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Agenda

- Rationale of choosing the theme
- Changing paradigms of manufacturing in 21st century
- Radical change required in cost & management approaches
- Action points

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Why this theme?

- Existing tools are mere computational & compliance oriented
- Rapid changes are occurring in the way the manufacturing activity is undertaken
- Traditional cost & management accounting methods & techniques may not provide requisite information for decision making

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Changes in manufacturing scenario

- Technological innovation canvas is ever expanding – ideas are fast turning into reality
- Innovation is crucial driver of competitiveness in manufacturing industry
- Emergence of technology aided “smart” products rather than “dumb” products
- Manufacturing is necessarily a “service” in today’s world
- Manufacturing – main engine of technical change and economic growth
- Focussing only on volumes will not guarantee economic viability of manufacturers
- Shifting focus from “ownership” to “access” may alter demand patterns (e.g. cloud computing)

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What drives manufacturing?

- Rapid changes in backdrop of business environment:
- Effects (ill?) of globalisation (Greece effect!)
- Dropping of competitive barriers
- Every day changes in prices of commodities, metals, gas, fuel etc.
- Shifts in manufacturing bases (increasing costs as nations develop)
- Disturbances in financial markets (volatility)
- Pronouncements of influential institutions (Federal Reserve)

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Changes of 21st century

- Asia & BRICS – a major production hub
- Decomposition of production and geographic redistribution leading to componentization
- Competition based on price and service rather than product differentiation
- Emergence of information & communication technology (ICT) enabled services embedded in physical products
- Increased use of robotics and 3-D technology
- Enhanced focus on shared services, call centres
- Focus is on **value based management** – hence search for “value” in the manufacturing networks

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Change in manufacturing philosophy....

- From production at one place to componentisation world over and assembling
- Sourcing components as “commodities” (e.g. automobile industry)
- As production is globalised, firms need to know where’s the value created
- Shift of production bases to developing countries for components and parts
- Flexible manufacturing systems
- “Product-as-a-service” (product generates low margins than servicing over life time) e.g. GE making engines for Boeing & Airbus

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Case study of phones

Value created (in terms of % gross profits)						
Phone	US	Japan	Asia (other)	Europe	Others	Total
Motorola	36	28	6	0	30	100
Blackberry	41	2	8	12	37	100
Nokia	17	35	2	11	36	100

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Case study of apparel (jeans)

French apparels produced in China & sold in Europe (value in Euro)			
Company	Function	Cost	Cum. Cost
Chinese textile co.	Raw material	1	1
Chinese sewing co.	Manufacturing	2	3
French brand	Design	0.3	3.3
	Transport	0.2	3.5
	Customs	0.5	4.0
	Distribution	20.0	24.0
	Market studies	5.0	29.0
	Advertising	15.0	44.0
	Profit	6.0	50.0

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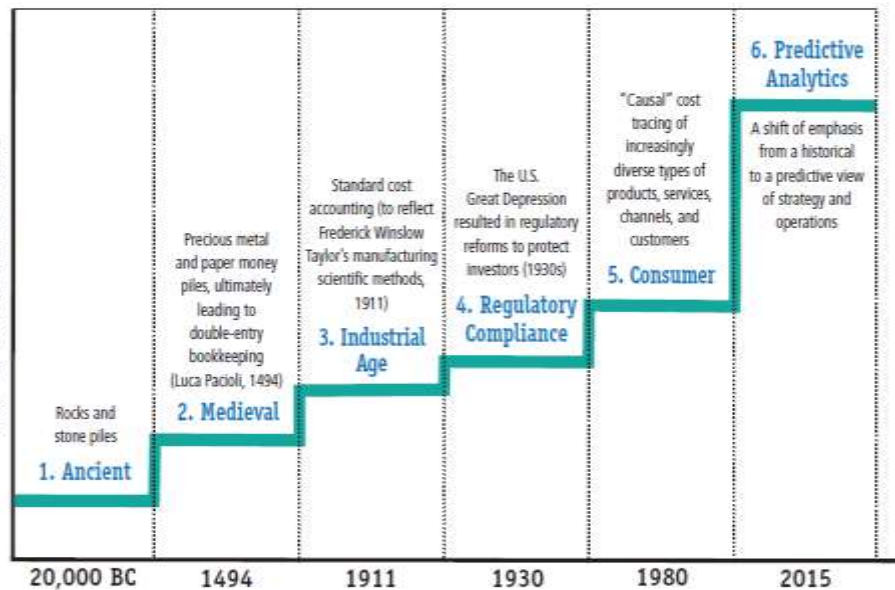
How this affects CMA profession?

- If we do not recognise & adopt these changes, the profession will be marginalised
- We cannot use historical absorption costing to compute costs at the period end
- Budgeted absorption rates are hardly useful as they lose flexibility element
- New CMA tools should be developed to satisfy changing needs of the new manufacturing canvas

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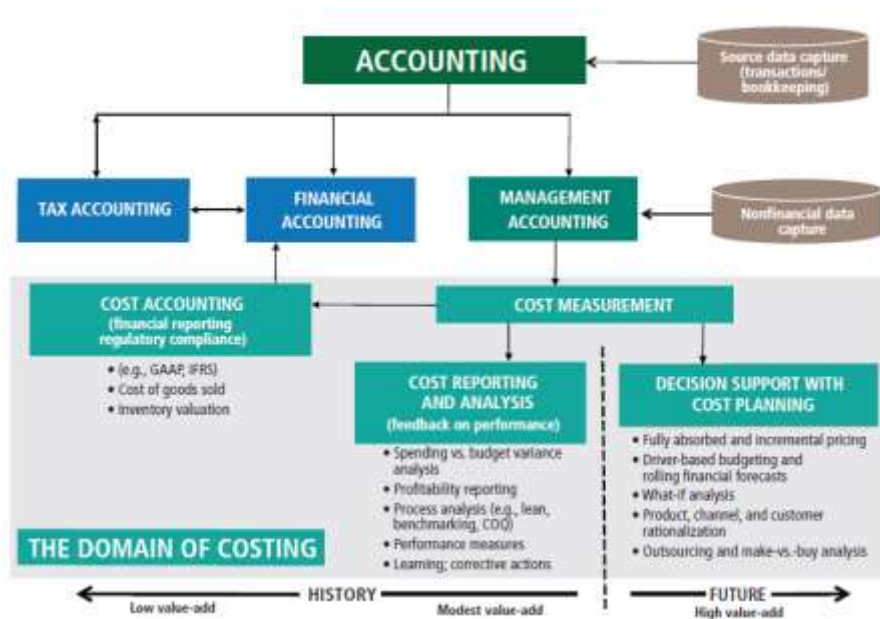
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Emerging CMA tools

- Companies mostly use only traditional tools such as
 - Full or absorption costing
 - Job/contract/process costing
 - Standard costing
 - Budgeting
- Newer tools are mostly viewed as academic tools
- Under emerging manufacturing scenario, one must capture “value created” rather than focus only on “what did it cost”

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Modern tools v/s traditional

- Feed forward & not feed-back
- Predictive & not post mortem
- Financial as well as non-financial
- Linkage to vision/mission
- Long term focus in addition to short term

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Operational tools - costing

- Costing tools (ABC, TDABC, TA, LCC, TC)
 - costing of activities,
 - pricing of products & services,
 - analysing profitability of revenue generating activities,
 - effective resource allocation & investment decisions)

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Operational tools - Pricing

- These developed mainly for new products, but should be used for new manufacturing technologies
 - Market sensitive pricing
 - Skimming
 - Penetration
 - Transfer pricing

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Operational tools - Budgeting

- Activity based budgeting
- Value based budgeting
- Beyond budgeting

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operational tools - Performance analysis

- Customer or channel profitability
- Economic value to customer
- Life cycle performance of products, customers, channels
- Kaizen
- Six-sigma
- TQM

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Investment decision tools

- Post completion audits
- Real options
- CAPM analysis

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Other operational tools

- Theory of constraints
- Learning curves
- Value chain analysis

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Management accounting tools

- Balanced scorecards
- Value based management
- Performance prism

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Strategic management tools

- Value added reporting
- Environmental assessment
- Sustainability reporting
- Value for money reporting
- SWOT, BCG reporting
- Ansoff's matrix
- Competitor analysis - benchmarking

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The way forward.....

- Understand the changing dynamics of manufacturing industry
- Keep update on emerging management accounting tools for profit improvement
- Enhance value of the CMA profession by helping out the manufacturing industry by developing new performance analytics