



Confederation of Indian Industry
Total Cost Management Division



TOTAL COST MANAGEMENT FRAMEWORK Version 0

November 2018



Foreword...

For over two decades now, the head wind disruptions in businesses is the neo-norm, strongly challenging the going concern concept in the corporate world.

Technology disruptions, changing customer preferences, unrelenting competitive forces, stiffer regulations, and continued volatility in input costs are posing serious threats like never before in the way of doing business – business models, organization structures, value chain designs and product designs.

Gaining competitive and cost advantage amidst market and economic chaos through delivering value to customers and stakeholders is no more a 'business as usual'. Aspiring for double digit growth in market share, revenues and margins calls for challenging the status quo and embracing new school of thought.

With this background of challenges, the TCM Division of the CII is striving to embed and enhance 'cost competitiveness' of the Indian industry through a tested concept 'TCM – Total Cost Management'.

Key principles driving TCM in business are embedding strategy, systems and cultural focus on 'costs' at all levels and at all times in a manner which is completely different from traditional costing. Industry's legacy view of costs – limited to factory and vesting ownership with the CFO – is now a passé.

The concept of TCM addresses cost emerging from 'business models, product design, value chain efficiencies and product / customer portfolios and addresses profitability issues in businesses.

TCM in a business enables complete visibility of costs through 'True cost structure' encompassing key dimensions like – costs aligned to business strategy, enterprise level cost ownership and spotting profit drain points to provide long term cost advantage and long term sustainable business model.

Board of directors and CXO's of both manufacturing and service sectors have made incredible gains through complete adoption of TCM concept. Connecting 'Value-Price-Cost' through TCM is a great proposition for building sustainable business model.

I take this opportunity to thank the chief mentors of CII Mr. A N Raman & Mr.P.Thiruvengadam who have been the architects of CII TCM Division and majorly contributed to this framework development.

Seshagiri Rao MVS

Chairman, CII National Committee for TCM &
JMD and Group CFO, JSW steel





Acknowledgments

We thank the founders and mentors of CII TCM Division who have envisioned 'TCM Division' at Confederation of Indian Industry (CII) for accelerating 'cost competitiveness' in the Indian industry.

The 'TCM framework Version 0' synthesizes concepts gained from 2 decades of exposure from various sectors and sizes of Indian corporates.

This publication would not have been possible without valuable inputs and insights from members of CII National Committee for TCM'.

Acknowledgments

Mr. A N Raman & P Thiruvengadam, Mentors CII TCM Division

Mr. Seshagiri Rao, Chairman, CII National Committee for TCM & JMD JSW Steel & Group CFO

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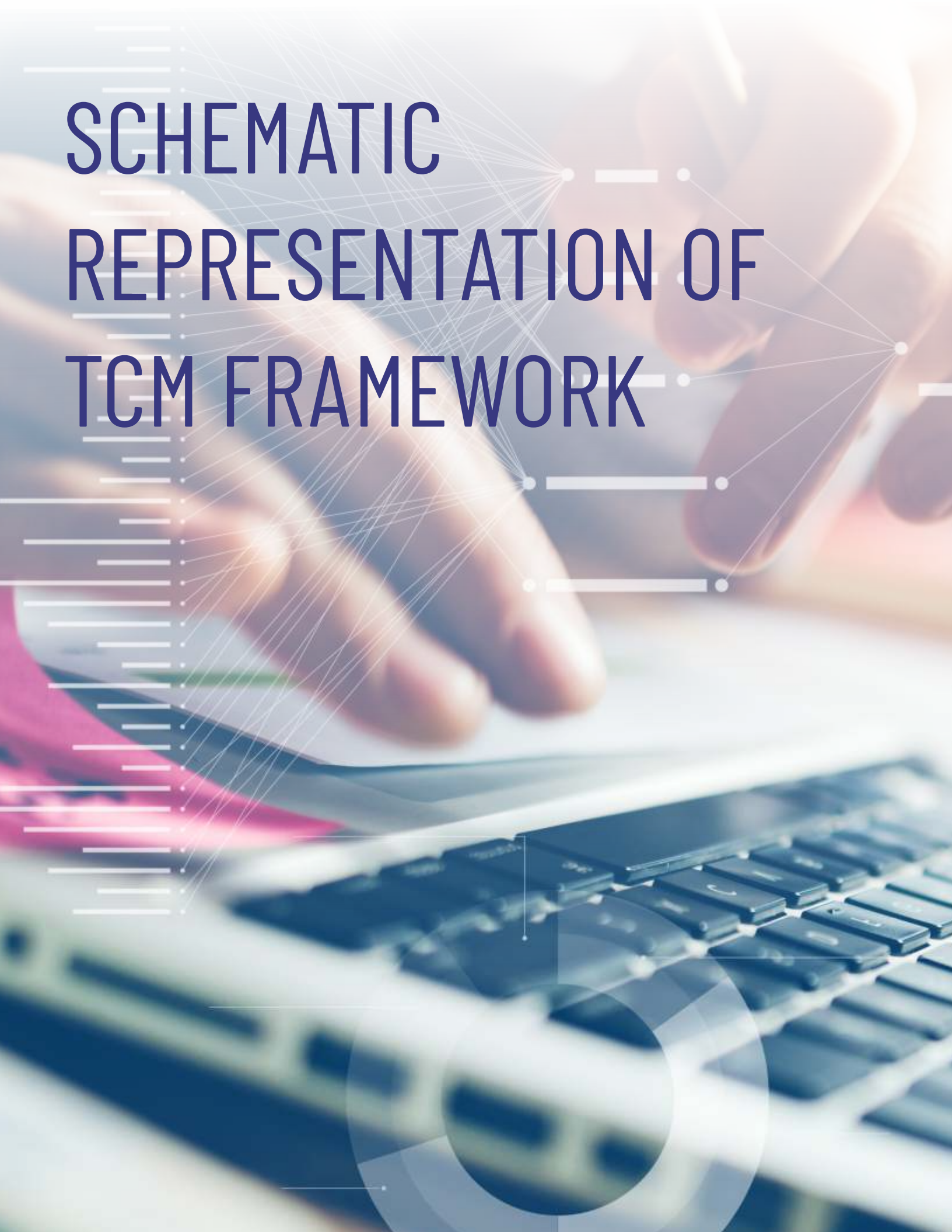


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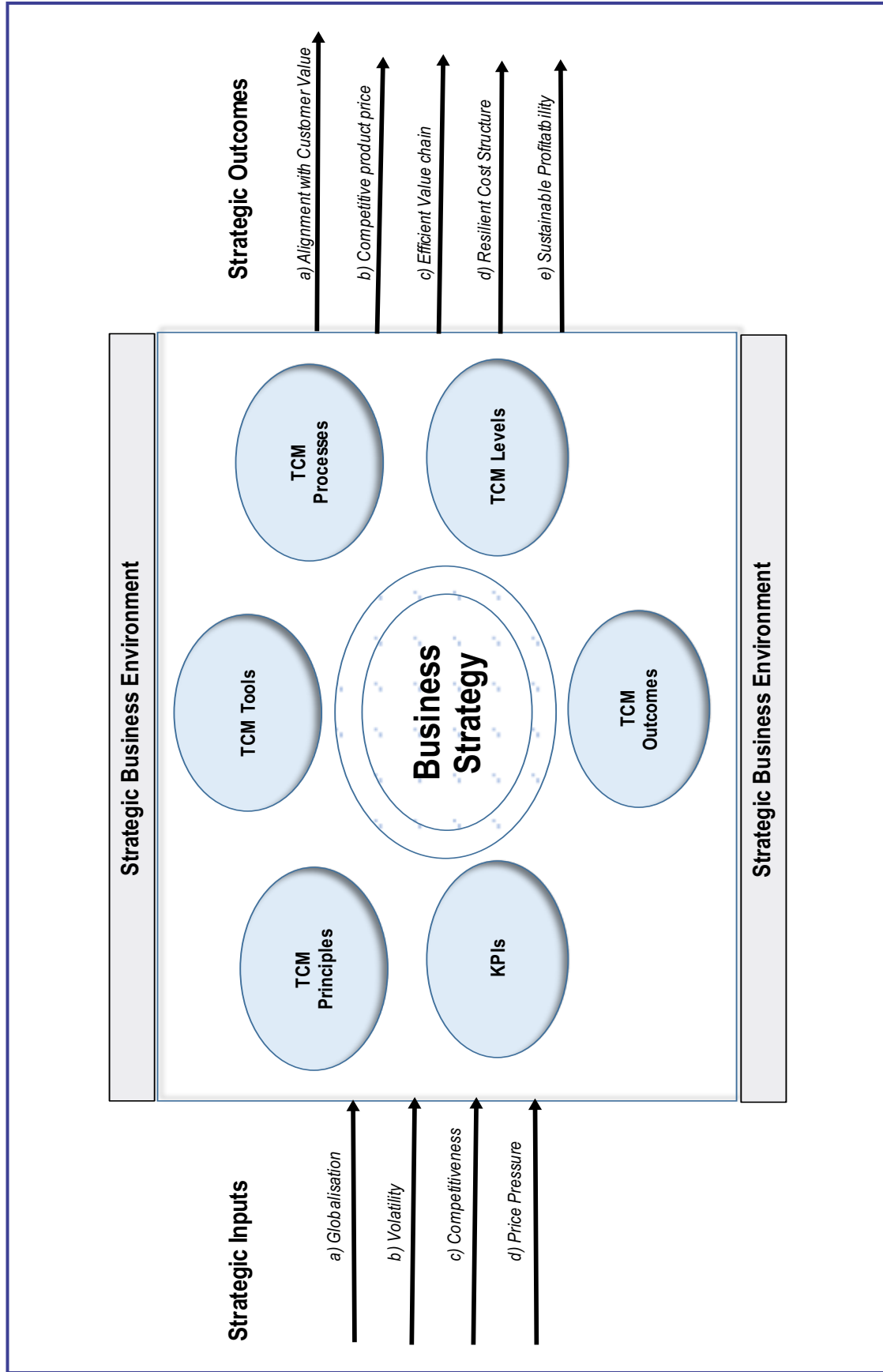


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SCHEMATIC REPRESENTATION OF TCM FRAMEWORK

The background of the slide features a close-up, slightly blurred image of hands typing on a laptop keyboard. Overlaid on this image is a complex network diagram consisting of numerous small white dots connected by thin, light blue lines. The dots are distributed across the upper and middle portions of the frame, with some lines extending towards the bottom. The overall color palette is soft, with warm tones from the hands and keyboard, and cooler, more technical tones from the network diagram and the blue text.

SCHEMATIC REPRESENTATION OF TCM FRAMEWORK



1. Purpose of TCM Framework



Presently, there is an ever increasing pressure on businesses to stay efficient and competitive due to recessionary and competitive pressures. CEO's & BOD ponder and brainstorm relentlessly to address stressed profit lines for various stakeholder interests. Therefore, journey of a business to de-mystifying costs across business is now to be reckoned with.

Addressing element wise cost reduction (like material cost or overheads), pursuing cost down targets and / or reactive measures to low profits are now a passé.

Cultural transformation for cost sensitization, enterprise level ownership to costs, visibility of cost information for strategic decision support, mapping profit drain points and relentless cost focus across value through efficiencies is catching up.

Addressing 'true cost' in business through product (re)design, factoring environment costs, value chain efficiencies, product cost management and reducing 'cost to customer' are few contemporary ways to address costs and profitability in a business.

CII TCM Division with inputs from industry, domain experts and consultants have over the decade pursued TCM philosophy with Indian industry. Learnings have been distilled and now presented to larger section of the Indian industry as TCM framework to address competitive journey of businesses.

1) Strategically designed 'competitive cost structure' in a competitive business scenario

In a competitive scenario, P/L based cost structure would have a limited support to CEO and leadership team in a business. Strategic focus on costs emerging from strategy driven business processes - enhances competitiveness of a business to stay ahead of competitors, refine business process for cost-efficiency and make a blue-print for growth.

2) Cost structure reflecting business process

Cost sheet reflecting the value chain of business, aligning resources with processes to reflect true costs in a business. This step largely reduces the quantum of overhead absorption and provides key information for focused improvements.

3) Enabling sustained cost advantage in a context of stressed economy and volatile global context

Delivering more value to the customer than competition at lesser costs through an efficient business model.

A business model combining a well marketed product delivered at a truly low-cost. A true cost advantage is difficult to overcome, especially in a price-sensitive market. A company that can create a meaningful cost advantage is playing with a stacked deck.

Eg: Walmart supply chain costs are the lowest in the world.

4) Create a blue-print for cost strategy in business

Cost structure vision in a corporate over a 3 – 5 year horizon helps c-suite to identify and map strategic initiatives for a constructing competitive cost structure.

Eg: Make Vs Buy, import Vs make, alternate materials, additional customer offering, et al

5) Optimized product and / or customer portfolio

Strategic influence and building capabilities in a business to manage product / customer portfolio is a way for improving overall margins in the interest of overall stakeholders

Cross subsidy of product margins, high cost to serve customers, long term unviable product segments and price-volume dilemma products are addressed through active management of portfolios.

Deploying right TCM tools aides strategic decision support in a business for the portfolio management

6) Futuristic cost structure

Risk induced cost structure factoring top risks of the business.

Every major risk can be a threat to any constituent of the cost structure. Constructing risk based cost structure for visibility on cost impact of risks provide mitigation plan for cost optimization.



2. Background and the Scope – The External Environment



The rapidly evolving dynamics of business landscape has resulted in a dramatic reduction in planning horizons for strategic plans and cycle times for business models. The planning horizons for strategic plans have shrunk from 8-10 years to 3-5 years and CEOs are forced to re-visit their business model every 2-3 years. As a result, the investments and resource commitments are being restricted to retain flexibility.

Competition:

Challenges to existing models, can come from completely non-traditional competitors e.g. electric vehicles disrupting the automobile industry, Air BnB disrupting the hospitality business, Uber disrupting the taxi industry.

Typically, many of these new entrants have exponentially lower costs compared to the incumbents. At the same time, even in traditional businesses, the mid-market and entry level competitors start making inroads into the premium markets.

The initial “DNA” of such traditional businesses has been cost driving, which is a valuable control that they bring to the table across the market.



External business challenges:

Incidence of external forces like market, customer, economy and regulatory seriously impact the cost competitiveness of businesses.

Emerging high cost structure hurt the overall profitability of businesses in medium and long term timelines.

Each market is getting differentiated on multiple axes. As the choice increases due to competition, the customer continuously seeks out and receives better value. Therefore, it is important for firms to track their investments and costs so that they are aligned with customer's value to stay competitive.

Cost Competitive Advantage:

Top management of every business is focused on developing sustainable 'cost competitive advantage' to grow profitably.

Business strategies incorporating Total Cost Management (TCM) enables businesses to acquire sustainable competitive advantage.

With the background of global volatility and customer value in business – CII has institutionalized 'TCM' – Total Cost Management, as a company-wide systematic and structured approach, which provides a holistic framework to control, reduce and eliminate costs, throughout the value chain of business.

CII Total Cost Management (TCM):

TCM calls for cost focus in every aspect of the business and flows through the organization as a part of strategy formulation.

Strategies are formulated with an objective of moving upward on the value chain and the focus is typically on the growth.

TCM recognizes that cost is incurred while creating value and brings cost dimension in the value creation process. TCM requires managing the cost while creating value.

CII TCM Division has gathered substantial evidence for the efficacy of the TCM philosophy by working with industries for over 2 decades.

CII TCM Division's aspiration has now culminated to document the coveted philosophy into a framework document.

3. TCM Aligned to Business Strategy



Organizations pursue different strategies to achieve their goals. Though not articulated explicitly as an element of strategy, every organization adopts cost management at different levels.

While many organizations see cost management as a way to reduce cost and increase profitability, a few align TCM with the current business strategy to achieve long term sustainable competitive advantage.

Customer requirements:

With the advent of globalization and expanded bandwidth of products, customers and markets – the axis of business competitiveness shifted to specific or customized requirements. This was largely different from single product / process orientation in erstwhile business focus.

Re-building competitive position in business began with understanding of customer requirements and embedding the required value proposition into the product and services effectively.

Business models / business processes have been transformed with product and customer focus. **The alignment of TCM with business strategy is the heart of TCM framework.**

The starting point of conventional costing accounting system is the manufacturing process and hence material and manufacturing process is at the core.

Factory as a central theme of cost will therefore need to undergo a paradigm shift towards strategy, defining the building blocks of TCM.

Philosophy of differentiation emerging from business strategy is the driving force of TCM in business.

CII TCM philosophy reflects the understanding of product /customer segments with the expected value proposition where in business wishes to compete and makes it as a co-ordinate in the TCM processes

For example, Technology deployed to be split into existing and new products / customers / processes and risks involved associated with implementation of strategy. Strategy along with business-as-usual are the aligning points of TCM architecture.

TCM philosophy completely aligns with the strategic thought process of a business as apposed traditional costing system's factory centric & cost reduction approach.

TCM's core approach is to identify, analyse and address the differential cost of producing and servicing the strategic customer / market segments.

Linkage between business strategy and TCM constitutes the biggest element of change in the management architecture of a current business

TCM aims to improve cost functionality across the value chain and thus benefit all stakeholders including shareholders. At a macro level, TCM deals with systems and processes required to bring a cost management culture into all levels of the organization. At the micro level, the focus is on implementing TCM across the value chain.

Visibility of algorithm based cost structure, cost ownership at functional levels, driving efficiency across value chain, developing cost vision in business and deploying long term cost strategies are the building blocks of TCM architecture in business.

TCM goes beyond bringing down the unit cost and facilitates organizations to improve market share and revenue per unit.

The complementary process happens only when the strategy formally recognizes the TCM as an element of strategy.

TCM links cost to value creation and over time helps increase the value per cost unit. When the value per cost unit is high, firms derive core competency and strategies are built around the core-competencies. TCM framework will help manager in developing core competencies over the years by concentrating areas where the value per cost unit is high.

4. TCM Principles



a) Resource Focus

Resource deployment in a business is purported to add value to the product or customer service offering.

'Resource' is the central theme of TCM and is all encompassing – actual and notional.

Resources entering the value chain of business either add value or cost – a clincher for managerial action to distinguish between 'value added activities or non-value added activities' in a business.

Robust 'Measurement and Management' of resources in the 'value chain' positively influences the growth path of business and eventually maximize value to stakeholders. We need to recognize resources at times lying outside the boundary of entity book keeping. This will be relevant in the context of sustainability when the entity consumes environmental resources not recorded in financial statements.

b) Strategic Context

Dimensions of VUCA, business complexity, diversity in customer value offering, technology interventions, product disruptions and government regulations pose enormous business and cost pressures.

Historical cost structures driven by economies of scale and standard costing are factory oriented and will be narrow in vision.

Costs and their role in the management of enterprise are important because the information concerning costs play a vital part in formulating more performing strategies and get lasting competitive advantage. Therefore the start and finishing point of costs will be competitive strategy which subsumes factory which is a legacy thought.

Aligning 'cost management' with building blocks of 'business strategy' – processes, products, markets and customers – for creating 'cost advantage' in business is key.

c) Future Outlook

Conventionally, businesses stack up 'costs' which emerges from the financial accounting system and resembles historical cost structure.

Principles of 'business continuity' necessitates corporates to 'manage costs' on a longer timelines.

TCM Techniques enable business entities to gain insights on the consequences of strategic initiatives / actions – product design, production process and cost to the customer etc.

- Life cycle costing for identifying least cost alternatives,
- Target cost technique for achieving desired profit level (calculated in the early design and development cycle)
- DTC (Design To Cost) technique to engineer low cost into a product / service

d) Integration with other initiatives

Disruption in the businesses contexts compel leadership to drive continuous improvement processes and sustainable results.

Initiatives like TPM, TQM etc. are driven across functions to accrue operational savings and profitability improvement.

Core principles of TCM promulgates institutional architecture for managing costs. Creating a long term cost advantage in a business through 'competitive cost structure' provide sustainable business model and value creation. This should be seen in sync with other initiatives to create value and sustain.

TCM aligns and does not overlap or compete with concurrent initiatives such as TQM, TPM, TOC, etc. in a business. Other frameworks are not substitutes or surrogate to CII TCM framework in business.

TCM compliments several strategic initiatives with a focus on increasing value and reducing the cost

e) Learning and Innovation

Commonly known PDCA cycle embedding into TCM and connecting to innovation.

PDCA Cycle is implemented to improve the quality and effectiveness of a business process.

Embedding TCM architecture into a business is similarly divided into 4 sequential categories PDCA (Plan, Do, Check & Act).

'Cost' or 'resources' will become inputs for the PDCA of the decision making process in a business to address viability of the processes, products and customers.



f) Enterprise wide involvement

'Cost ownership' in a business was traditionally with few functions or levels like CEO / CFO. Year-end P/L or B/S or ABP (Annual Business Plan) triggered cost sensitivity in an organization – eventually restricting cost focus to/from the financials or historical data.

Scoping cost reviews and amends in shop-floor only equips or empowers only operations team which itself is a portion of total value chain of business.

Compelling arguments in favor of enterprise wide approach to cost ownership as an effective approach in today's business world is gaining momentum. This argument becomes more profound when costs need to be harnessed upfront and needs the engagement of design engineers or new product development managers.

Maintaining sharp focus on 'costs' at all times – business cycle fluctuations, negative demand, price pressures and customer disruptions – enriches bottom lines.

Monetizing value for abnormal occurrences, deviations, non-standards and sub-normal processes helps leadership teams to map 'profit drain points' across the value chain.

Functional excellence closely aligned to cost excellence is a clincher for design and drive to achieve 'cost economics'.

g) Aligned to policy development (PD)

Policy deployment is a strategic improvement system in corporates.

PD has been implemented in numerous organizations and is one of the four core components for deploying TCM along with Cross Functional Management, Daily Management, and Small Group Activities.

Leadership voice on TCM linked to business strategy to be communicated to all levels of hierarchy and functions.

Mapping cost based decision making points at customer, market and product level for the management team to address corrections and create profitability path.

h) Process Orientation

A business process forms the lifeline for any business and helps it streamline individual activities and make sure that resources are put to their optimum use.

Legacy view of 'cost flow' in a business is in the perspective of cost centres which is akin to cost pooling or cost allocation.

The key to TCM architecture in a business is – integrating business processes supporting business strategy with TCM.

Identifying business processes cutting across functions and linked to resources at product or customer segments is the key.

'Cost incurrence' is across the value chain of business – sourcing, manufacturing, design, engineering, logistics, branding, sales & marketing etc.

Aligning cost information across the business processes & resources to product, customer and market segments provides holistic approach to cost management.

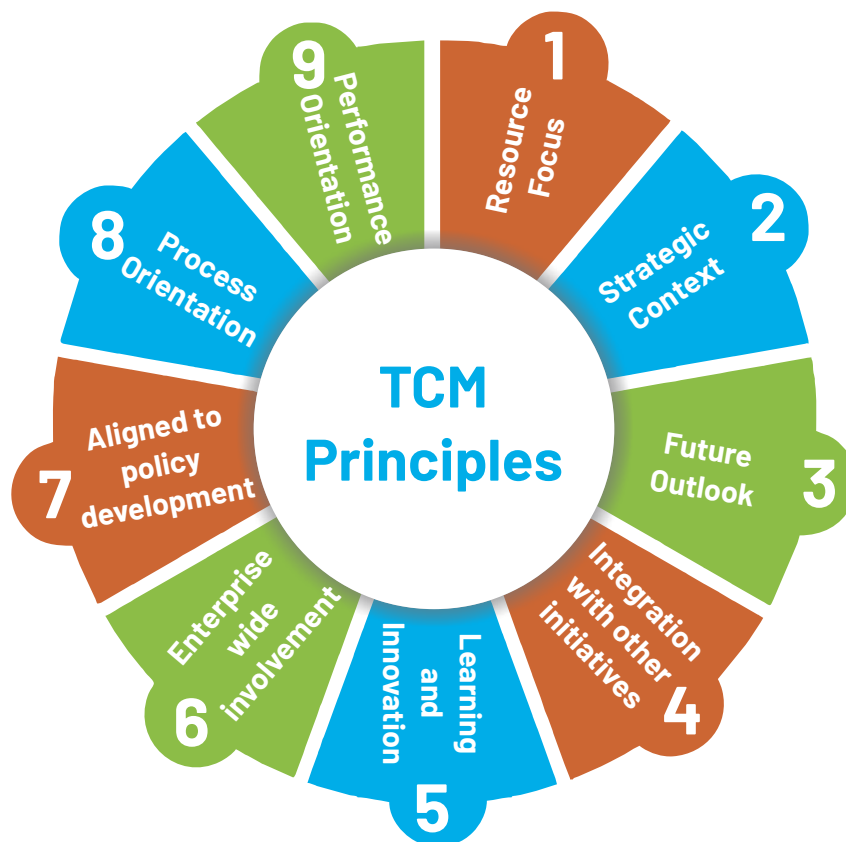
Efficiency monitoring is made possible through institutionalizing the cost capture across business process.

I Performance Orientation

The TCM systems set up KPIs which measure the outputs and outcomes of the TCM efforts. This helps the management continuously evaluate the cost management of the organization at different levels and functions and make improvements accordingly.

Performance is measured by the KPI matrix – which is broken down till the last employee using the TCM framework. The main measures of performance are – Growth, market share and bottom line. A KPI matrix is made for each process aligned to the main measures of performance. Each process can be broken down into individuals to ensure global impact.

Cost analysis is a powerful tool to measure the gaps in performance targets and actual performance. As TCM is to be ingrained in the culture of the organization, all individuals are aware of the metrics and can track their own performance and that of their business unit and reduce waste or improve efficiency accordingly.



5. TCM Tools



TCM tools are deployed in a business to accelerate 'cost competitiveness' by generating desirable outcomes of costs, price, value and profit.

Tools also involve technicalities of measuring resources in business with both accounting and non-accounting information

Entire spectrum of 'cost management' architecture – measuring, managing, reporting, analyzing, controlling, course corrections, predicting and estimating costs across value chain of business – is enabled by an array of TCM tools.

Contemporary businesses are largely driven by several market and customer dynamics – complexity and variety in business processes, product and customer portfolios.

Businesses manage 'costs' associated with both current and future activities and application of TCM tools scopes its deployment accordingly.

TCM tools can accordingly be classified into basic (operational) and advanced (strategic).

Day-to-day simplistic analysis of costs like variance analysis, cost driver analysis, cost of quality, kaizen costing, application of ABC principles (to address variety and complexity), input-output balance, kaizen costing, inventory valuation etc.

Leadership vision for achieving future business goals are addressed through advanced TCM tools like target costing, constructing risk articulated aspirational cost structure, customer profitability management, value chain costing, life cycle costing etc.

a) TCM Tools: Operational

Sl. No.	Application / Scope	Business Context	TCM tool	Benefits
1)	Resource control	Business as usual	Variance analysis	Resource conservation
2)	Expense control	Business as usual	Cost driver analysis	Reduction of NVA
3)	Product / Customer quality	Business as usual	Cost of Quality	Minimizing quality deviations
4)	Resource balance	Business as usual	Input-Output balance	Yield improvement
5)	Product cost improvements	Profitability challenges	Kaizen costing	Product profit improvement
6)	Total cost of buying	Business as usual	Total Cost of Ownership (TCO)	Reduced cost of inputs

b) TCM Tools: Strategic

Sl. No.	Application / Scope	Business Context	TCM tool	Benefits
1)	New product design & development	New product introduction	Target costing	Optimizing 80% of product costs at design stage.
2)	Aspirational cost structure	BC Plan and cost implications	Risk articulated cost structure	Focused strategic initiatives in high risk / high cost areas of business
3)	Total Cost Visibility over product life cycle	Gaining competitive advantage	Life Cycle Costing (LCC)	Economic analysis of alternatives that impact current and future product costs
4)	Customer profitability	Wide customer portfolio	Customer cost and profitability reporting	Customer cost / profitability correction
5)	Value chain of business (Design to Selling)	Creating cost and competitive advantage	Value chain costing	Mapping cost pressures across value chain for rectification

6. TCM Process



TCM architecture in a business is reflected through creating and operationalizing TCM processes.

Set of processes with defined outcomes enhances the efficacy of TCM – creating competitive cost structure, cost advantage and profitability growth.

- **Governance structure:**

Most corporates continuously strengthen governance frameworks and policies for providing stronger governing roles.

Securing a governance structure and process for TCM, institutionalizes the 'cost management process' in a business.

- **IT enabled architecture for capturing cost information:**

Activating CO module and mapping cost information into IT system helps businesses to go 'live' with outcomes, analytics and decisions.

Primary information relating to process, product and customer to be online. Standards can only help to build standard costing which has limitations.

Cautions should also excised by the leadership and governance structure to secure non-standard information also into IT architecture.

Eg: Unique sourcing processes, abnormalities in the production processes (re-work generation etc.), maverick expenses, R&D effort, specialized selling effort, staggered expenses etc. to be factored into product or customer costs for profitability reporting.



- **TCM competencies at enterprise level – HR:**

Calibrating TCM competency skills amongst employees enhances cost awareness, cost ownership and improved analytics.

Monetizing of abnormal business occurrence / process deviations, capability of middle level leadership to link business outcomes and cost outcomes, balance cost and value proposition etc are closely aligned to specific competencies related to TCM.

Design and development of formal pedagogy to embed 'TCM competencies' across functions and hierarchy



7. Key Performance Indicators



A Key Performance Indicator (KPI) is a measurable value that demonstrates how effectively a company is achieving key business objectives. Organizations use KPIs to evaluate their success at reaching targets.

Efficient and effective TCM architecture also provides KPI's to leadership to measure, manage and do course corrections mid-way for better business results.

KPI's are typically distinguished as 'strategic' and 'operational'.

To enable robust decision making process KPI's are further classified as 'lead and lag' indicators.

	Operational KPI's	Strategic KPI's
Lead KPI's	Cycle time variation of products	Target cost process, negative cost variation while selecting design parameters
Lag KPI's	Process cost per SKU, cost of obsolete technology.	Cost of market penetration (for strategic segments)

KPI's in TCM architecture govern and report the whole gamut of process, product and customer outcomes.

Periodical reviews based on a standard template report lag indicators like process costs, selling costs and design cost at unit level.

However, lead KPI's reflect causal factors for eventual cost impact. Any maverick processes like air-freight, deployment of specific or unique technology for a specific product or unique processes involving unique resources are lead indicators for cost variations at product level.



8. TCM Outcomes



'Outcomes' are basically the result – or the consequence – of something, or doing something. The 'outcomes' can also be the 'achieved end state' that can be verified through measurable results.

The efficacy of TCM architecture in a business is also measured by several desirable outcomes which fructifies in the form of growth or profitability or value to stakeholders or all of them.

- **Decision Making Process**

Decision making is the process of making right choices by identifying a decision, gathering information and assessing alternative solutions.

Business decisions again are classified into 'operational and strategic' based on short-term or long-term outcome.

Operational decision support: Make or buy decisions, Insourcing or outsourcing, visibility of price-cost gaps for corrections, resource optimization, improving RFQ strike rate, identifying NVA (Non Value added Activities), mapping profit drain points et al.

Strategic decision support: Re-configuring product/customer portfolio for higher margins, value chain modifications, alternate materials, re-designing of products et al

- **Visibility of strategy implemented**

Viability or economics of 'business strategy' in its execution phase can be monitored through appropriate design of TCM architecture.

Processes, markets, segments and customers absorb high value resources through the value chain of business. TCM identifies pathways and reports to management for course corrections if any. This ensures better profitability from mid-course corrections.

- **Cost visibility beyond P/L – books of accounts**

Cost information in business is strategic. However, cost information in a business limited to historical data is now a legacy.

Staggered costs / investment (technology, R&D costs, branding costs) spill over to years beyond the current financial year.

- **Business view of cost sheet (Robust cost measurement)**

Unlike traditional 'cost sheet' stacking up of P/L drawn costs, TCM architecture provides business view of a cost sheet.

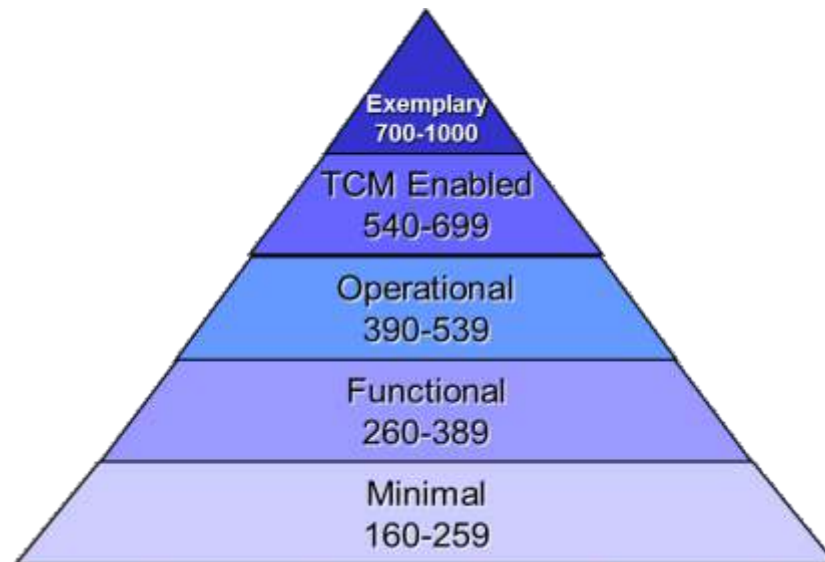
Business processes and its impact are factored into TCM based cost sheet which provides business perspective of costs.

Efficiency / effectiveness of business process reflect the highs and lows in the cost sheet and corrective actions are triggered accordingly.

9. TCM Maturity Levels

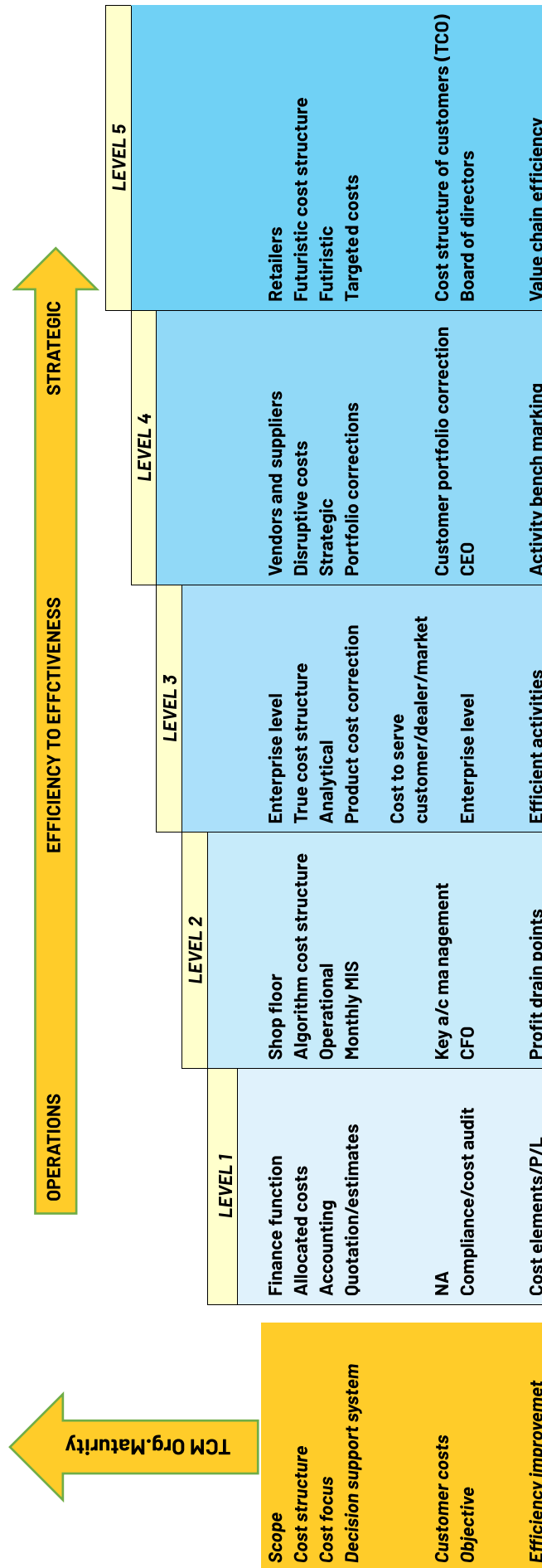


CII TCM Division has conceptualized 'cost maturity Levels' in a business on a 5 level hierarchy. The 5 level hierarchy is called 'CII TCM Maturity Model' and the model is an IPR (Propriety Right) of CII.



Business models are constantly being reviewed for sustained competitiveness which has also injected a new dynamism into cost management. The basis and assumptions used in the traditional costing are constantly being challenged resulting in pressure for evolving the organizations into higher maturity levels.

Organizations are hard pressed to focus on cost management levers to create value. It is timely for business models to look up, discern and review their cost management systems.







TCM MATURITY MODEL



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