance. Sustainable growth, transparency and progress on environmental, social and governance issue is also important in the success of today's business. Modern global businesses are built on fundamental principle that actions of the business must deliver a positive financial, social and environmental outcomes within a definable time frame. So the businesses must decide to change to a Sustainable Value Business Model, which would ensure that the organizational effort and investment provides a measurable return on the balance sheet and also have a positive impact on Social, Environmental and Governance metrics reflecting a fundamental shift towards focus on sustainability. The choice for companies today is not if, but how they should manage their sustainability activities. Business leaders should identify and understand the key sustainability issues and drivers relevant to their organization and develop their strategy accordingly

### **Sustainability and Business strategy**

In today's dynamic and uncertain business world importance of building Sustainable Value into the strategy of a business cannot be underestimated. Business strategy is most simply defined as the set of actions and activities a company invests in to gain competitive advantage and to maximize long-term value. A clear and defined strategy provides the necessary focus for effective executive decisions, management actions and business investments. Making sustainability a part of the formal business strategy, and measuring results in terms of improved financial and non-financial business value, is critical for developing a Sustainable Value Business Model.

Consumer confidence, shareholder value, brand equity and the very sustainability of today's global businesses, and the planet, rely on a major shift towards new business models that focus on the intentional creation of enduring social and economic value for all stakeholders. Enduring business value is created

when an organization conducts its operations such that commercial, social and environmental goals are inextricably linked, and these are duly considered and represented in strategic planning, operating budgets, balance sheet and corporate culture of the companies.

### **The Development of Sustainable Competitive Advantage**

An organization in a free-market economy, especially one that is becoming increasingly global, aims to achieve its strategic goals on the basis of a competitive advantage in which the company implements a value-creating strategy that remains unique despite attempts at imitation by current and future competitors. This means that the organization is capable of offering greater value to buyers in its industry that have a choice from several alternatives. We must emphasize that the value offered to customers by products or services is determined by the customers themselves. As such it may include: (a) Better quality, i.e. increased functionality, reliability, safety, etc. (b) Lower price for comparable quality level (c) Faster delivery when quality and cost are the same (d) Easier use (e) Greater customer satisfaction (f) Provision of good after sale support.

The most recurrent mistake made by successful organizations is the failure to assess the impact of ongoing changes on their customers and stay with the same strategy assuming continuity in environmental conditions. In what seems the rational thing to do, considering the cost structure with big overheads imposed by their large size, they keep making products that offer, even though temporarily, the most attractive profit margins, by investing in incremental improvements that satisfy their most demanding customers. As a result they often pay little or no attention to the moves made by new competitors operating with a new strategy based on some disruptive innovation that gradually eats away their market share

In a relatively stable environment most organizations can develop a strategic plan with a clear focus and direction. Its successful execution can achieve strategic goals mainly through operational excellence. However, when change in the external environment is volatile and rapid and when outcomes cannot be anticipated, leadership must shift its priority to the exploration of new value opportunities and systematically experiment to see what works and what does not. Under such conditions what matters most is the capability to experiment efficiently, to test and to adapt to an environmental context undergoing significant change

In periods of rapid change the focus for most business firms must shift from meeting profitability targets to the need for survival in the face of intense competition at a global scale. The conventional approach of cutting costs through extensive employee layoffs, plant closures, outsourcing to low-cost countries or increasing productivity with new technologies, does not address the fundamental challenges posed in the era of globalization through networked economies. What is primarily needed is the development of new capabilities that enhance the continual development of innovations that offer maximum value to customers and other stakeholders. Such a new strategic response demands the significant improvement of the quality of an organization's value-innovation process.

### **Leveraging Strategic cost considerations for building a sustainable business**

Strategic Cost Management is a term used to describe the strategic planning, restructuring and re-alignment of a company's costs to an operating model that will deliver their revised strategy and strategic ambitions. Such programs undergo a grassroots diagnostic that allows organizations to focus on operating costs, that are either no longer aligned to the strategy (destroy value), or integral to supporting the underlying growth, or maintaining positions in markets, businesses and functions (create value). The importance of managing costs and aligning them with the business strategy of an entity is critical especially in the midst of challenging economic times faced by businesses today. By attacking costs comprehensively and strategically, companies are able to buy time for growth measures to work.

To achieve high performance with strategic cost management, it is recommended that companies create maximum impact sustainable development by using a timely combination of:

**Tactical Cost Reduction :** seek rapid cost reduction of non-strategic expenses, the low hanging fruit, to fund ongoing strategic cost management initiatives.

**Proactive Cost Governance:** Create, implement and manage a proactive cost governance model to sustain cost reductions using an organizational mindset that is focused on Kaizen - continuous improvement.

**Strategic Cost Management/Operational Transformation:** Implement structural changes using new technologies and digital interventions to the operating model and business processes to maximize value, sustain cost reductions and move to a more variable (vs. fixed) cost structure.

**Cost Management as a Core Value :** Every business has its own challenges, risks, and ways of doing things – but through it all, cost management remains a core value that can drive success. The differentiation and competitive advantage for a high growth business emanates from its ability to innovate. Effective cost management supports and supplements business innovation. Embracing a cost management framework is a key step towards building a sustainable business

**Cost management as business design :** Companies and entrepreneurs typically believe cost management implies a restructuring of business – this simply isn't the case. The idea is to make it an integral part of the business design that indicates the company's aspiration for achieving all round operational efficiency.

**Measuring and monitoring ROI on all spends :** Effective cost management is a business philosophy and it starts with fostering a culture of questioning and evaluating every rupee spent. The entire organization should be oriented towards measuring and monitoring the return on investment (ROI) on all costs and investments. Every spend decision should be driven by the expected outcome or ROI it will generate.

**Unitizing Costs:** High growth businesses are structured in such a way that they can very quickly operate at much larger scale. This requires 'investing' in operating infrastructure well in advance of achieving the targeted scale. Adopting a high fixed cost model in the growth phase typically results in 'unproductive' cash expense, since the firm is spending on capacity and resources it cannot currently fully utilize. This model also leaves the business exposed to negative operating leverage, i.e. volatility in monthly revenues directly transmitting into volatility in monthly cash flows. For most firms adopting a high fixed cost model, this risk remains elevated until they achieve operating break-even.

A smart approach which deals with inflexibility associated with a high fixed cost model is to tie in these costs to business activity or production volumes (i.e. converting fixed costs into variable) wherever possible. This 'unitization' of costs or linking the expense outflow to business activity or revenues enables firms to spend as needed, and to save on operating expenditure during lean months.

**Focusing on cash flow and not just EBITDA :** The hype-led funding and the subsequent distress observed in some cases led the industry to place emphasis on EBITDA improvement along with revenue growth. However, an effective cost management framework should be more comprehensive in its approach and therefore, focus on cash flows. Working capital can be a significant cash expense for a growing business, especially in the B2B segment. Many companies have struggled to sustain, despite being EBITDA break-even, because the companies couldn't meet working capital requirements.

**Sustainability Accounting :** Accounting for sustainability involves linking sustainability initiatives to company strategy, evaluating risks and opportunities, and providing measurement, accounting and performance management of corporate actions to ensure that sustainability is embedded into the day-to-



day operations of the company. At the core of business decision making, regardless of the area, is quantitative information that can be leveraged and applied to business decision making and evaluation of different options on a real-time basis. CMAs are well positioned to capitalize on the growing demand for comparable, real-time, and actionable management information linking sustainability to profitability more particularly :Identifying opportunities for more efficient use of resources; Helping to assess the potential costs of failing to undertake environmental initiatives; Helping to improve methods for reallocating internal environmental costs, such as energy or water costs, to specific products and activities; Identifying and estimating costs resulting from the organization's activities that have to be met by others (externalities

### **Conclusion**

Only recently have organizations begun to really consider the interplay between business strategy and sustainability. Organizations will inevitably be affected by the increasingly complex sustainability agenda emerging internationally and within national and regional markets. Those that set out to develop a sustainable business will gain in stature and enhance their reputation and business results in a daunting and challenging world. Strategic cost management is vital to building a sustainable business through integration of Environmental , Social and Governance (ESG) considerations alongside tracking, monitoring and reporting of information on financial and operational impacts and performance.





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## Designing Cost Effective Sustainable Products

### Abstract

*Sustainable innovation is done for rethinking about how to meet the current demand and growth while having less negative impact on the environment. It aims to reduce the impact on social environment while designing the products to meet up the demands. There are a number of ways by which sustainability for products can be promoted like; material to be used, process to be followed etc. There are a number of tools and techniques that can be used to design products more sustainably, and the right technique depends on each company's aims and objectives. Sustainable design and products has impact on financial performance as well as on environment.*

### Sustainability Initiatives

Sustainable innovation is done for rethinking about how to meet the current demand and growth while having less negative impact on the environment. It aims to reduce the impact on social environment while designing the products to meet up the demands. To reduce the impact of economic growth on the environment, the industries are decoupling to make a link. After the liberalization policy of Government of India in 1990s, the industries started designing the eco-friendly or green products to reduce the environment degradation. The strategies were made to streamline the production process to reduce the negative impact on environment. This streamlining was really helpful in the developing nations like India as industry is very much necessary for the economic growth of the country and for developing nations, the need and necessity is more.

Zijp, M., et.al.” (2015) concluded that Method selection is a crucial step in pursuing sustainability. By choosing a method, one selects, or at least narrows down, the choice in system boundaries, themes and personal values. Sustainable initiatives help in leapfrogging for better design and production techniques in developing countries by decoupling and industrializing at the same time. Cleaner production process is very much essential for sustainable design.

United Nations environment programme plays a vital role in setting the targets for achieving the sustainable goals. In 2015, the international community adopted a set of 17 goals as part of a new global agenda on sustainable development. The 9<sup>th</sup> and 12<sup>th</sup> goal of Sustainable Development Goal (SDG) is to build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation and ensure sustainable consumption and production patterns. It encourages local and national authorities, alongside industry, to develop and implement policies, strategies and practices that are cleaner and safer, reduce pollution and risks for humans and the environment, and incorporate environmental costs.

There are a number of ways by which sustainability for products can be promoted:

Materials that can be used:

- Eco Fibred products: The clothes and textile industry can opt for eco fibre options which impact less on environment degradation like Australia based Biotechnology Companies are using.



- **Durability:** The companies should try to make the products that can last long and finally can end up into landfills.
- **Recyclable:** Design the product which is recyclable and will not put negative impact on the environment.
- **Reduce greenhouse gases:** The burning of plastics in industry cause nitrogen oxide and Sulphur oxide which is harmful for environment.

Process to be followed:

- **Designing patterns:** To reduce the ecological footprints, the producer should try to make those patterns which can use up as much fabric as possible.
- **Product lifecycle:** The manufacturer should try to introduce innovative ideas in production to last long the product lifecycle. There can also be instructions for the usage of the product from opening the packaging to the end of life.
- **Efficient use of resources:** The manufacturer should select those production processes which uses the resources like water, chemicals and other raw products efficiently. The use of green and renewable energy must be promoted.
- **Producing multifunctional products:** The manufacturers should try to manufacture the products which have multiple uses.
- **Cut off waste:** There should be minimum waste or damaged products during production stage which is good for company as well as environment.

Marketing of products:

- **Eco friendly label:** The manufacturer can use eco friendly labelling of the product.
- **Verification Certificate:** The producer can get the verification certification for their products if it is environment friendly and use the ethical practices in manufacturing.

### **How to Design Cost effective Products for Sustainability**

For sustainability of the products, the manufacturer must take care of its impact on the environment. The product should not harm environment in its life cycle. The environment degradation is done from extraction of raw material to the end of life of the product. But now the manufacturers should keep “sustainable products” in their mind for any production so that there must not be any negative impact on the environment for individual profits.

For example: Manufacturers must think about the *e waste* generated from any electronics products. Most of the electronic items have the life cycle of 12 to 18 months and after that they are replaced. Thus, the companies should design the products which can be recycled easily when disposed off by the consumers. The manufactures should try to make the eco friendly electronic products which can be dismantled easily and do not generate the *e-waste*. Another thing is the products manufactured must use efficient energy. Companies can manufacture the products which use renewable source of energy like solar power energy. When the companies are designing such products, they should always try to reduce the products’ effect on environment which can lead to their own cost savings in the future.

### **ECO DESIGNING OF PRODUCTS:**

Rossi, M., Favi, C., Russo, A. C., & Germani, M. (2019,) suggested that companies should focus on development of a tool that supports implementation of eco design strategies through a structured repository of guidelines, best practices and training material on eco-design matters.

The term eco design means development of the product by taking into consideration its impact on the environment. In eco design, the manufacturers try to make less negative effect on the environment whereby designing the product for the sustainability. The designers keep in mind about the product life cycle and design the product.

There are a number of tools and techniques that can be used to design products more sustainably, and the right technique will depend on each company's aims and objectives. For example, if a company is looking to reduce its carbon footprint, then it would make sense to look at "Design for embedded carbon" and review the material selection, or look at "Design for transport efficiency", as the distribution of the product may well cause the biggest production of carbon. However, if a company has set targets for moving to 100% recyclable packaging, then it would need to look at "Design for recyclability" and move towards using mono materials that can easily be separated at point of disposal and recycled in most local authorities' collection streams. Manufacturers need to be careful, however, when transporting packaging or products abroad that the materials can be readily recycled at their destination.

A few of the techniques commonly used for minimizing environmental impact are:

- **Design for reducing carbon dioxide**  
The materials made from the recycled materials can reduce carbon dioxide emitted during the process of production. For example, if we are using 60% of recycled raw material in our production, we are cutting down 90% of embedded carbon.
- **Design for recyclability**  
Use as much as recycled raw material as you can. The manufacturers should try to switch to recycled material and make single material product so that at the end of life of product, it can be easily dismantled and reduce the wastages.
- **Design for recycled content**  
The manufacturers should purchase the recycled content from the suppliers dealing with it. This will not only sustain the environment but also save money. For example, use soft drinks bottles for recycling. The other examples could be cardboard boxes, metals and other plastic containers.
- **Design for bio-degradability or compost ability**  
The manufacturers should try make those products which leaves no toxicity on the environment as the end product. For this the manufactures should also consider about the packaging of the product. For example, the vegetable and fruits market using banana leaves for packaging of their products instead of plastics now. This kind of packaging helps to make home compost which will not harm environment. The packaging of the product really matters for the environment as the wrong packaging leads to 20% increases in methane and Carbon dioxide in the environment.
- **Design for transport efficiency**  
Can the packaging be designed so that more products fit onto one pallet?  
Can the packaging be designed to interlock or stack in a different way to allow more products to stack together?  
Can shelf-ready packaging be introduced, thus eliminating the need for secondary and transit packaging and therefore fitting more products together in one pack?  
The answers for the above written questions can lead to product sustainability.  
Ouyang, F., Meng, K., & Liu, D. (2019) pointed that product packaging and designing needs to be ecological and systematic. This will promote sustainability of the product.
- **Design for concentration**  
The producers can produce the products which can be concentrated and can be used by mixing water into it. The products are easy to store and transport and moreover are inexpensive for packaging. These products can be cleaning products, drinks, chemicals etc. such type of products can also increase the lifespan of the product.
- **Design for longevity**

In the past, some companies have been accused of deliberately planning or designing a product with a limited useful life, so that it will become obsolete or non functional after a certain period to ensure consumers re-purchase products. In this way the companies try to make more money by making people addicted to their product which are cheaper in the beginning.

Most designers are, however, now moving away from inbuilt obsolescence and looking at whether the product can be designed to last longer, for example many shampoo companies are now selling large quantity of their product which the consumers can fill up in their reusable bottles at home and it saves from unnecessary one time use packets which leads to trash of plastic in the end. The other example could be LED lighting for home which is energy saving and has longer life. For which some companies even claim that it will last long for 20 years.

- Design for energy efficiency

Almost all of the electronic products in India have the 5-star rating of the product which claims about the energy efficiency of the product and its impact on the environment. Now the consumers are wise enough to see the rating of the product before buying. For example, the air conditioners have the self-powered off mode when it reaches to optimal required temperature which is known as energy saving mode on the electronics.

The above written points can (and should) be considered during the eco design stage of any product or packaging. The best way to do this is to undertake a workshop, inviting representatives from all the different sections of the business, from marketers, production managers and environmental managers to the senior management to attend and contribute. Brainstorming with these different staff together, looking at product lines as specific examples and building short, medium- and long-term plans for improvements, quite often identifies projects where low cost / no cost changes can save vast amounts of money. It is worth remembering that, although external consultants can often add value by providing additional advice and expertise and by helping to facilitate the workshop discussion, no-one knows a company better than its own staff!

### Conclusion:

Terms like eco-design, design for sustainability, carbon foot printing and life-cycle thinking all sound very technical and complex when first looking at the sustainability of a product, service or process. However, all these terms have roughly the same meaning and use similar approaches in identifying potential improvements in the design of “greener” products, packaging and services. In simple terms, they all suggest that the entire life-cycle of the product should be considered when looking at improving any product and this will usually include the added benefit of identifying where costs are highest and where easy financial savings can be made. After all sustainable design has impact on financial performance as well as on social and environmental benefits.

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# A Study on Business Models & The Cost Management as A Strategic lever for Mission \$5 Trillion

## Abstract

*Cost is basically an energy that is being converted from one form to another. Cost creates value addition at every stage in the process of utilization of resources; thus Cost Management is all about the Value creation for betterment of organization, government and society as a whole. It's observed that the companies which are using Cost management techniques to generate savings and investing those funds into growth are more benefited compared to the companies which are using Cost management only for cutting their costs. The top performing companies that are using Cost management as a strategic lever are able to generate revenues both from additional savings and from additional investments. A CMA can be a cryogenic force in achieving the USD5 trillion goal in a transparent way, with trust and at overall prosperity. Thus reaching the goal with 'Sabka sath, sabka vikas and sabka vishwas'.*

USD 5 Trillion Goal for 2024 set by our Honorable Prime Minister requires a huge burst of energy to propel various engines of the economy. Setting up a Goal is a basic requisite for any individual, organization, institution or a nation too. A Goal basically drives the focus, brings discipline, creates accountability and helps in evaluating the performance and efficiency. Building a new India definitely requires a super goal and also a Business Model to achieve the goal which also requires an extensive deployment of Cost and Management Accounting techniques as cryogenic forces.

The mission USD5 trillion opens up number of debates and discussions among economists, industrialists and general public. Considering the statistics available at the moment, economists expressed that the goal is a challenging one but can be achievable. Hon'ble Finance Minister during Budget speech mentioned that the economy has reached from US\$ 1.85 trillion to US\$ 2.7 trillion in last 5 years, so it's well within the capacity to reach US\$ 5 trillion in the coming few years. Also recalled how major reforms were taken place in last five years in indirect taxation, bankruptcy and real estate; expressed commitment for implementing more structural reforms to achieve the goal.

At this point it's essential to understand the share of GDP from different sectors of different countries and their rankings:

Rank	Country	GDP (trillion of US\$)	Agriculture			Industry			Services		
			GDP (trillion of US\$)	Rank	% of GDP	GDP (trillion of US\$)	Rank	% of GDP	GDP (trillion of US\$)	Rank	% of GDP
1	United States	19.36	0.174	3	0.90	3.660	2	18.90	15.530	1	80.20
2	China	11.94	0.994	1	8.30	4.720	1	39.50	6.230	2	52.20
3	Japan	4.88	0.048	13	1.00	1.450	3	29.70	3.380	3	69.30
4	Germany	3.65	0.021	31	0.60	1.100	4	30.10	2.530	4	69.30
5	France	2.57	0.051	11	2.00	0.517	7	20.10	2.000	6	77.90
6	United Kingdom	2.56	0.015	36	0.60	0.487	8	19.00	2.060	5	80.40
7	India	2.43	0.375	2	15.40	0.560	6	23.00	1.490	8	61.50

\*(source: <http://statisticstimes.com>, Aug.'19)

From the above table, India is ranked 7<sup>th</sup> place in the world economy and clearly visible the need of improvement in all three sectors.

*This article brings to the light a summary on couple of Business Models those disrupted traditional models for past few years. Also discussed about the transformations that are happening across business models due to the advent of digital technologies. Then talks about the benefits of using the Cost and Management accounting techniques as cryogenic force in identifying a sustainable business model in digital landscape in order to accelerate growth bring transparency and cost efficiency.*

#### **Summary on couple of latest Business Models**

**Shared services** is a model, that is outsourcing of various non-core activities and operations to a third party by large Multinational companies in order to reduce overall operational costs. Many Indian companies grabbed these opportunities from western countries and emerged as one of the largest employment provider in the country.

**Contract manufacturing** is another business model wherein sharing manufacturing facilities with large Multinational companies (MNCs). Due to some regulatory procedures and cost involvement, MNCs instead of setting up their own production facilities may opt for contract manufacturing. Some Indian firms offering contract manufacturing to large MNCs and registered around 15 per cent growth rate in pharma and health care sector.

**Management contract** is one successful model in recent times. This is extending one's own expertise to the development of someone else's business. One of the top Indian hotel brands is offering their expertise in design and execution of projects owned by others; and proved this model is cost effective to expand their brand globally at faster rate.

**Socio-economic business** model that includes the social responsibility as part of the business model. The spending on corporate social responsibility (CSR) is an additional cost which can't be recovered. As an example, one of the dairy firms improved its productivity by investing in educating the farmers on modern dairy techniques, thus included the CSR in its business model.

**Security driven model**, which integrates the security requirements with business objectives. The digital transformations forced people to migrate into on-line transactions which are exposed many security risks. The cyber security is no longer an additional feature at payment gateways. Organizations should develop a comprehensive security-driven business model.

#### **Digital disruption changing the dynamics in Business**

Digital disruption in recent times changed entirely the dynamics in business landscapes, by removing physical boundaries, creating unlimited customer base and at the same time exposed to cyber risks. In the era of digital revolution it is an organization's decision on how to transform their business model for sustainable growth.

According to a survey by Mckinsey, only 8 percent respondents expressed that their company's business models still viable with the advent of digitalization. However, the companies those invested in digital technologies are far ahead of their peers and is a new normal at the top performing companies. The penalty is huge for not revisiting one's own business model to understand whether it requires complete innovation or partial.

Digitalization requires either to provide a platform between suppliers and customers or to create a complete digital eco-system. Incredible business models are new normal in digital world. Face book becomes one of the major media player without producing any content itself. Uber emerged as a global player in mobility without owning a car and Airbnb sells lodgings without owning hotel. OYO rooms

just a five year old company now standing as one of the India's largest hotel chains. Ola ride and Flipkart are similar examples offering digital platforms and market place. Power2SME is providing digital platform to make SMEs procure raw materials at a better price.

Business models such as Saas 'Software as a Service', Infrastructure as a Service (IaaS), Platform as a Service (PaaS) are couple of innovative business models completely re-defined the earlier models in digital landscape. FaaS (Farming-as-a-Service) is one remarkable business model that bridges the gap between the farmers and the consumers. A Corpus body established for this purpose which provides farming as a service, keeping the ownership of land still with the farmers. This provides digital solutions and improves the productivity, market accessibility and achieves overall economy of scale. This helps in consistent and assured payments to the farmers and also reduces costs and risks by studying monsoon trends, market conditions etc.

Despite number of successful business models and giants emerged, it is not surprising that the companies find it difficult in turning digital transformations to be successful. The rate of success is alarmingly low as per latest McKinsey's Global Survey. Only 14 percent said their efforts have made performance improvements and only three out of ten respondents reported complete success on digital transformation.

***Organizations need to face many challenges and to take critical decisions on the areas - do they transform their existing business model or build a new one; analyzing the extent of investments in digital technologies; the areas of digitalization; how to acquire the funds and so on. Here the Cost management techniques play a predominant role in answering these questions and identifying a business model.***

#### ***Cost and Management Accounting techniques as a Cryogenic force***

***As per latest study by Wharton school of business the Cost management today has become a competitive necessity. It is becoming a strategic lever in generating additional savings which can be invested in driving growth.*** It is always cheaper to generate own funds than to borrow it from outside. Many companies are using cost management techniques to overcome the inefficiencies, and then investing these extra savings into digital technologies to propel the growth. This is a very different way of approach in deploying the Cost management to accelerate growth. It's also observed in the study that the companies which are using Cost management techniques to generate savings and investing those funds into growth are more benefited compared to the companies which are using Cost management only for cutting their costs and no proper plan on those additional savings. ***The top performing companies that are using Cost management as a strategic lever are able to generate revenues both from additional savings and from additional investments.***

Cost is basically an energy that is being converted from one form to another. Cost creates value addition at every stage in the process of utilization of resources; thus Cost Management is all about the Value creation for betterment of organization, government and society as a whole. By classifying the costs in scientific manner one can achieve least cost combinations and generate additional savings by managing operating costs.

***Target costing*** is one such tool to apply in agri-sector and makes it easier to track various expenses and useful in preparation of budgets. Indian railways includes manufacturing and services activities, ***Activity based costing*** (ABC) is very powerful technique to identify cost drivers and accurate allocations of costs to the activities. Thus possible to remove all non-value added activities and generate additional revenues within the prices they offer.

The application of ABC in banking sector helps in fixing the charges for services in a more competitive way. ***Break Even Analysis*** is another handy tool for Banks in identifying loss making or low activity branches and work on either closure or turning them into break even in the era digital landscape. In recent



past, one of the largest International bank identified that number of branches has very low operations due to digital disruption. **Cost governance** provides government departments, local bodies and trusts accurate cost classification, measurement and allocation thus enables accurate fixation of prices for their products or services. **Cost Sheet** facilitates element-wise analysis of costs and revenues for each product and service. This information is very vital to avoid any losses and in dealing with the cases under insolvency and bankruptcy code.

Sectors like Ports, Railways, Mining, Defense, Oil & Gas, Aviation and Roads & highway projects are being funded by the central and state governments. Now they are open for private participation allowing foreign direct investment. These kinds of projects which are in interest of the nation, adoption of cost management techniques is must to bring transparency and efficiency.

From the above study one can confidently say that it's imperative to adopt the Cost Management techniques in daily routine of business as usual. This should be in the same lines as how the 'Swatch bharat' was a Call initially, later became a mission and now an integral part of daily life. A CMA can be a cryogenic force in achieving the USD5 trillion goal in a transparent way, with trust and overall prosperity. Thus reaching the goal with the Government's agenda '**Sabka sath, sabka vikas and sabka vishwas**'.

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**(FOOD IS GIVER AND EXTINGUISHER OF LIFE -  
FOOD IS SAID TO BE PROGENITOR OF ALL PROGENY)  
Anna Suktam**

## **Agriculture – The “Culture” of India**

### **Abstract**

*Food gives us strength in many ways and strength only allow us to perform in a better way in day to day life. Agriculture is only activity which produces food for all. Hence, one has to understand that without agricultural activities no other activity will be possible. On the other hand, the sector is contributing a major share to GDP also. Thus, the first and foremost priority of the Governments should be to give importance to agriculture sector for achieving “Food Safety” and “Food Surplus” by implementation of various measures as listed above for the development and progress of agriculture sector and encourage the new generation to take up the agriculture as a career also. The services of professionals like CMAs will be very much helpful to the Government to accomplish the goals as well as to achieve the sustainable economy marching towards “Mission 5 Trillion”.*

### **Introduction**

From times immemorial, the main, major and oldest livelihood of India is Agriculture and its ancillary activities. At present, India is one of the largest producer of major agriculture and ancillary products in the World.

**Availability Of Land :** The total arable land in India is 159.7 million hectares (394.6 million acres - second largest in the world) and gross irrigated crop area is 82.6 million hectares (215.6 million acre - largest in the world). However, due to urbanisation the arable area is diminishing every year.

**Climate Conditions :** India experiences both tropical and temperate climate. There are only few countries which have similar climate as compared to India. India is cultivating of crops suitable for both climates.

Since there is a diversity in climate, topography and soil in India, a wide range of crops are grown in the country in different cropping seasons – Kharif, Rabi And Zaid.

**Water Sources :** Cultivation is based upon the availability of water. There are three types of water sources available – Ground water (Earthfed), River water (Riverfed) and Rain water (Rainfed).

89% of the total ground water available is used by agriculture purpose. Out of this, 60% water is utilised by the two crops rice and wheat. Remaining water is not sufficient for other crops. Somehow, the farmers are managing the cultivation activities with available water resources.



**Cropping Seasons And Crops :** There are three cropping seasons in India – Kharif, Rabi And Zaid. **Kharif** season is from **June to October**, **Rabi** Season is from **October to March** and **Zaid** season is from **March To June**.

On fertile lands with sufficient water availability three crops are farming. On other lands one or two crops will be farmed as per availability of water.

Mainly the crops are under four categories –

- A) Food Crops ( Rice, Wheat, Maize, Millets, Pulses Etc.)
- B) Cash Crops (Sugarcane, Tobacco, Cotton, Jute, Oil Seeds, Spices Etc.)
- C) Plantation Crops (Tea, Coffee, Coconut, Rubber, Cashewnut, Cocoa Etc.)
- D) Horticulture Crops (Fruits, Vegetables, Flowers Etc.)

*Ever since the Green Revolution, India is cultivating varied types of crops. India is one among the five largest producers of over 80% of agricultural produce items.*

*India is second largest producer of rice, wheat, sugarcane, pulses, several dry fruits, numerous vegetables and coconut. Also, India is largest producer of many fresh fruits.*

**Present Economic Scenerio :** As per economic survey of 2018, agriculture sector and its ancillary sectors employed more than 50% of work force of india and contributed near about 17-18 % to gdp of the country.

#### **Major Problems Facing by Agriculture Sector**

Even though agriculture sector is contributing major share to GDP, the sector is facing numerous problems yet to be answered.

- A) **Diminishing Of Land :** Due to rapid urbanisation the total arable land is diminishing every year and farmers are leaving the agricultural activity.
- B) **Labour :** Even more than 50% of work force of India in agriculture sector, the sector is facing quality labour force once again due to rapid urbanisation. The labour are shifting to urban areas in search of different other livelihoods. Hence the labour cost is increasing.
- C) **Water :** Ground water availability is decreasing and not sufficient for all seasons. River waters are not available at all places. Hence, two-thirds of total agriculture activities are depend upon monsoon which is unreliable, uncertain and irregular. Irrigation facilities available are unable to serve the need of the all farmers.
- D) **Climatic Conditions :** Due to floods, cyclones and other climatic changes every year, farmers are unable to save their crops.
- E) **Damages By Pest Insects :** Due to change in climatic conditions different pest insects are growing and damaging the crops.
- F) **Inputs :** The prices of all the inputs like – seeds, fertilisers, insecticides, pesticides, labour etc., are increasing year by year. Small farmers are unable to afford the input costs.
- G) **Soil Capacity :** Due to repetition of same crops in each season the soil nutrients are decreasing which leads to lower production.
- H) **Mechanisation :** Complete mechanisation facilities are not available in many areas.
- I) **Storage Facilities :** Proper storage facilities are not available in rural areas. Hence, farmers are selling their produce at lower prices.
- J) **Marketing Facilities :** Due to lack of good marketing facilities and intervention of middlemen, farmers are selling their produce at lower price. At times they unable to recover the cost also.

- K) Minimum Support Price (MSP) :** There is no MSP for many agriculture products. Hence, farmers are unable to recover even their costs on sale of their produce.
- L) Burden Of Loan :** Due to technical problems small farmers are unable to utilise bank loans and borrowing from private persons at higher interest.
- M) Insurance Facilities :** Insurance facility is not available for all crops. On the other hand insurance companies rising disputes in settlement of the claims.
- N) Unorganised Nature :** Agriculture is the main activity of our country and contributing a major share to GDP. But it is not an Organised sector. Due to unorganised nature of sector, the farmers are not getting any benefit of various government schemes.
- O) Industry Status :** There is no “Industry” status to agriculture sector. Hence the sector is not able to utilise the support available to an “Industry”.

### MEASURES TO BE TAKEN TO STRENGTHEN THE AGRICULTURE SECTOR

Since “**Food**” is a necessity to each and every being of country rather on Earth, it is the primary responsibility of Governments to take steps to maintain the required production of food grains and other items to achieve “**Food Safety**”. As the population of India is increasing day by day, “**Food Safety**” is really a serious and sensitive issue.

**Agriculture** is a State subject. Food availability is always connected with national security. Hence Central Government must involve along with State Governments to solve the problems of agriculture sector to achieve “**Food Surplus**”.

Some important measures to be taken for strengthening the agriculture sector are-

- A) Demarcation Of Lands :** Lands for agriculture purpose should be demarcated and there should not be any diminishing of area of agriculture. Otherwise, in future the agriculture production will be drastically come down due to non availability of arable land.
- B) Development Of Water Sources :** Governments should take steps to **Connecting The Rivers** In India for better utilisation of rainy and flood waters. Since there is no connection of rivers, rains and floods destroying the villages, towns and cities. Many a times, the excess water is flowing into the sea.

**Lift irrigation projects Or Check dams** may be constructed to save the excess water.

On the other hand, rain water should be saved through **Rain Water Harvesting Pits** to increase the levels of ground water.

Governments should develop sufficient irrigation facilities to overcome the water problems.

- C) Supply Of Inputs :** Inputs like seeds, fertilisers, pesticides and insecticides should be supplied by the Government directly to the farmers through agriculture departments. the seed must be strong to resist all the pest insects.

Indian Council Of Agricultural Research (ICAR) is developing different types of seeds with pest insect resistance capacity for betterment of production.

- D) Mechanisation :** Utilisation of machinery should increased where ever necessary. **Drip Irrigation Systems** should be adopted by farmers for better utilisation of water sources.
- E) Crop Calendar :** Governments should prepare the Crop Calendar For Each year. The agricultural lands will be divided into Clusters/Units and for each cluster two or three crops will be allotted for farming without any repetition of crop. The calendar should be prepared as per the required/estimated production of each agricultural item for the year and steps will be taken to achieve such production. MSP will be decided on estimated costs by the Governments. Inputs



should be supplied by the Governments through agricultural departments. If Crop Calendar is followed without repetition of crops, the soil nutrition will also be gained and production will be on higher side.

- F) Development Of New Farming Techniques :** New techniques like Integrated Farming, Combined Farming, Organic Farming etc. to be adopted to achieve desired production of agricultural items with less water utilisation. Two or three crops will be farmed at a time and farmers will be benefited by these type of farming.
- G) Loan Facilities :** Loan facilities will be given to Clusters/Units. In this model small farmers also benefited by nationalised bank loans with lesser interest charges.
- H) Insurance Facilities :** Again insurance facility will be extended on Clusters/Units. Premium burden will be less in this type of insurance facility.
- I) Organised Sector :** If Cluster/Unit types of agriculture system is adopted, then the Governments may extend benefits of organised sectors to agriculture Clusters/Units Also.
- J) Industry Status : MSME status may be given to Clusters/Units. It will definitely encourage the young generation to work in agriculture industry. Governments should also encourage new entrepreneurs to establish agri-based industries nearby the Clusters. New employment opportunities will be developed in this model.**
- K) Storage Facilities :** Construction of storage units or cold storages in rural areas will be helpful to the farmers to store their produce.
- L) Marketing Facilities :** Marketing facilities should be supervised by the Government officials to eradicate the middlemen intervention and allow the farmers to sell their product directly at a better price. Food Grains may be purchased by the Government also.
- M) Research and Development Activities :** Government should encourage the research activities for the development of hybrid / new generation seeds for better production and also to introduce new farming techniques.
- N) Awards and Rewards with due respect should be given to farmers to continue their endeavour to feed the society at large.**

## **ROLE OF CMAs IN AGRICULTURE SECTOR**

Agricultural firms like Clusters/Units that produce several products, management accounting systems for decision making is needed. Cost Accounting opens up new ways of looking at farming operations. CMAs can help the farmers in making better administrative decisions. CMAs can help farmers for optimal utilisation of land with available water resources to achieve desired production.

Implementation of Cost Accounting Systems in agricultural firms can improve farm management and lead to better farm performance.

**Comparative studies on yields, product pricing, utilisation of machinery, adoption of new techniques, optimal utilisation of resources, marketing, budgets and estimates for next season – in all these areas CMAs will support the farmers in a practical way for the betterment of their livelihood as well as life style.**

**Definitely, with the support of CMAs, agriculture sector will be going to contribute at a higher percentage to GDP in turn to achieve “Mission 5 Trillion”.**





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## **Agriculture and its Export– Contribution for 5 Trillion Economy**

### **Abstract**

*It's about importance of export for 5 trillion economy and the role of agriculture in that export growth on the basis of Agriculture export Policy drafted by the government of India released on December 2018. There is suggestion on how to increase return for a farmer with the help of commodity market, by giving training to farmers related to crops and etc. There is a short discussion of water scarcity and its problem and some solution to preserve water of our country. There is also a few points related to our country's overall performance in the export of the agriculture sector.*

Growth of export for reaching 5 trillion economy is needed at much higher than growth rate of economy which required to be at average of 8% for next four year. Roadmap to double India's exports to \$1 trillion by 2025 from about \$500 billion at present is going through agriculture sector as well. Since the government has brought out a draft agricultural exports policy in December 2018, double farm exports to \$60 billion by 2022 from \$30 billion last year, which will be given final shape after receiving feedback from stakeholders. However, there are a few areas which need to be importance in the context of boosting our agricultural exports, which are currently at the 30th position all over the world.

First, we need to make our farmers to get a good return from selling their produce, whether by increasing domestic sales or exports to get good return. Towards this end, we need to dismantle the Agriculture Produce Market Committees that are still functioning as great barriers to price discovery and are perpetuating the exploitation of farmers by vested interests. Second, the use of analytics to project demands for commodities and their prices in future (both in the domestic as well as international markets) can be Spread among farmers' organizations and train them use of the same, to help them take appropriate Planting decisions. A robust forward markets mechanism for all crops in the country can help immensely in this to achieve something. Third, the returns from exporting fruits and vegetables is much higher than from exporting grains like rice, maze. Because of a short shelf life for fruits and vegetables, we need to provide appropriate grading and sorting facilities, warehousing, refrigeration and transportation for our horticulture exports, on priority basis which help private and public sector. Fourth, we urgently need to develop high yielding pest resistant varieties for fruits and vegetables that are in demand in the markets globally. Fifth, we need to develop and conform to international standards of product, by way of fertilizer and pesticide use and sensitize our farmers to encourage and train them to adopt the relevant practices.

However, there must not be a 'start and stop' policy on exports and imports of agricultural products, because that promote farmers from taking objective decisions on planting different crops which give more return, in that case it may become harmful for agriculture industry. While it is very important to exploit the unused capacity of agricultural exports, we need to remember that India is contributing roughly 17.8% of the human population of world's population and 15% of the animal population of the



planet on only 2.4% of the land of planet and 4% of the world's water resources. Keeping in mind that many of the regions in India are already water stressed, we need to harness our water resources in a way that shows care and thought for the future. Thus, excessive growing and exporting products of water intensive crops like sugarcane needs to be discouraged. Also exporting large volumes of rice, which is being grown in some important areas in northern India by exploitation of ground water more, needs to be similarly discouraged as sugarcane. A final word of caution related to agriculture. One kilo of bovine meat has been calculated to consume approximately 20000 litres of water by way of feed, fodder caring and

drinking water for an animal during its lifecycle. Thus, in light of India's tight water position, the sustainability of exporting meat is highly questionable "why we still focusing on meat?"

For various reasons, agriculture sector has not received much reform attention. Indeed, it can rightfully be said that agriculture has been ignored while doing any change during the period of economic reform post 1990's. This lack of attention is reflected in our performance going down as measured by the change in rank – from 12th (2003-11) to 30th (2012-17).

A strong policy recommendation emerging from our deliberations is the need to dismantle the Agriculture Produce Market Committees that are still functioning as great barriers to price discovery and are perpetuating the exploitation of farmers by vested interests. This we believe is a necessary starting point for expanding a sector which must receive primary attention. This domestic policy change must be accompanied by predictability and stability in policies regarding import and export of agricultural products. We need to recognize the changing structure of agricultural exports, and the urgent need to adjust to the relative scarcity of water and the exigencies of climate change. For example, horticulture and fruits and vegetables can become major export items. This will involve, on a priority basis, the provision of appropriate grading and sorting facilities, warehousing, refrigeration, storing and transportation. Regarding fruits and vegetables, Research and development push is needed to develop high yielding pest resistant varieties. While it is important to exploit the unused capacity of agricultural exports, we need to remember that India is supporting roughly 18% of the human population all over the world and 15% of the animal population of the planet on only 2.4% of the land of planet and 4% of the world's water resources. Keeping in mind that certain regions in India are already water stressed, we need to husband our water resources prudently. Thus, excessive growing and exporting products of water intensive crops like sugarcane needs to be discouraged. Also exporting large volumes of rice, which is being grown in some important areas in northern India by exploitation of ground water, needs to be similarly discouraged.



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# Cost and Management Accountant - An Impetus to Mission \$5 Trillion Economy!

## Abstract

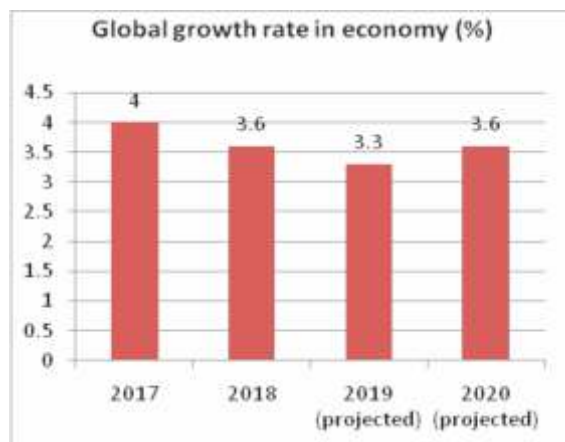
**“Mai Nahi Hum”** The development of country should be a mass movement where every Indian should recognise its role in the development. Amid the waning global growth momentum the projected contribution to world output from India in the year 2020 is higher than US and China. It is the time for every Indian to contribute and accelerate the share of India in global output. Mission \$5 trillion economy demands for cost competitiveness and operational excellence at domestic and global platform. **Cost and Management Accountant** plays a pivotal role in the realization of operational excellence with the adoption of different management tools.

**Together WE can make great things to happen and do the miracle.** “Mai Nahi Hum” (I to We) portal was launched by Honourable Prime Minister Mr. Narendra Modi for volunteering efforts and initiatives with a vision to create a New India by combining strengths, connecting, and contributing for the society. India is at the cusp of radical transformation and targets to be a \$5.0 trillion economy by the year 2024-25. However, it is apparent to the country that Indian economy is in a shambles and growth rate has ticked down to 4.5 percent in the second quarter of the year 2019. The growth rate of GDP has been reported to be the lowest over the period of more than six years for quarter 2 and this growth rate will take nine more years to achieve the target of \$5 trillion economy. One of the strategies of Vision New India 2022 focuses that the development of country should be a mass movement where every Indian will recognise its role in the development. Our economy urges the collective efforts of all to accomplish the desired goal.

This article pinpoints the role of Cost and Management Accountant in achieving the target of \$5 trillion economy. This mission demands for cost competitiveness and operational excellence at domestic and global platform. **Cost and Management Accountant** plays a pivotal role in the realization of operational excellence with the adoption of different management tools. CMAs can suggest the measures to improve the operational efficacy. The statutory implementation of cost records, cost audit and inclusion of CMA in the definition of Accountant will explicitly help to accelerate the growth and to achieve the target of \$5 trillion economy.

## INTRODUCTION

The year 2019 started at a weak footing not only for India but for the world. Global growth rate in economy has been paving since few years as follows:



Source: WEO

Some of the reasons for the decline in economic activities are the acceleration in US-China trade tensions, macroeconomic stress in Argentina and Turkey, disorder in auto sector of Germany, and stricter credit policies in China. However, China has improved its fiscal and monetary policies to counter the negative effect of trade tariff. And, the outlook for US-China trade tensions has also improved. The US Federal Reserve controlled the increase in the interest rate for rest of the year 2019 in response to the rising global risk. The increase in projected growth rate in 2020 is bolstered by growth in India and China and the increase in their weights of incomes on global arena. It is expected that the tepid labour productivity growth in advanced economies will drag its growth rate and the per capita income is projected to fall in advanced economies for next five years. The contribution to world output in terms of real GDP by leading countries from advanced and developing economies can be seen as follows:

Contribution to world output (in%)				
Country	2017	2018	2019 (Projected)	2020 (Projected)
United States	2.4	2.2	1.8	1.7
Japan	1.9	0.8	1.0	0.5
United Kingdom	1.8	1.4	1.2	1.4
Germany	2.5	1.5	0.8	1.4
China	6.8	6.6	6.3	6.1
India	7.2	7.1	7.3	7.5
Advance economies (total)	2.4	2.2	1.8	1.7
Developing and emerging economies (total)	4.8	4.5	4.4	4.8
World output	3.8	3.6	3.3	3.6

Source: WEO

Amid the waning global growth momentum the projected contribution to world output from India in 2020 is higher than US and China. Gross valued added at current prices for the year 2018-19 can be viewed as follows:

Gross Value Added at current prices for the year 2018-19		
Sector	Current price (Rupees in Crore)	Share in %
Agriculture Sector	2,692,433	15.87
Agriculture, forestry & fishing	2,692,433	15.87
Industry Sector	5,042,587	29.73
Mining & quarrying	457,301	2.7
Manufacturing	2,853,986	16.83
Electricity, gas & utilities	452,683	2.67
Construction	1,278,617	7.54
Service Sector	9,226,346	54.40
Trade, hotel, transport & communications	3,157,709	18.62
Financial, real estate & professional services	3,555,780	20.96
Public administration, defense & others	2,512,857	14.82
Total	16,961,365	100.00

Source: MOSPI

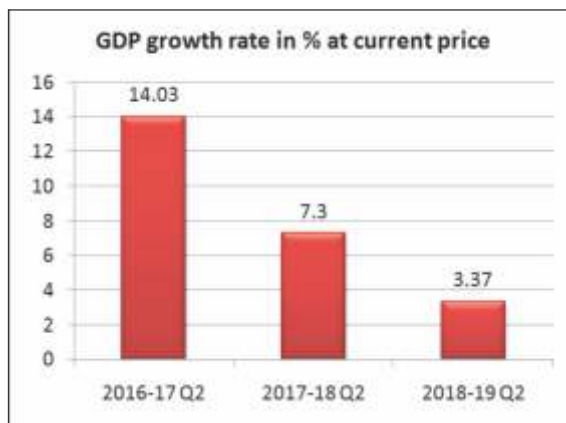


The contribution to GVA by service sector is highest in India. Finance, real estate, and professional services of service sector dominate over other sectors with highest contribution to GVA.

## **COST AND MANAGEMENT ACCOUNTANT AS AN IMPETUS TO \$5 TRILLION ECONOMY**

### **ROLE OF CMAs IN PRIMARY SECTOR (AGRICULTURE SECTOR)**

Agriculture sector supports 58 percent of population of India. But the growth rate of GDP from agriculture sector is bleeding. Let us have a glance on quarter-wise growth rate of GDP from agriculture sector:

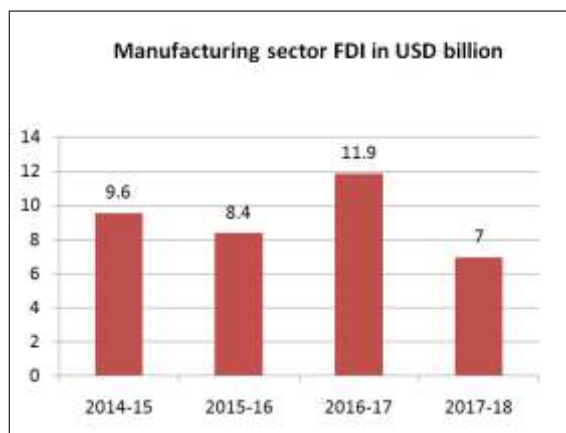


Source: MOSPI

Government has announced four point strategies to support agriculture in India. These strategies are: ensuring profitable prices, reducing cultivation costs, processing farm wastage, and creating non-farm sources of income. CMAs can help the companies engaged in agriculture sector to focus on these strategies and can make themselves competitive with others at global platform.

### **ROLE OF CMAs IN SECONDARY SECTOR (MANUFACTURING SECTOR)**

Manufacturing sector has evolved as one of the highest growth sectors in India and the country is striving to become the fifth largest manufacturing country in the world by the end of year 2020. Indian Government targets to increase the share of GDP of manufacturing sector to 25 percent by 2022 from current GDP contribution of 16 percent and creating 100 million jobs by 2022. Foreign investment is shying away from Indian market. FDI in manufacturing sector remained sluggish despite of improvement in the index of ease of doing business and Make in India initiatives.



Source: RBI

Cost competitiveness and operational excellence in manufacturing is vital to boost FDI and increasing GVA. Generally, Indian products and services are less competitive as compared to other countries due to inefficient management of cost. Cost is a vital detriment to foster competitiveness of the product in export market. Cost competitiveness will make our country a dream destination for foreign players and it will enable to achieve the target of double digit growth in manufacturing sector. Cost of product and service acts as denominator for measuring the performances and efficiencies of the factors of production. Cost audit will help to boost the quality and cost competitiveness of the products in global and domestic markets.

### **Cost Audit as a pillar for strengthening economy:**

**“Prevention is better than cure.”** Cost audit being suggestive and helps to provide signals for appropriate remedial actions to be taken at suitable time. India is the first country in the world to recognise cost audit under Companies law 1965. Cost audit in India is a statutory requirement with the threshold of turnover but it has been voluntarily adopted in many economically advanced countries. Cost audit covers the behavioural aspects of cost efficiency and cost competitiveness and it will enable the companies to achieve organizational efficiencies.

Government of India has taken a numerous steps for emphasising the need of cost audit and also mandated a certificate regarding cost efficiency from practising CMA is to be attached with the project proposal under “Make in India” scheme. This is a welcome step. But why cost audit is not applicable for all Indian Industries irrespective of turnover is ambiguous. Do the companies below the statutory limit of cost audit are not contributing to the GDP of India? Is cost competitiveness is not vital for companies below the threshold limit of cost audit? The diagnosis of financial activities of business through financial audit is mandatory for all companies irrespective of their turnover while the cost audit is not a statutory compliance for all companies. There is no substitute of cost audit for nurturing cost culture in the country. Hence, cost audit should be in line with financial audit. This seems to be ironical as cost is most crucial factor for industries, society, and nation as a whole.

It is desirable that the cost audit should be a mandatory phenomenon for all kinds of industries irrespective of turnover so that the benefit will reach to every nook and corner of the country. Cost audit assists the management to deploy the resources in right channel thereby ensuring optimum return on capital employed. It helps to improve the productivity of labour, raw materials and other inputs and ensures that the expenses are in conformity with national and international standards.

### **ROLE OF CMAs IN TERTIARY SECTOR (SERVICE SECTOR):**

The recent report of Transparency International (Berlin based NGO working against corruption) for corruption perception index ranks 180 countries and territories by their perceived levels of public sector corruption, uses a scale of 0 to 100, where 0 is highly corrupt and 100 is very clean. Let us have a glance of score of India as compared to some of the countries of Asia Pacific region.

<b>Scores of different countries on Corruption Perception Index 2019</b>					
<b>Year</b>	<b>India</b>	<b>China</b>	<b>United States</b>	<b>Japan</b>	<b>New Zealand</b>
2015	38	37	76	75	91
2016	40	40	74	72	90
2017	40	41	75	73	89
2018	41	39	71	73	87

Source: Transparency International data bank

Financial, real estate and professional services account for the highest share of service sector but the losses from financial sector is increasing. Bank frauds have spiked ₹ 2.05 trillion in previous 11 years and counted for more than 50,000 frauds. The increasing bank frauds as per RBI data can be seen as follows:

Bank group/Institution	2017-18		2018-19	
	Number of frauds	Amount involved (₹ million)	Number of frauds	Amount involved (₹ million)
Total	5,916	411,670.40	6,801	715,429.30

Source: RBI

### CMA as a Due Diligence and portfolio advisor:

RBI says that banks took an average of 22 months between the occurrence of the fraud and its detection despite of sterner guidelines by both the RBI and the government. The average time gap is almost 55 months in the case of large frauds. CMAs can play crucial role in due diligence of clients and can help in creating sound investment portfolio.

It is vital for banks to circumvent the contingent losses and work in lesser frauds milieu by impregnating the loopholes so that the banking sector can contribute more to the growth of the economy.

### Catalyst to increase tax revenue:

The mistakes due to incorrect allowance of business expenditure have increased by approximately 1.7 times in four financial years.

Mistakes noticed in incorrect allowance of business expenditure				
	Tax effect (₹ in crore)			
Corporation tax assessment	March 2014	March 2015	March 2016	March 2017
	281.36	299.64	514.09	478.67

Source: CAG report 2017

CAG noticed errors in local audit during FY 2016-17 which caused total revenue loss of ₹ 35,822.25 crore.

Tax wise details of error in assessment		
Category	Cases	Tax effect (₹ in crore)
Corporation tax and income tax	20,582	35,745.12
Other direct taxes	652	77.13
Total	21,234	35,822.25

Source: CAG report 2017

The inclusion of CMA in definition of Accountant under Section 288 (2) of Income Tax Act 1961 will be helpful in impregnating the revenue losses due to errors in assessments.

### CONCLUSION

Cost and Management Accountant plays a vital role in controlling and reduction of cost. He/she is primarily responsible for collection, analyzing, and submitting the cost data to the management. Cost accounting standards, standard costing, budgetary analysis, and preparation of cost sheet are helpful for



management in controlling costs and CMAs are well versed with all these. Financial audit is an external reporting system for different stakeholders of the company whereas cost audit can act as a guide to the management in the field of economic resource management. ***A stitch in time can save nine.*** Cost audit in parallel with the financial audit will be helpful in application of professional scepticism too. Vision New India 2022 toils for double digit growth of manufacturing sector. The operational efficiency can enable the industries to achieve double digit growth. Indian manufacturing companies tend to implement world class practices to manage costs and to be globally competitive. The adoption of cost management methods by the manufacturing companies helps in reduction of waste, improvement in quality, and to enact operational efficiency. Government, professional institutions, researchers, employees and public at large should come together and synergise their energies to bring the economic change by increasing productivity. Together we can make great changes. It is the time for every Indian to contribute and accelerate the share of India in global output. Time recalls for ***Mai Nahi Hum.***

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## **Ethics and Compliance as A Trajectory for Shaping India to become a \$ 5 Trillion Economy and the Role of CMA's**

### **Abstract**

*Ever since the PM Narendra Modi announced the target of a \$ 5 trillion economy by 2024, there are lots of policy changes and reforms announcement taking place to steer the economy. If we analyse the factors which contributes towards the growth then we find that Ethics and Compliances is also one of the important factor which can accelerate the growth of business. These are more of internal factors to the organization but it has lot of bearing on the external factors since it is concerned with stakeholders and society. After seeing so many frauds, scams and corruption taking place in our country one thing clearly emerges that we are not committed to code of ethics and standards and also not compliant with statutory compliances which is pushing over business and economy to lower growth. The role of CMA's as a professional can contribute towards better business environment and be part of making India a third largest economy in the world*

It took almost 55 years for India to become a \$ 500 billion economy, and then it took 5 years to become \$ 1 Trillion economy in 2007. It added another \$ 1 trillion in next 7 years to become \$ 2 trillion economy in 2014 and have almost reached \$ 3 trillion economy in 2019 in just span of 5 years. In next 5 years expecting to not only become \$ 5 trillion Economy but also to become the third most powerful economy in the world. This will be really a very distinctive achievement what we are optimistically looking for to achieve in next 5 years. The pace at which the various sectors should grow from now onwards will set the trend for the speed at which level we need to grow in order to achieve additional \$ 2 trillion in next 5 years. There needs to be overall push in the economic activities across the different verticals and geographical locations. This creates lot of opportunities and new space emerges for innovation and use of technology in shaping the system to speed up the growth. The challenges and complexities which the business will undergo becomes a real headache for the policy makers as they need to revamp the existing policies, rules, procedures and regulations. In this process of transformation it becomes highly important that the businesses should not compromise on its Ethical Values and Compliances which are the two important driving forces for its sustainability and growth.

### **Ethics in General**

India is a country which has its legacy inherited with a strong Ethical Values and Morality. Our Ancient system of administration and business had a strong root of ethical principles and practices. The concept of "Dharma" highlighted three important ingredients, namely Duty, Obligation and Righteousness. These are the most important parts which are very essential in all walks of life. The Upanishads which are the essence of Vedas also says " Satyam Vada, Dharman Chara" which means "follow Truth and practice Dharma" and it goes on to say that earn money through righteous path and distribute it to the welfare of society. The Bhagavad gita, one of the sacred texts which are very closely followed in everyday life talks about "Niskama Karma", which means Selfless action aimed always at the well being of others. The teaching of Mahaveera, founder of Jainism emphasises on three important principles, Samyaka Dristi –



Right Vision, Samyaka Jnyana- Right Knowledge and Samyaka Charitra- Right Conduct. These principles are relevant even today in understanding our Ethical practices. Guru Nanak, the founder of Sikhism says “Truth is higher than everything else, higher still is truth conduct”, this is an apt definition of Ethics which everyone should adhere and follow. There is lot of such references in our ancient texts which highlights the need of change in human behavior in order to do good to the society. Ethics have significant bearings on changing the way society function. Society and State are two important structures which contribute towards growth and development of the Economy. State through various policies, rules and regulations tries to bring change in the society and the society adopts the same in their day to day practices.

### **Ethics in Business**

Business ethics are very important guiding principles for the success of the business. Ethics are moral principles and standards which a business is expected to follow within and with its stakeholders. Today Ethical conducts are also one of the important factors which will be used as an indicator to value the business entity. The ethical code of conducts and standards today in India is mandated only to those companies which are incorporated under Companies Act. The irony part is that in India 76% of total business is in the form of Sole Proprietorship and Partnership where there are no such guidelines or framework existing for them to be ethically compliant. These business types contribute almost around 32% of our GDP and 35% of the exports. These are the potential business houses which will be contributing towards the maximum GDP in the coming years. The risk is that they are not governed by any Ethical codes or principles and at the same time these business houses are not aware of any ethical practices. Since, the businesses are not organized and they do not set any conducts they are also not serious about honoring the interest of stakeholders in specific and natural factors in general. This may become a serious threat for India to grow at a pace at what it is expecting to grow.

### **Corruption – A stigma to Growth**

As per the Corruption Perception Index 2018 reported by Transparency International, India is ranked at 78<sup>th</sup> place in the list of 175 countries. Even though there is marginal improvement in the rankings compared to previous years but it is still a long way to go to improve the ranking. The poor ranking will definitely have impact on the confidence level of investors as well as those who want to do business in India. Ineffective adaptation of good Ethical practices is one of the reasons for corruption to flourish in the system.

### **Frauds – A Shame**

When people don't inherit good ethical behaviors in the organization then it will lead to Frauds. RBI has detected Banks fraud close to Rs.71,500 cr in the year 2018-19. In last 11 years Bank Frauds worth Rs 2.05 trillion has been reported. The rising Bank Fraud is a serious concerns and most of the frauds committed so far is by the Bank employees colluding with the businessmen or with like parties who have substantial interest in the companies. From 2013-14 to 2017-18 on an average around 5000 cases (amount involved more than Rs. 1 Lakhs) of Frauds are detected annually; this significant year on year increasing numbers are big jolt to progress of Economy. Deloitte, in its Corporate Fraud Perception Survey, 2018 highlighted that lack of efficient Compliance System and diminishing Ethical Values are the two main reasons for Fraud. It was also found in the survey that 67% of the frauds are committed by junior, middle and senior level management people. Frauds bring down the reputation of not only the business units but also to the entire nation. It even impacts the foreign investments as most of the investors feel that their money is not in the safe hands.

### **Scams – A Dent**

In spite of many efforts in the form of policy and regulations control, still India faces challenges of Scams in its operating system. The magnitude and intensity of Scam is such that it has penetrated all the sectors

of our operation. Scams have taken place in Defense, Telecom, Sports, Health, Stock Markets, Banks, Financial system etc. One of the reasons for why Scam takes place and continues in the system is that because of low Ethical standards. Low Ethical Standards among the masses is motivating even those with high Ethical Standards to become opportunistic criminals. If we try to find the root of origin of any scam it leads back to the employees working in the organisation who get associated for immoral gains and becomes scamsters. Goldman Sachs while cutting the projected India's growth rate for FY 2019 said, "India's economy may seem a bit like raw mango these days- enticing from a distance but bitter to taste; good for pickles, not much more." This was in context with the series of banks scams which got reported in recent years and also due to bad loans which resulted in huge NPAs.

### **Compliances – A Blow**

Compliances refer to various rules, laws and regulations which every business entity to abide and comply with. These compliances are guidelines for both internal and external governance of business. We have elaborate policies, procedures, rules and regulations which mandate the business houses to follow set of compliances but the outcome of the same is not so satisfactory. If we take the example of GST monthly return filing we see that hardly 77 lakhs dealers are filing the return but the total registered dealers is somewhere around 1.04 cr (composite dealers excluded). What about the rest 27 lakhs registered dealers? Why they are not filing the return? If turnover has not crossed the threshold limit or if they have discontinued their business at least they should get GST cancelled. This has become serious problem for the GST authorities. There are many instances of licenses being expired but, the business still continues without getting it renewed. We see many times that notices sent by the statutory departments are not seriously taken and they are ignored without responding on time. Many organizations still have the practice of not remitting the statutory dues like Provident Fund, ESI, PT, and Gratuity etc to the government. The recent digital revolution has transformed the way the compliance used to look like earlier. The system is now more robust and user friendly and almost all compliances starting from registration to filing of returns and answering of notices can be done online with reduce scope for personal appearance in front of the statutory authorities. In spite of taking so many positive steps by the statutory authorities, the reforms are not getting drilled down and the results of complying with compliances are not as expected. The major reason for low level of Compliance adherence is because of lack of awareness and will to comply.

India's Business Confidence index dropped by 12.8% in December 2019, which shows a decrease of 1.3% year to year in the previous quarter and over a period of last ten years the trends shows that there is some vacuum which is getting created in the minds of investor about the future of Indian Economy which is not so satisfactory. India's Global Competitive Index is down to 68<sup>th</sup> rank in 2019 and this is because of the reason that India is not able to cope up with the rapid growth witnessed by the other countries. Even though India is doing good at Macro level indicators but, the failures to implement the policy reforms at the bottom level has resulted in losing the opportunities which has been now tapped by the other countries. If we deeply analyse the context then the final conclusion which we can draw is that Ethics and Compliances are the two important components which can set right trajectory for future growth. Ethical codes and standards should be administered in each and every individual though a strong Ethical Value driven policy by the organization. This should flow to the entire business community irrespective of they being organized or not or formalized or not. A sort of Ethical Revolution needs to be carried out involving all the people in the country by creating awareness about their roles and responsibilities. Once we can inculcate ethical awareness to the masses then it will result in good practices in business which leads to strong and competitive business environment. A well deliberated code of Ethics and standards implemented in the organization creates a very good thrust for Compliance Management system. More compliant the business becomes more vibrant the economy grows. This sets trend for new opportunities and exploration of new business models. Strong committed ethical practices reduce corruptions at all levels and also puts a check on the corporate frauds.



### As a CMA, How can I contribute?

We professionals really have great responsibilities to build the nation. We are the people who act as catalyst between the Statutory Authority and the Corporate. We have to demonstrate exemplary service not only to help the Government and the Corporate but equally we are accountable for the society at large. If we look at our mission statement which reads, “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.”

1. As a CMA, I need to first abide by the “Code of Ethics” given by the Institute.
2. As a CMA member in general and in practice, I should strictly commit myself to the the Vision and Mission statements of the Institute.
3. As a CMA member in general – In Employment
  - I need to demonstrate high degree of ethical standards and codes at place of work.
  - I need to be committed to my employment and accountable for my role.
  - I need to morally act in my role by upholding the ethical values of the organization.
  - I need to be true and fair in discharging duties and should not collude with anyone in any fraud or concealments.
  - I need to follow the compliance calendar and make sure that all statutory requirements are completed in time.
  - I need to make sure that any notices from the statutory authority are well attended within the time allotted.
  - I need to make sure that I alert the management on any ethical misconduct noticed.
  - I need to ensure that my subordinates are aware of Ethics and Compliances.
4. As a CMA – Member in Practice
  - I need to discharge my duty as per the Institute guidelines and procedures.
  - I need to make sure that all the Statutory Compliances relating to my clients are taken care of without resulting in hardship to the client.
  - I need to alert the Management in case I notice any fraudulent or misrepresentation or concealment related issues so that management takes cautious decisions.
  - I need to make sure that I appear before the statutory authority on time and furnish all the information and documents which are true and fair.
  - I need to ensure that I educate my clients with latest updates on Statutory Compliances and other Regulations.
  - I need to make sure first that all the information and attachments submitted to statutory authorities for registration purpose is correct and true.
  - I can give suggestions and views on value additions which will benefit the clients in developing the business.
  - It is a very important role that I give necessary advice to my client on Optimum Use of Natural Resources in their operations.



## Conclusion

Ethics and Compliances are most important components for any business to grow. There are many codes and standards which are developed by international and national bodies but they lack in proper implementation and practice. Ethics are very important from the point of value addition and sets high standards to measure the business overall. In this competitive world where the resources are constraint and demands are mounting up it has become necessary to work towards optimum use of resources. Ethics and compliances helps in proper planning and using of resources as it addresses many issues which cause hardship to business. In order to achieve \$ 5 trillion in next 5 years, GDP should grow around 8% in real terms and the contribution of Manufacturing and Service Sectors are very important and they need to grow at a high pace. As a CMA, we can contribute towards building strong healthy organizations by making the organizations ethically and morally strong and also by ensuring the organizations to comply with Statutory Compliances. A highly ethical business environment will help in Investor loyalty and stakeholder satisfaction which finally drills down to increase in investment and social development.



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## Mission ‘Make In India’ .... For the World

### Abstract

*Mission ‘Make-in-India’ is not limited to import substitution, its aims at making India as world’s manufacturing hub. India has potential to cater to the world’s demands, with its natural advantage of cheap and skilled labour force, which will go a long way in ensuring availability of better quality product at reasonable price. Making India a \$5 trillion economy by 2024-25, requires some hard choices, strong political will power, by opening up economy by forgoing protectionism. India can speed up the growth by encouraging investments, improving skill set of available manpower, increasing exports and having business friendly transparent tax laws.*

### A. Introduction

It is projected that, next two decades belongs to India, if and only if, we put-to-use our abundant human capital and other resources for growth. More than anything else we need to change our mind set from ‘Make in India - for India’ to “**Make in India – For the World**”.

Currently, the **United States** is considered a ‘**Superpower**’ and **China** as ‘**Emerging Superpower**’. The European Union and Brazil, Russia & **India**, are most commonly described as being **potential superpowers**.

India’s dream of becoming \$5 trillion economy by 2024-25 will be a reality only if we are open to competition by **foregoing protectionism**. If smaller countries in Asia like Philippines, Myanmar Vietnam, Thailand, can compete by **increasing exports**, India had big potential to improve its share of world export of 1.7%. For this we need to change our old mind set of ‘export pessimism’.

India’s achievement of \$5 trillion economy will make India a **global economic powerhouse** moving it from the 7th to 3rd position in terms of current dollar exchange rate. This requires hard choices, **low cost and high quality imports** are essential to join global supply chains, which **will improve manufacturer’s skills and competitiveness**.

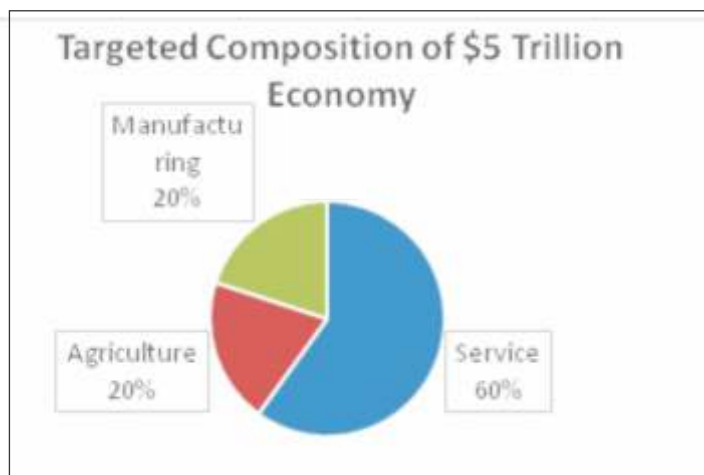


Figure 1 : Targeted Composition of \$5 Trillion Indian Economy

## B. Factors for Sustaining India's Economic Growth

- **Investment:** investment is seen as a critical enabler for innovation, rapid **productivity growth**, and new **technology** that in turn will help in increasing **jobs growth**.
- **Startups:** Development of **startups** is a critical strategy for creating **value-added and skilled jobs growth**.
- **Savings:** level of savings equals the level of **investment**, as investment needs to be financed from saving so If people save more, it enables the banks to lend more to firms for investment.
- **Exports:** Exports play an important role in influencing the level of **employment** and the **balance of payments** that in turn accelerates economic growth of the nation.



\*\* The Harrod-Domar model is a Keynesian model of economic growth, which is used to explain an economy's growth rate in terms of the level of saving and productivity of capital.

Figure 2 : The Harrod-Domar model for explaining factors for sustaining India's economic growth

If India continues on the existing path, the \$5 trillion dream, by 2024, will be a difficult task. On the other hand, encouraging private investments will enable India to reach the target by 2024. To encourage private investments, the tax and regulatory laws need to be more transparent and growth-oriented. India could and should aspire to **double-digit sustained growth in all sectors of the economy**, which will offer employment to masses.

## C. Number Game

<b>Current Status</b>	<ul style="list-style-type: none"> <li>• India's current GDP : 2.72 Trillion</li> <li>• 6th largest economy of the world</li> </ul>
<b>Objective</b>	<ul style="list-style-type: none"> <li>• \$5 Trillion economy by 2024-25</li> <li>• 3rd largest economy of the world</li> </ul>
<b>Required Growth</b>	<ul style="list-style-type: none"> <li>• Nominal growth of 12 % GDP growth</li> <li>• If inflation is contained within 4%</li> <li>• Net growth rate of 8%</li> </ul>
<b>Estimated Rate</b>	<ul style="list-style-type: none"> <li>• IMF revised India's GDP growth rate projections to 6.1% from the 7%</li> <li>• World Bank original projections @ 7.5% revised to 6%</li> <li>• RBI original projections @ 7.4% revised to 6.1%</li> </ul>
<b>Required Rate</b>	<ul style="list-style-type: none"> <li>• Net growth rate of 10.1% is needed from 2021-22 onwards to achieve the objective of \$5 Trillion economy</li> </ul>

Figure 3 : India's Growth Rate



## D. Critical Challenges to be Addressed and the Way Forward...

### D.1 Culture of Innovation

“**Innovation** can play a big role in economic growth,” **Breakthrough ideas are an essential driver of progress** that benefits consumers, businesses, the economy and the nation as a whole. Innovation will need to play a crucial role if India is to achieve the ambitious goal of becoming a \$5 trillion economy by 2024. For example, innovation in the telecom sector, has led to significant growth cutting in all sectors of the economy. Innovation in agriculture, education and healthcare will help the country grow and will also help to improve living conditions. In economic terms, innovation describes the development and application of ideas and technologies that improve goods and services or make their production more efficient. A classic example of innovation is the development of steam engine technology in the 18th century, which resulted in steam engines being put to use in factories for mass production and has also laid to revolutionise rail transport. India needs to cultivate culture of innovation and need to reform education system accordingly.

### D.2 Ease of Doing Business

To become a \$5 trillion economy, India’s **GDP needs to grow at 9% with Inflation restricted to 4%**. Due to slowdown, growth rate will be ~6% for next 2 years, making target harder.

India is ranked at **63rd position** among 190 countries, on the World Bank’s ease of doing business ranking. Although, India continues to maintain its first position among South Asian countries.

The World Bank has commended the reform efforts undertaken by India. Significant improvements have been registered in resolving insolvency, dealing with construction permits, registering property, trading across boards and paying taxes indicators. India aims to achieving 50th rank in ease of doing business from 63.

This needs bold reforms like removal of red tape roadblocks, by ensuring ease of doing business. **Digitalisation** of all permissions will bring in transparency and will ensure speed with lower costs. It is also rightly mentioned that the tax authorities should be given realistic tax recovery targets. It is observed that unrealistic targets often leads to **tax terrorism**

### D.3 Balancing Development and Environment

A new World Bank report finds that environmental degradation costs India \$80 billion per year or 5.7% of its economy. So, \$5 trillion dream must take the path of caring for our mother nature

In our agricultural dominated economy, we need to treat our **farmers as businessman** with **predictable export-import pricing and firm policy**, which will require good amount of political will power to change the policy.

Recent researches of Grantham Research Institute on ‘Climate Change and the Environment’ of the London School of Economics, have asserted that technology development is essential for cleaner and greener environment and systems. World Bank economists are arguing that for an environmentally sustainable future growth, **India needs to value its natural resources and ecosystems for superior policy framing and decision-making**. Presently India is witnessing the natural disasters at a higher frequency, fatal heat waves, the worst water crisis along with worst air quality.

It is ironical that, the agricultural sector that employs more than 50% of the Indians, but struggles with the huge increment of input costs in terms of chemical fertilisers, pesticides, decreasing farm profitability, resulting in farmers’ suicide, food and nutritional crisis among rural communities, increasing rural unemployment, etc.



## D.5 Skilled Manpower and Labour Laws

As per Economic Survey of 2018-19, the share of working age population will increase from 50.5% in 2011 to 59% in 2041, thereby adding 14 crores to the workforce in 20 years

India need to reform rigid labour laws that protect jobs and not workers. Companies have to survive in downturn either by cutting labour cost or go bankrupt. Developed nations allow employers to 'hire and fire' but protect the laid off employee with a social security. '

India should have a labour welfare fund which is formed with the funds from employers and government which will support unemployed during unemployment period and offer training.

India need to offer more job opportunities but not life time assured job.

National Skill Development index estimates only 5% of Indian workforce have formal skill training whereas South Korea @ 96% and Germany @ 76%

## E. Conclusion:

The pathway to \$5 trillion exports is bumpy. If India continues on the existing path, the \$5 trillion dream will remain a mirage, hence India need to carry out the crucial internal reforms, with a strong political will, that will make India an 'Emerging Super Power'.

India should take advantage of its **current, favorable demographics** it is never likely to emerge as an upper-middle-income economy with a **prosperous and thriving middle class.**

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# **CMA – A Cryogenic Force of Future Mission 5 Trillion**

## **Abstract**

*CMA acts as cryogenic force of future 5 trillion mission of PM Narendra modiji's aspiration, in different areas as registered valuation, Big data and Analytics, Arbitration, Artificial intelligence (AI), Insolvency professional, Digital manufacturing, Quantum computing, and Block chain, highly productive, showing super performance even in extremely cold and stagnant situations, generating adequate force, pushing economy, catalyzing GDP growth by strategic thinking as Captains in Government, stalwarts in Business management Leadership, aligning entities themselves in Switching Governance Mechanisms in board Rooms from Compliance oriented to Value Creating approach, Sustainable Development Goals, reorienting Management Systems and implementing Sustainable Strategies in different Sectors.*

Recently, Prime Minister Mr. Narendra Modiji aimed for a 5 trillion dollar economy by 2024. To attain this target, our GDP needs to grow steadily over the next few years. However the major challenge is to attain this type of ambitious growth in an environment-friendly way in our present era of scenario crisis. Our PM Modi aligned every topic of the budget with how India will attain 5 trillion economy. "Everyone is a stakeholder in this country," PM Narendra Modi said while addressing the BJP workers in Varanasi. Prime Minister Narendra Modi's Independence Day speech aspired that India will become a \$5 trillion economy in the next five years. He said, "From 2014 to 2019, we became a \$3 trillion economy. Before that, in the last 70 years, the country was a \$2 trillion economy. We added \$1 trillion to the economy in just five years. Now we are looking forward to making the nation a \$5 trillion economy." USD 5 Trillion Goal for 2024 set by Honourable Prime Minister of India requires a huge burst of energy to propel various engines of the economy. The goal of USD 5 Trillion can be achieved through a clear strategic thinking by the Captains in the Government, Business and Management Leadership. The companies and business entities need to reorient their processes for executing the strategies of the new economy sustainably. This requires the corporate and non-corporate entities to align themselves with the new visions such as Switching Governance Mechanisms in the Board Rooms from a Compliance oriented to a Value Creating approach; Adapting Sustainable Development Goals in Medium, Small and Micro Enterprises; Reorienting the Management Systems towards Sustainable Strategies; and Implementing Sustainable Strategies both in the Private and Public Sector. In today's globally competitive business environment, all the constituents' economy have to work in sync with each other and play an active and cryogenic role to propel various engines of the economy and generate sustainable momentum for the progressively faster economic growth of the country.

Cryogenics means relating to or involving the branch of physics that deals with the production and effects of very low temperatures. Cryogenic technology gives low-temperature applications in food sector. There is a tremendous scope for application of cryogenic technology in food processing and preservation. Cryopreservation is the only viable method available for long-term preservation of both plant and animal origin species, such as dairy products. Cryogenic preservation of food offers great promise for the country, both for export and for domestic consumptions, due to assurance of the food quality and safety. ICAI, 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. ICAI 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 ICAI 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 that - **CMA – A CRYOGENIC FORCE OF FUTURE MISSION 5 TRILLION**. CMAs have got lot of opportunities in the recent scenario making them **Force of the future cryogenic force**, which is as follows: -

PROFESSIONAL AREA	OVERVIEW	ROLE OF MANAGEMENT ACCOUNTANTS
Registered valuer	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.	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.
Big data and Analytics	To get overview of patterns of business operations which is not possible in human course of action	Application of business analytics in aiding decision making and optimization of physical and human resources.
Arbitration (A form of alternative dispute resolution (ADR))	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).	CMA can take role as arbitrator, after completion of certified course enlarging the scope of a CMA.

Artificial intelligence (AI)	Automation, robotics, cobots and machine learning, shortening production cycle, ease, brevity and speed of doing business and revolutionizing business models and innovation	Application in Project management, logistics and supply chain solutions, FMCG distribution, risk mitigation and strategy formulations.
Insolvency professional (Insolvency and Bankruptcy code - IBC)	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	Opportunities to the CMAs who can now obtain their deserved professional credits enlarging the scope and role of a cost accountant.
Digital manufacturing	Better network amongst business partners	Leveraging on it for value creation across the value chain.
CMAs are in Indian railways	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.
IOT – Internet of things	Connecting devices for better operations, augmented intelligence, predictive maintenance and timely scheduling	Pricing: Insurance premium on policies depending on the usage pattern/risk assessment.
Quantum computing	Speed and accurate computations	Relieves the finance professionals from mundane work so that of strategic business development.
Block chain	Decentralized data base which is fast, transparent, cost effective, and temper proof.	Participate in solution development using block chain and help in applications in BFSI and real estate sectors.

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 1<sup>st</sup> July 2017. 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. 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 cryogenic catalyst 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:-** A CMA has his vital role in 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 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 many of the areas like Cost audit, advising on Cost records maintenance, Special audit and certification under GST regime, Internal audit & Concurrence audit, Stock audit for bank, 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 many of the areas like 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 in many areas like 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,

Apart from these, there are many emerging areas for CMAS like 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

**Conclusions:** - The Management Accountants act as a cryogenic force who are very highly productive and show super performance even in extremely cold and stagnant situations so as to generate adequate force that is required to give a big push to the economy. The above will not only help India to become cost competitive to achieve global scales; but will also catalyse wider employment generation and GDP growth with simultaneous advancement towards our achievements in sustainable development.

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## **The Role of Cost and Management Accountants in the Indian Economy as Cryogenic Force**

### **Abstract**

*It is pertinent to note that the role of CMAs in India is very important in all practical situations and processes. Therefore, Mission 5 Trillion – CMAs as a Cryogenic Force is to be viewed in a systematic manner in achieving the goals and objections of the Nation. The growth of the Indian Economy depends on Cost Savings and cost Efficiencies in all the sectors of the Indian Economy. Good Corporate Governance with adequate utilisation of services of CMAs will be helpful in sustainable growth of the Nation. India will become self sufficient and self reliance to cater the needs and means of the Population of the Country. The Management of the various sectors of the Nation is possible with the help of Professionals like CMAs with their enormous and efficient skills.*

### **Introduction**

The Global Summit 2020 play a very important role in the Indian Economy focussing MISSION 5 TRILLION –CMAAS A CRYOGENIC FORCE. It is a professional expertise which ensure transparency and best governance which is totally required by the Government. Cost and Management Accountants with their enormous Professional Skills can build a strong base for India to meet the International standards in developing knowledge, application, analysis, synthesis and evaluation. In the long run it builds efficient management, strategy regulatory functions and financial Reporting. The CMA professionals inculcate skills for employability. Moreover, the profession is mainly increasing emphasis on Accounting, Analysis, Reporting and Control, Strategy, Performance Measurement, Corporate and allied Laws, Rules, Regulations, Policies, Taxation, Ethics and Governance. It is stated that for every success of business there is a CMA. It is to note that CMAs play a pivotal role to ensure the very success of the business.

### **CMA AS A CRYOGENIC FORCE**

CMAs are considered as a cryogenic engine and it is the last stage of space vehicles which makes use of Cryogenics. A Cryogenic engine provides more force with each of its skills as compared to other propellants. In simple science it acts as solid and liquid propellant rocket engines and it is more efficient. Therefore, it is the production and behaviour of the skills which can act in any kind of situations, residual stresses, grinding forces, freezing conditions, different political situations and any environmental conditions.

### **ROLES AND RESPONSIBILITIES**

The CMAs have the following roles and responsibilities :

**1.As Practitioners:** The Cost and Management accountants (CMAs) can advise in maintenance of Cost records, conduct of Statutory Cost Audit, Internal Audit, Concurrent Audit and Stock Audit of Banks, Compliance Audit of Reserve Bank of India, Special Audit under Customs Act, GST Act, Exim Policy, Surveyor and Insurance Advisor in Insurance Industry, Certification Works Special Assignments by the

State or Central Government, Court of Law, Labour and Administrative Tribunals, Government statutory Bodies and other regulatory Bodies. CMAs can be the Professional in Insolvency and Bankruptcy Code.

**2. As Advisors and Consultants:** The Cost and Management accountants are responsible and their roles are very important in Financial Planning and policy determination, Cost Management Planning and Policy, Capital Structure Planning and Policy, Working Capital Management, Project Reports and Feasibility studies, Budget and Budgetary Control, Supply Chain Management, Inventory Management, Market research and Demand Studies, Total Cost Management, Total Quality Management, Cost Control and Value Engineering Analysis, Recovery Consultants in Banking Sector, Taxation and Project Management, Business Evaluation and Financial Services. CMAs act as Trustee, executor, Administrator, Arbitrator, Receiver Appraiser and Valuer.

CMAs can advise on Cost Control and Cost reduction Techniques, Management Information and reporting, Operational and Strategic Management, Quality, Environmental and Energy Audits, Mergers and Amalgamations, Valuation of Assets and Business Organisations, Strategic Positions and Integrated Managements System Analysis and Design, Fund's Portfolio Management etc.,

**3. JOB OPPORTUNITIES FOR CMAs:** CMAs are employed in the areas of functions such as Financial Management, Cost Management, Project Management, Insurance Sector, Banking Sector, Telecom Sector, Textile Sector, Automobile Industries Power Sector, ISRO, Manufacturing and trading Organisations, Transportation Industries, Logistics Management, Infrastructure Organisations, Information Technology and Biotechnology Industries, Service Sector Organisations, Central and State Public sector Organisations, etc., Fund's Portfolio Management Organisations, Processing Industries, Central and State Government Departments/ Organisations, Private and Public Sector Organisations, Defence, Navy and Air Force Organisations. Job opportunities are plenty in National, International levels and across the Globe.

#### **MISSION 5 TRILLION- CMAs AS A CRYOGENIC FORCE:**

The Honourable Prime Minister of India has high hope for building up the energy to boost up the Indian economy and viewed the CMAs to act as cryogenic force in the context of Space Technology. Cost And Management Accountants as Catalysts in India work like twinkling Stars in the Sky and become powerful source of Cryogenic Force for the Economic Growth and sustainable development of Indian Economy. The CMAs have enough capabilities and capacities to withstand in any kind of situations for all factors of Growth in Indian Industries and work as Cost drivers with proper decision making approach for the futuristic growth. India will become role Model in the entire world. In the Space Technology India has proved the Cost Leadership with appropriate Space Strategies. CMAs will certainly be helpful in achieving the goal of 5 Trillion Levers with best Strategic applications and methods to achieve positive results in the growth of Indian Economy.

The CMAs will take care with efficient skills for up gradation in all the sectors of India's growth. The Note Ban strategies, implementation of GST, globalisation processes, Digital Banking, Joint Venture Projects, Exim Policy, rationalisation of various Acts, Rules, Policies and procedures, Augmentation of gaps in the International Business deals have been adopted on par with International Standards for which the CMAs role is very important to the Nation. This ensures sustainable growth in the Indian Economy. The Technological, Socio-Economic, Environmental and Financial parameters show the progress and growth of the Indian Economy.

The Health and Wealth of the People in India is also growing for which the CMAs strategic Plans and cost efficiencies and best cost practices are important in the context of change of Government Policies in Banking sector, use of Plastics also contribute to the greater extent particularly in Agricultural and Horticultural Sector, Taxation and Clean Governance and Transparency in Administration of the Country. The Cost practices are very helpful in achieving the goals in defence sector with cost saving tools and methods. The Cost Audit plays a very important role in all the sectors of the Indian economy.



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## Cost and Management Accountants – Cryogenic Force for \$ 5 Trillion Economy

### Abstract

*India has poised to grow to \$ 5 trillion economy by 2024-25. From the present level of \$ 2.72 trillion it looks distant reality and hard to achieve. Unless India gets a cryogenic force, which can give the rocket thrust as well as place the same into right orbit through controlled action. Cost and management accountants are better equipped with the techniques which can not only bring the required thrust in the measures taken by the Govt. but also control the action through knowledge of controlled propulsion.*

While delivering a lecture on ‘Indian Economy: Challenges and Prospects’ at prestigious Columbia University’s School of International and Public Affairs, Finance Minister, Nirmala Sitharaman mentioned that India is a \$ 2.7 trillion economy in 2019 compared to \$ 1.7 trillion in 2014. This means the economy has added \$ 1.0 trillion in the last five years and expressed that the present Govt. has set a vision to become \$ 5.0 trillion by 2024-25. She also emphasized that a \$ 5.0 trillion economy will make India a global power house moving it from the 7<sup>th</sup> to 3<sup>rd</sup> position in terms of current dollar exchange rate.

At the same time our Prime Minister has also shown the way India can fulfill its mission by 2024-25. The growth paths shown by the Hon’ble Prime Minister are – Increase in per capita income, sanitation, agricultural growth, farmers’ welfare and creating of infrastructures. Prime Minister has explained that per capita income in developed countries were on growth path when they were transforming themselves from developing to developed economy. India needs to follow the route. The sanitation program will lead to less spending by the poor people in terms of health care and growth in agriculture will generate more income to the farmers who are the backbone of this country. Development in infrastructure projects and creation of infrastructure will lead to quick movement of goods making the realization of product value in a timely manner which will help boosting the financial sectors as well.

India’s present position in the global GDP is –

COUNTRY	GDP IN TRILLION \$	% OF Global GDP
USA	20.49	23.60%
CHINA	13.41	15.50%
JAPAN	4.97	5.70%
GERMANY	4.00	4.60%
UNITED KINGDOM	2.83	3.30%
FRANCE	2.78	12.80%
INDIA	2.72	
ITALY	2.07	
BRAZIL	1.87	
CANADA	1.71	

*\*Source: IMF’s World Economic Outlook Data – April, 2019*



From \$1.7 trillion in 2014 to \$ 2.72 trillion in 2019 is a jump of around 63% and present target of \$ 5 trillion in 2024 is a jump of 54%. This seems achievable although with the increasing base, the percentage increase reduces the possibility and makes it more difficult to achieve. But the Govt. is determined to achieve the target and set the vision for 2024-25. It is also true that without having set a target no goals can be achieved and the sources cannot be fully utilized.

In order to achieve the mission target of \$ 5 trillion economy, we need to have -

- Higher GDP growth rate;
- Downward inflation rate
- Fixed investment
- Available skilled manpower
- Low cost financing

But we are stuck with the winds of Trade wars, deteriorating WTO arrangements, volatile crude price and rising export impediments. Our recent decision to not become the part of RCEP (Regional Comprehensive Economic Partnership) and various FTAs with neighboring countries are also obstructing the growth prospect of export. Increasing imports are affecting domestic production. In such economic environment, success of the mission seems distant reality.

This can very well be compared to the India's space mission program when the founder fathers of the space program had the vision to conquer the space but were devoid of the vehicle required to launch the same. A cryogenic rocket was the need at that time and rest is the history of how the country overcomes the difficulties with the devotion and determination of so many professionals could break-through the process to manufacture the cryogenic rocket indigenously. Similarly, we need a vehicle to achieve this target of \$ 5 trillion economy and also need a thrust like the cryogenic force with controlled thermodynamics and entropy. The strength of the force will not only take the vehicle to the higher trajectory but also place the same in the right orbit.

Prime Minister has already outlined the path through which we can bring this growth. We need to develop various ways and means to reach to the goals through this outlined direction and for the same our country needs dedicated force who will contribute to the thrust and monitor the growth continuously and check the reality of the economy on a real time basis. Govt has already taken up several measures to boost the economy and also strengthening the system. Some of the measures taken to bring the economy back to the growth path are –

1. **Banking sector reforms**: Wide spread reforms in all public sector banks to make this sector regulatory compliant. Merger of two or three banks taking place to combat the capital adequacy ratio which has gone down the years due to increasing NPAs. The Non-performing assets have been noted and recovery proceeding either through NCLT or through bankruptcy code has started. Even guarantor assets are being seized and auctioned to recover the banking loans which have not been serviced for long or are declared as bad debt. Results of the reforms have become visible as the lending capacity of banks have grown and more loans and advances are given.
2. **Financial Sector reforms**: In the financial sector reforms, Govt has introduced procedures and codes for MSME, NBFCs and also introduced the Bankruptcy code which has received wide spread acceptance by the industry and creditors become less worried about their financial security.
3. **Domestic Trade reforms**: Govt. has made the biggest domestic trade reforms through introduction of GST which has facilitated all the manufacturers and traders. The age-old system of forms and taxation has gone and the new GST process is very simple. Other domestic trade reforms include the digital payment system and incentives for making digital payment.



4. **International Trade**: The progress towards International Trade has taken back seat due to on-going trade war of USA Vs. China. Declining to join RCEP and monitoring the various FTAs and anti-dumping procedures have made exports easier. Though not much has been achieved in this front, India needs to think about a long term strategy to make exports easier. India needs to achieve at least \$ 1 trillion mark in exports compared to the present \$ 0.5 trillion.
5. **Impetus to agricultural sector**: Farmers in the country are not able to make both ends and as a result there are lots of suicides etc. taking place. This has reduced the contribution to economy in this sector. Though the same is not worrying as compared to the other countries the downfall is negligible. Earlier Govts. resorted to waiver of Farm Loans but this Govt. has made a fixed formula for the Minimum Procurement Price (MPP) for the farmers which are 150% of the cost of the produce. This is expected to give boost to improve the conditions. The biggest challenge in this sector is to implement the process of determining the cost of production and fixation of MPP.
6. **Creating Infrastructure**: Govt. has invested a lot in creating the infrastructure. The roads have been made throughout the country, the telecommunication and internet facilities including video conferencing even in smaller town has changed the communication landscape. Investment in surface water transport, new train lines, aviation sector, industrial corridors etc. have also given result.
7. **Boosting domestic production (make in India)**: Domestic production is the traditional way of boosting country's GDP. The ease of doing business and labor laws amendment has given rise to foreign investments in manufacturing sector. Apple has started manufacturing in India and others are on the way. Continuous growth in the domestic production need to be maintained to avoid any 'Stagflation'.
8. **Encouraging new entrepreneurship (startup India)**: India is having a good skilled and young workforce. This workforce can be utilized to create value for the country by creating entrepreneurs who will bring economic prosperity to the country and also generate employment. Startup India project was the need of the hour where new entrepreneurs get benefits of easy loans and tax benefits.
9. **Training and development of skilled manpower (skill India)**: when we are on the growth path country will require lot of skilled manpower. Training and development of manpower and making them skilled worker requires special emphasis from the govt. For development of this sector Govt has created a new Ministry and also started a new program called skill India.
10. **Service sector reforms**: The service sector is the key driver to Indian economy and it has substantial contribution in GDP. The expansion of service industry is dependent upon the boost in capacity building and favorable policies. The incentives to export of services and the trade barriers to services have also promise good result and is poised to greater contribution in the country's GDP.

Cost and Management Accounting (CMA) is an elite accounting profession which aims to maximize the profit by managing the revenues and expenses. Its primary objective is to facilitate the management in decision making by providing data and reports and helping them to form the strategies for long term profit and growth.

Major activities which are specialized and practiced by CMAs are –

- a. **Reporting**: Reports prepared by the CMAs for various assignments are of high standard and contains relevant information beyond the traditional data analysis. The analysis of management decisions, which is the primary expertise of CMAs, comes handy in various business decisions. Sometimes such reports filed to the Govt. also used for policy decisions.
- b. **Aid in Decision making**: Decision matrix requires three major inputs – data analysis, alternate solutions and cost effective methods. CMAs having expertise in all the three are better equipped to come to aid of business in decision making and making long term strategy.

- c. **Planning and formulation of strategies**: Planning and strategy formulation is the key to the success of any enterprise. CMAs in most of the organizations are part of the planning and strategy group due to their analytical ability and functional knowledge.
- d. **Controlling performances**: Performances are key to success but over performance may lead to destruction. The limit to which this is required is better analyzed by the CMAs in their reports. At times over production may lead to losses due to high overhead costs. Only CMAs have the ability to arrest these losses and plug the loopholes.
- e. **Motivating employees**: Though typically this is a HR job, CMAs, through various reports highlight the performance of a group of individual or a person who has contributed to the profitability of the organization or has created value for the organization. Such recognitions motivate employees towards better results.
- f. **Indirect Tax initiatives**: Various initiatives have been taken by the CMAs during audits and Govt. has also taken cognizance to the various reports by CMAs where in changes has been suggested. Some of them even made it to statute. The GST implementation throughout the country was the real challenge faced by the CMAs which has passed the litmus test.

Cost and Management Accountants (CMAs) are better equipped to contribute to the cryogenic thrust to the vehicle already launched by the Govt. in various sectors. But the general rule of the universe is that everything eventually runs from order to disorder and CMAs are equipped to deal with this entropy and steer clear the direction of the various measures taken by the Govt. to boost the economy through their professional knowledge, ethics and above all their ability to intervene in the multi discipline and various sectors of the economy. This enables the Govt. and the business houses to take right decision at the right time thereby increasing the gap between the revenue and expenses.



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## **From Control to Strategy Costing for \$5 Trillion Economy**

### ***Abstract***

*In the history of evaluation of business scenario, from the dawn of industrial revolution to the era of artificial intelligence, different discipline of knowledge emerged. Costing is prime one among them. Initially, when it was a producers' world, costing was used as a control tool, but gradually it moved from helping the business to take operational decision to now taking strategic decisions.*

As we know, manufacturing moved to mechanisation and automation during industrial revolution. This led to:

1. Labelling and Identification of costs into Variable and Fixed
2. Multi product operations
3. Multi location organisations
4. Large scale competition
5. Economies of Scale
6. Global markets

All these needed information for decisions, which was not available through accountancy. Thus emerged the profession of costing as a formal and distinct skill. Manufacturing had derived gains through division of labour and specialisation. Similarly, as Costing became a specialised skill, managements gained through evolution of the skills and timely availability, as costing became distinct profession as compared to accounting. The owners started using this information for:

1. Product Pricing – for domestic & export markets
2. Product mix
3. Budgetary Control
4. Cost volume Profit optimisation

All these leading to the goal of Profit Maximisation. Over the years the industrial scenario changed:

1. Rise of multinational organisations
2. Product differentiation
3. Premium products for Super Rich
4. Switching between fixed and variable costs through outsourcing, etc
5. Post Manufacturing operations gaining importance
6. WTO and Global trade



These led to further usage of costing tools to determine the best possible ways to reduce costs, increase profits and gain market share. Thus we saw emergence of conflicting goals like short term vs long term profitability, combating and eliminating competition, global scale factories, etc. Costing gained prominence and moved up from pricing and controlling tool to strategic tool.

### **COSTING & IT:**

The increase in computing power and affordability thereof led to emergence of software industry which is all encompassing the trade and industry. This has led to:

1. Enterprise wide software which has led to decompartmentalisation of data
2. Softwares which are much more than accounting packages
3. Built in tools to determine historic costs, budgetary control as also sensitivity analysis
4. Real time availability of information and reports
5. Consolidation and control over operations through these, across locations and geographies

The historic need of a team to calculate and control costs has been taken over by ERP. This has helped in focussing from routine to strategic use of costing. Also, in present day scenario, Costing can be labelled as a speciality within Data Analytics.

### **Millennium Changes:**

Since the turn of century, we are seeing:

1. Intellectual Capital and Intangible Assets getting centre stage
2. Emergence of internet as a business enabler
3. Easy availability of capital to start/scale up businesses
4. Software as a service (SaaS) models
5. Disruption of existing business models
6. Cloud storage

These have resulted in changing management focus from traditional thinking to out of box and disruptive thinking.

However, costing has been one constant across all scenarios, since beginning of industrial revolution to present scenario, albeit it has changed with the times.

### **Costing for \$5 Trillion Economy:**

The country aims to achieve this goal by 2024. To achieve this, all sectors of the economy will need to put in their best. Broadly, we may divide the economy into four sectors:

- A. Agriculture
- B. Manufacturing
- C. Services
- D. Infrastructure

Let us look at each of these and see the need of costing for the same.

### **Agriculture:**

Agriculture sector includes Agriculture (Agriculture proper & Livestock), Forestry & Logging, Fishing and related activities.



As the country becomes more affluent, the demand for food will increase. As we know, the government is aiming to double farmers' income. The country also needs to ensure stability and sustainability of this sector for food security of the nation.

The central government is announcing Minimum Support Price for 22 crops and Fair & Remunerative Price for Sugarcane. The government is also looking at the farmers as exporters and not just as mere producers.

The MSP, announced by the Government at the beginning of the sowing season is on the basis of the recommendations of the Commission for Agricultural Costs and Prices (CACP). CACP inter alia considers cost of production for each crop. However, the cost for each region and each type of land differs and is also dependent on availability of resources. The farmers need to:

1. Consider cost of all the requisite inputs, including imputed costs, such as rent for land and self-employment, etc.
2. Costs and margins of other crops (including fruits and vegetables) which can be grown.
3. Use of land beyond farming - for livestock and other activities as well.
4. Understand post production operations to get better prices as also for exporting, e.g. Cold storages help farmers to hold on to produce for getting better prices.
5. Get knowledge of prevailing prices in nearby markets to know which offers best price.

#### **Industry (excluding Infrastructure):**

The age of Automation and Artificial Intelligence is taking over traditional manufacturing. Also, business models are changing. Disruptors are challenging established goliaths. To grow in such a scenario is challenging all conventions. The industrialist needs to:

1. Decide between various modes of funding: Trade off between risk / ownership and cost of capital
2. Long gestations: Many companies are bringing new products/services which have a long gestation before they break-even. Proper costing applications help in working out appropriate pricing and business model to manage conflicting goals of volume vs profit.
3. Appropriate selection of technology, as also ability to constantly upgrade:  
Need to work out Product Life Cycle Costing over shorter horizon.

As can be seen from the above two, there is a conflict between short and long term perspectives, both of which need to be balanced.

4. Own Manufacture vs Outsourcing: To keep pace with fast changing world, many now prefer to outsource manufacturing, which was considered as core competency, no longer so.
5. Focus on Post Manufacturing operations: While costing has traditionally looked at manufacturing area, it is being increasingly used for Corporate and especially marketing operations. The principles of capacity and utilisation are also being applied here.

Activity Based Costing has been useful tool for this.

6. Intellectual Capital & Intangible Assets: Companies are now creating value through these. Ways of creating these assets and ascertaining cost thereof as also prioritising the tasks need costing expertise to quantify the same.
7. Owning vs Leasing: many companies, especially startups, prefer to stay light on assets and use funds for creating customer base or technology.

**Services:**

As the economy grows, share of services in GDP will increase. Also, with rising income levels, leisure services as also premium healthcare and education will be sought after. India has been exporting software services in a big way and this will continue. We may also see, some other sectors gaining in export of services. Many feel that costing is not relevant for services and can't be applied to services. The truth is far from it. Moreover, in many cases, services are perishable and hence proper pricing and high utilisation are the key to success, as can be seen from Hospitality and Healthcare industries.

Provision of services have also changed in recent years and we are seeing a lot of services being provided from remote locations and thus for many services, location is not relevant. Hence these can reduce costs by moving to low cost locations/working from home, etc.

Most of the above mentioned issues relating to industry are also applicable to services.

**Infrastructure:**

This sector has its own uniqueness, often with four different stages in life cycle – Build, Own, Operate & Transfer. The major characteristics are:

1. Different ownership models: Government owned, Public Private Partnership, Private ownership. These also, can be for only for setting up project, operating for a life of project or for fixed number of years. Ownership transfer from operator to government after specified period, etc.
2. Revenue Models: these may be controlled by regulator, free pricing, cost+ basis, assured return, etc.
3. Investment: This may not be on same lines and proportion as per ownership.
4. Long Duration: Often investments and returns are to be recovered over long time frame.
5. Quasi Monopoly: Often the project is given monopoly for a fixed number of years.
6. Maintenance: The projects often need maintenance/upgradation, which needs to be inbuilt in revenue.
7. Special Laws: Some services are governed by special laws, e.g. Electricity.

Thus, costing becomes very crucial for both government/regulators and private sector participants as profitability and survival often hinges on proper costing. Product Life cycle Costing can be very useful for infrastructure projects.

**Conclusion:**

Costing has come a long way from factory and production costing to support for strategic decision making. The tools and techniques of costing have kept pace with the changing world. We have seen emergence of Activity Based Costing, Target Costing, Balanced Score Card, Benchmarking, Product Life Cycle Costing, Asset Life Cycle Costing, etc. which are helping users across all four segments.

As disruptions and environmental awareness gain centre stage, the profession needs to come up with newer tools and costing models to strategise for the same.



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## Role of CMA's in Corporate Governance, Fraud Detection and Whistle Blowing

### Abstract

*CMA's in Industry are employed in very senior positions in all the sectors of the Economy. To be the cryogenic force in the future they ought to be aware of their social & ethical duties also. They are expected to be the main catalyst in the corporate governance process and should take a pro-active role in implementation of corporate governance measures, Forensic accounting and Auditing and to blow the whistle whenever required. Most of the financial and other scams took place because the professionals in many cases did not blow the whistle at the proper time. The present article highlights this very important aspect and the expectations of the economy from the CMA's in Industry*

We need the freedom of association, information and to challenge and monitor Government & other Corporate Officials. Without it, democracy becomes a ritual. Napoleon once said “**The World suffers a lot not because of the violence of the bad people, but because of the silence of the good people**”. We the Cost & Management Accountants (CMA's), belong to a totally different breed of professionals. We are qualified, trained & educated in such a way that we have the capacity & the potential to be employed in various vital positions across varied Government and Private Organizations.

The Cost Accountants are the foundation, a pillar on which enterprises are built and grow. The specialized education & training by the Institute (Institute of Cost Accountants of India) makes us a multifaceted professional. We are expected to be the main driving force in all important economic activities, as we create the values, enable values, report values and are the value preservers. Naturally, it is expected that the Cost Accountants in employment (particularly in the corporate world) should deliver his/her best in corporate governance, fraud detection and in whistle blowing in the larger interest of the society for a sustainable future.

**Corporate Governance in India** is a set of internal controls, policy and procedures which form the framework of a company's operations and its dealings with various stakeholders such as customers, management, employees, government and industry bodies. The framework of such policies should be such as to uphold the principles of transparency, integrity, ethics and honesty. Corporate Governance is the soul of an organization and must be adhered to while indulging in any business practices. Corporate Governance lays the foundation for behavior of the company, the utilization of resources, product/service innovation and overall corporate strategies. ARTHASHASTRA tells that self discipline for a king and the six vices which the king should overcome. -lust, anger, greed, conceit, arrogance and foolhardiness. In the present corporate scenario this is a very vital aspect which highlights the ethical aspects of businesses and the personal ethics of the corporate leaders. Corporate Governance, pillars on transparency and fairness in action of the business leaders satisfying accountability and responsibility towards the stakeholders.

On the other hand, “Fraud is a deception or misrepresentation that an individual or entity makes knowingly so that it would result in some unauthorized benefit to the individual or the entity as a whole”



(Association of Certified Fraud Examiner). Fraud can also be conducted as per Section 447 of the Companies Act 2013. It includes any act, omission, concealment of any fact or abuse of position committed by any person with the connivance in any manner, with intent to deceive, to gain undue advantage or to injure the interests of the company, whether or not there is any wrongful gain or wrongful loss. The term “ wrongful gain “ means gain by unlawful means of property to which the person who is gaining, is not legally entitled and “wrongful loss” means the loss by unlawful means of property to which the person who is losing is legally entitled. (Explanation to section 447 of the 2013 Act) Frauds can also be committed as defined in the SEBI Act 1992. There are various reasons behind committing fraud. Few of them are as follows:

- 1) *Human greed*
- 2) *Lack of Transparent mechanisms in the Company*
- 3) *Poor MIS*
- 4) *Excessive complex organizational structure*
- 5) *Poor Accounting and Internal control systems*
- 6) *Weak management and absence of clear moral direction from the top management*
- 7) *Weak and non –independent Internal Audit department in the organization*
- 8) *Complacent Attitude of Executives with the mindset that “ fraud will not happen here”*

Some of the important and noteworthy financial scams that took place in India (post Independence) are:

- a) *1948: Jeep Scandal Scam*
- b) *1956: BHU Funds Scam*
- c) *1958: Haridas Mundhra Scam*
- d) *1992: Harshad Mehta Scam*
- e) *1997: Hawala Scandal*
- f) *2009: Satyam case*
- g) *2014: SAHARA SEBI case*
- h) *2018: PNB Scam*

My intention in this article is not to go into the depth of Corporate Governance, Forensic Accounting, or its auditing or in the details of whistle blower policy and its intricacies. My intention is to emphasize the crucial position of the Cost Accountants employed in an Industry and in the Corporate and Government sector to make them aware of their ethical expectations which can help them perform their duties diligently in frauds prevention, its detection and mitigation and to blow the whistle when the time comes.

The main objective of Corporate Governance policies & practices in any industry or organization should be of wealth creation, wealth management and wealth sharing. To create, manage and share the wealth, only an inclusive approach to Corporate Governance is sustainable. For this kind of inclusive approach, the model of Corporate Governance which is expected should be such that it promotes & take care of the interests of all the stake holders, their employees, customers, shareholders, investors, creditors & the society at large.

According to my experience, the top five control mechanisms which are the most vital for implementing better and effective Corporate Governance in any Corporate Organization are:



- 1) *True Independence of the Board*
- 2) *Role of the Auditing Function and the auditors (both Internal & Statutory) and the Audit Committee*
- 3) *Whistle Blowing*
- 4) *Shareholder Activism*
- 5) *Fast Track Redressal Mechanism*

Whistle blowing is relevant & plays a critical role in implementing Corporate Governance methods and practices. Our present society has become so entrenched in doing wrong, that corruption & violation of laws has become the inherent part in public life. Hence, this issue & social menace is to be tackled by adopting best practices which encourages and requires corporate to set up channels for taking the right measures.

**What actually is a whistle blowing?** In simple terms it is speaking out on malpractices, corruption, misconduct, frauds, or mismanagement at the point you are aware of it. It involves the act of reporting the wrong doings within an organization, either through internal or external connivance or both. It is the action taken by the appropriate authority who believes that the interest of the public overrides the interest of the organization he or she serves. Let us now discuss about the role of Cost Accountants in senior managerial position in the Industry and Corporate Houses in forensic audit, Corporate Governance and effective whistle blowing.

We the Cost Accountants, in whatever capacity we serve, when employed in an organization as Key Managerial Position, whether as an Accounts/Finance officer, CFO, Financial/ Cost Controller, General Manager (Finance), Chief Internal Auditor, etc are mostly at the centre of decision making process and is in a very crucial position in the information flow network. The Senior CMA's employed in Industry should guide the Directors not only in their pursuit of profit and growth but should also act with integrity & with independence to protect the interests of the Company, its shareholders & employees. This requires excellent communication skills, a thorough knowledge of the company's business & applicable regulations, clear Financial Concepts, accounting and managerial skills. In addition to this, he/she should possess the strength of character, integrity and above all own professional ethics. For a corporate, to function as it operates its business in a commercially viable manner and simultaneously complies with the rules & principles of corporate Governance, is the litmus test. This multifaceted role that the Cost Accountants play in industry leads to a fine balance between sound commerce, and robust compliance. His conscience always is the guiding force in ensuring the right thing every time.

While on one hand the CMA's plays the role of a catalyst in devising, implementation and administering the Whistle Blower Policy in a company, there is a more important role than this, which he/she, is expected to play in future which is as a conscience keeper. The CMA's already has the onerous responsibility to ensure that the company complies, adheres and fulfill its obligations as per the laws, policies, procedures and other applicable covenants.

In fact the role of CMA's is very delicate and calls for more than an epitome of courage, commitment and conviction. It is expected & predicated that on the fiduciary duty owned by the Cost Accountant, he promptly brings to light any wrong doing by virtue of his position as a KMP (in most of the cases) & the position which the CMA's enjoys in the hierarchy, he/she is eminently best suited to be the first whistle blowers. The job profile of the senior CMA's throws up a wide array of tasks, duties and related exposures that makes him/her the person to be the one who can take up the challenge and initiate things.

The CMA's can easily smell the rat by his professional training & competence. He can suspect the improper activities/unethical practices adopted within an organization. Some of the common instances of unethical/improper/fraudulent activities which are required to be reported or for which the whistle should be blown are:

- 1) *Theft.*
- 2) *Harassment*
- 3) *Fraud*
- 4) *Unethical Practices*
- 5) *Dishonesty*
- 6) *Discrimination*
- 7) *Lack of Independence of the Board/ Committees*
- 8) *Improper Director Remuneration*
- 9) *Lack of independence of Audit Functions*
- 10) *Corruption*
- 11) *Bribery*
- 12) *Financial statements misrepresentations & Financial statements frauds*
- 13) *Lack of Proper Insider controls*

The pursuit of excellence is perennial. There should be no room for compromise. For the CMA's in industry and in employment, we need to be constantly cognizant of our responsibility to the company, the stakeholders & the Profession. We, the CMA's are the partners in nation building, a cog in the wheels in the Indian Economy. Nation /Economy should always come first, Profession is the next, SELF INTEREST should always be the LAST factor. This alone will do justice to the faith reposed in us the CMA's by one & all.

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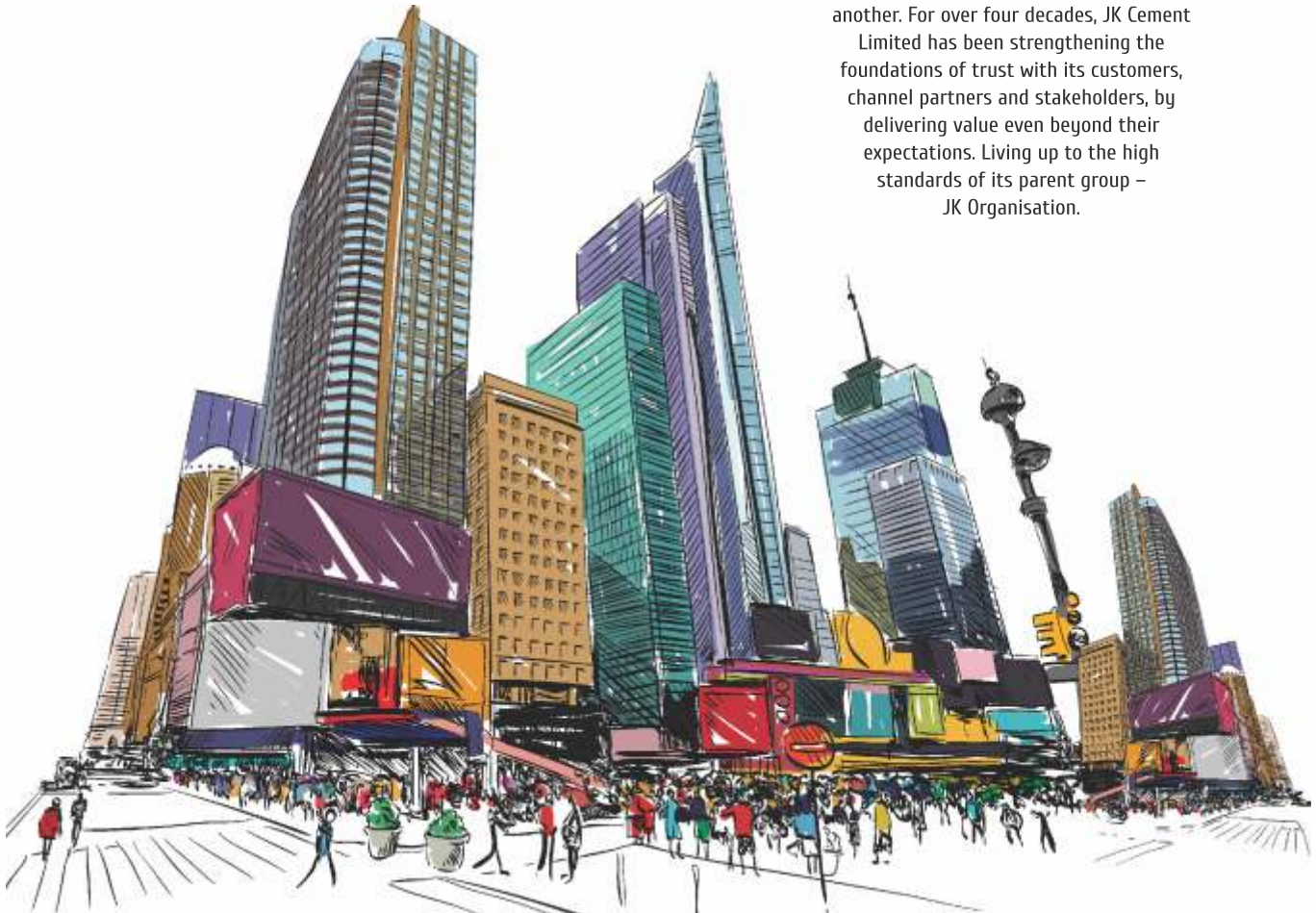


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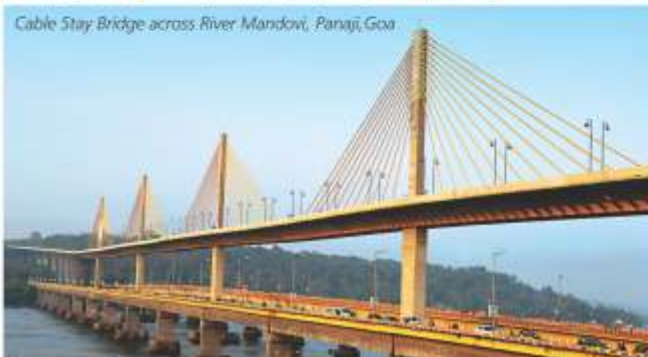
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### OBJECTIVE

The Fund has been created to provide outright grant of prescribed amount to the member in the event of critical illness of a member / beneficiary of the Fund. It is also for outright grant of prescribed amount to the beneficiary in the event of death of a member of the Fund.

### LIFE MEMBERSHIP FEE

Onetime payment of ₹7500/-

### BENEFITS

- ⊙ **Income Tax Benefit under section 80G**
- ⊙ **Outright grant not exceeding ₹3,00,000.00/- in each case to the beneficiary in the event of death of the member.**
- ⊙ **Outright grant not exceeding ₹1,50,000.00/- in each case to the member and beneficiary for critical illness duly certified by the doctor under whom the treatment is continuing.**

**Coverage of Critical Illness, leading to hospitalization, may cover the following -**

- ⊙ Cancer / Malignancy
- ⊙ Coronary Artery Bypass Graft Surgery
- ⊙ Stroke / Cerebral Attack / Paralysis
- ⊙ Heart Valve Replacement Surgery
- ⊙ Myocardial Infarction (heart attack) / Heart Failure / Pace Maker Surgery / Kidney Dialysis(CKD)/ Renal Failure
- ⊙ Major Organ Transplant
- ⊙ Hemophilia
- ⊙ Thalassemia
- ⊙ Neurological Diseases
- ⊙ Flue Blown acquired Immune Deficiency Syndrome
- ⊙ Multiple sclerosis
- ⊙ Tuberculosis / Bronchopneumonia/ Pleurisy
- ⊙ Permanent disablement
- ⊙ Any other disease that may be considered by the Board of Trustees to be critical in nature.

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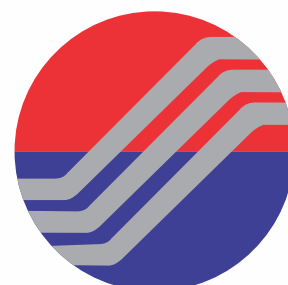
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