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MATERIALS MANAGEMENT REVIEW

IFPSM

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Top 10 E-Procurement Entities

1. Military Engineering Services
2. IHQ of MoD (Army)-(OSCC)
3. NTPC Limited
4. Bharat Sanchar Nigam Limited
5. IHQ of MOD (Navy)
6. Department of Defence Research and Development
7. National Highways Authority of India
8. Food Corporation of India
9. NACL,NALCO
10. Rashtriya Chemicals & Fertilizers Ltd.

MANAGEMENT QUOTES

"The way a team plays as a whole determines its success. You may have the greatest bunch of individual stars in the world, but if they don't play together, the club won't be worth a dime." – *Babe Ruth*

" Great teamwork is the only way we create the breakthroughs that define our careers." – *Pat Riley*

"Ask your colleagues for help—early and often."– *Jill Konrath*

"One man can be a crucial ingredient on a team, but one man cannot make a team." – *Kareem Abdul Jabbar*

"Leaders will be those who empower others." – *Bill Gates*

"I can do things you cannot, you can do things I cannot; together we can do great things" – *Mother Teresa*

"The way to achieve your own success is to be willing to help somebody else." – *Iyanla Vanzant*

"No matter how brilliant your mind or strategy, if you're playing a solo game, you'll always lose out to a team." – *Reid Hoffman*

"I have always believed that the way you treat your employees is the way they will treat your customers and that people flourish when they are praised." – *Richard Branson*

"My belief is that communication is the best way to create strong relationships." – *Jada Pinkett Smith*

"Good plans shape good decisions. That's why good planning helps to make elusive dreams come true." – *Lester R. Bittel*

"A team is not a group of people that work toghether. A team is a group of people that trust each other." - *Simon Sinek*

From the Desk of Chief Editor & National President

Government while discharging its duties towards larger interest of its citizens, spends a whole lot of money on acquisition of goods and services so as to provide better infrastructure, safety, employment and standard of living to its citizen.This whole process is attributed to Public Procurement and can be defined as “the acquisition of goods and services by government or public sector organizations” for the benefit of its people.

India accounts for approximately 15-20% of its GDP on public procurement and considering the USD 4 trillion economy, even 15% will amount to billions of USDs. Such huge expenditure on public procurement naturally impacts the businesses, society, government agenciesand watchdogs to keep check on misappropriation of public funds and to see that whatever amount being spent on public procurement is garnering enough value creation/addition to masses.This would have implications beyond the economic realm, as government spending effectively becomes a means to enact policies addressing contemporary challenges including climate change and social inequalities.

Of late, Public procurement in India has gone under number of reforms so as to reap strategic advantage for many public policy initiatives. For instance, Make in India initiative - procurement from local suppliers is a key policy initiative towards capacity building and development of domestic suppliers at the same time generating employment opportunities. Another could be sustainable procurement – wherein, procurement entities and suppliers are motivated to implement procurement practices which are not only useful to end user but also economical and least harmful to the environment.

Another such policy reform is implementation of Government e Marketplace (GeM) to provide equal opportunities to suppliers to participate in public procurement process meanwhile ensuring transparency, competitiveness and efficiency. As of now, GeM has over 11000 product categories and 300 service categories. GeM has so far garnered over 2 lakh crore Rs of order value in current fiscal year. Besides this, Government e-Marketplace looks to facilitate collateral-free working capital loans up to [1] 10 lakh in just 10 minutes at an interest rate of 10% to small businesses based on the orders in hand.

Public procurement process has its share of challenges like fixed budget constraints, uncertain demand, high public expectations, and performance targets which is why training of public procurement officials become imperative so as to manage limited resources strategically and effectively. Procurement skills & planning are two critical enabler for enhancing the procurement performance at the same time creating or adding value to the procurement function.

GeM continues to serve the public procurement stakeholders in an excellent manner. GeM’s robust growth in service procurement has been remarkable and the transaction value has surged from approx. Rs 8505 crore in FY 20-21 to an impressive Rs 65954 crore in FY 22-23. GeM has set a forward looking target of surpassing Rs 1.5 lakh crore procurement in services in the current fiscal year.

Healthy growth in infrastructure of the country will provide more opportunities in this sector for supply chain managers. Country is ambitiously moving to become 3rd largest economy in the world in next 5 years opening up many areas of growth and opportunities, however, it will also require absorption and application of newer technologies in SCM. There is, therefore, greater need for upgradation of skill sets in SCM to meet these challenges.

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KEY TO MITIGATING SUPPLY CHAIN DISRUPTIONS

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1. Understanding the Supply Chain : When we talk about the supply chain, we are talking about the link between resources, processes and businesses that are part of the manufacturing, marketing and distribution of a product from start to finish. If any link in the chain is broken, then the whole system falls like a house of cards. The world had seen virus-related supply chain crises during the SARS, Ebola and Swine Flu outbreaks. None of such crises were even came close to the scale of devastation brought by pandemic. All the vulnerabilities inherent in this type of global supply chain were exposed once pandemic struck. The resulting supply chain crisis so experienced, have changed the way companies will operate the future

2. Role of Supply chain in crisis mitigation : Supply chains have been a vital lifeline to support the response, keeping essential medical supplies, food and other key necessities flowing where they are needed most. There is no doubt that the pandemic has tested the ingenuity, resilience and flexibility of supply chain leaders globally, as they have sought to maintain essential operations. Consumers, investors, governments and communities may ultimately judge companies on how they respond during period of disruption. To safeguard against future breakdowns, all industries realized to make supply chains local again. Focused efforts were made on high-precision and high-quality manufacturing so that the costs can remain low. Broadly, industry adopted technological advancements as another key step in shoring up supply chains and reshoring manufacturing.

3. Impact of Globalization on Supply chain : Supply chain to be outsourced to a few big players such as China, South Korea and Taiwan. For a striking example of this market concentration, Taiwan Semiconductor Manufacturing Company (TSMC) accounted for 54 % of total semiconductor manufacturing globally.

Almost all of the large electronics vendors such as Apple, Huawei and Qualcomm rely on TSMC to manufacture chips for their latest generations of smart phones, laptops and other consumer products. Companies were able to save big on manufacturing and labor costs and optimize their individual supply chains to avoid inventory carrying cost. Shipping containers from China were cheap and shipping times were fast. The profitability seemed to grow and grow with no ceiling in sight.

4. Key impacts on organizational supply chains : The supply chain disruptions resulted in the following

i. Increase in Global commodity prices,
ii. Organizations looked for alternative sources of supply, Labour shortages
iii. Production and importation disruption
iv. Risk management is no longer optional

5. Events responsible for Global Supply Chain disruptions

5.1 Pandemic Covid-19 : With the virus a live threat and a number of regions and economies in lockdown, while others emerge into a very different world, the disruption to supply chains continued to be severe. As economies restart, the supply chain became critical to supplying goods and services quickly, safely and securely.

Business leaders took rapid decisions, and immediate actions to sustain business operations to serve their customers, clients and communities, as well as protect and support their workers. The repurposed and reshaped supply chains of the future need to be characterized by both resilience and responsibility. These will help communities manage the short-term crisis and enable businesses to build around their customers and help economies rebound.

While consumption did dip for a while, it came roaring back before anyone could have imagined. And because people were not able to spend their money on travel, entertainment or dining, they had a surplus of money to spend on consumer goods. People who were stuck at home began to shop online a lot. Accordingly, online ecommerce companies such as Amazon experienced huge rise in profits as well in sales. Even though workers were not commuting to the office in the same numbers, people became increasingly concerned for their safety on public transportation. People who rode the subway or took advantage of ride shares, decided that they wanted to have their own automobiles in order to lower their exposure to the corona virus. This resulted in to prices of used cars climbed higher.

5.2 Russia-Ukraine War : Russian – Ukraine war have been putting pressure on an already stressed global supply chain system due to pandemic. Europe supply chain routes have been disrupted. Both countries reduced their trade with the world, and supply chains were disrupted. Delayed shipments, price volatility and supplier component/material shortages continued beyond the pandemic. Travel restrictions and port closures extend into the future as well. Bottlenecks in international freight remain high and are accentuated by the Ukraine war and the shutdowns in China.

5.3 GLOBAL IMPACT ON LOGISTICS : The Russia-Ukraine war led to an increase in prices of several commodities including fertilizers, food products, and oil and gas. The supply chain disruptions have increased freight charges, created container shortages, and lowered the availability of warehousing space. Several ports were closed and orders were pulled back because of delays in shipments and congestion.

5.4 Rise in Oil and Gas Prices : The surging oil and gas prices coupled with the geopolitical risks arising from the conflict, crippled global supply chains, especially in the energy-intensive logistics sectors. The black seaport, along with several other routes, has become non-operational following the war, ceasing the supply of several products and commodities including transport equipment, machinery, electronics, metals, chemicals, fertilizers and food products. The European Union struggled with the availability of these energy sources, and the sharp surge in prices.

European Union imports a significant share of energy from Russia. It also depends on Russia for 35% of its natural gas imports, around 20% of crude oil imports and 40% of coal imports. The rise in oil and gas prices has a crippling global effect. Organizations involved in supply chain operations took active measures to mitigate risks and soften the blow of rising prices and energy shortages.

5.5 The China-U.S. trade war : The China-U.S. trade war and other pandemic- and climate-related disruptions have caused the pace of supply-chain localization to rise significantly. In fact, a Jan 2020 survey of 3,000 firms in a variety of industries — Semiconductors, Automobiles and Medical Equipment Shifted, or planned to shift, at least part of their supply chains from current locations. Companies in about half of all global sectors in North America declared an intent to "reshore."

5.6 Food Supply Shortage and Rise in Prices: In Europe, natural gas prices rose by around 120-130 % in the last 6 months since the start of the war, while coal prices rose by 95-97% during the same period. The prices of soybean, corn and crude oil – of which Russia is the leading producer – have been increasing ever since the attack. The cost of fertilizers, mainly for crops and animal feed, was already high due to increased demand during the pandemic. Similarly, the household stockpiling of several products led to a shortage and the recently created shipment crisis deepened the crisis. Russia and Ukraine are major suppliers of fertilizer and the land destruction and commercial constraints due to the war have brought a major export concern for the fertilizers and in turn food and grains

6. Priorities for SC Disruption Mitigation : A few important priorities for supply chain disruptions are briefly discussed below:

1. Put people first: Keep the planning workforce healthy and productive by supporting new ways of working.

2. Leverage data to improve visibility: maximize visibility into demand, inventory, capacity, supply and finances across the ecosystem.

3. Define segmentation to prioritize demand: carefully analyze demand and define priority micro-segments.

4. Build a sales and ops SWAT team: mobilize dedicated planning and execution teams that are able to undertake multiple interventions and orchestrate responses effectively.

5. Evaluate supply chain scenarios: run simulations to predict when and where excesses and shortages are likely to occur as well as running end-to-end scenarios to get actionable insights that will optimize operational metrics.

7. Supply chain makeovers

7.1 Consider alternative sourcing : The companies could no longer able to depend on traditional suppliers. It would be appropriate to either diversify partners or find alternative sourcing modes. While changes are necessary, there are ramifications. When suppliers changed, lead time might increase, and when lead time increases, there will be temporary shortages.

7.2 Capitalize on new opportunities : Start collaborating through trade coalitions and other joint partnerships to increase capacity, when possible, they should transition from global to a localized set of suppliers. If needed to collaborate with others in order to increase capacity, start doing it. It's important to start working, not in silos.

7.3 Understand that quantitative approaches can help, but there are challenges. : While modeling can help optimize supply chain changes, there are limits to this approach. Most supply chain models assume a steady state, which is not applicable for redesigning something that is in transition. Decision makers should move to systems thinking and have multiple objectives and KPIs in mind when designing supply chain networks

7.4 Accept that this is the new normal : Planning can only get you so far in a world order that continues to be in constant flux. Therefore, the key to sustaining growth in uncertain times is developing best-in-class agile competencies. You can't plan for everything.

8. Way Forward : In order to overcome the challenges, companies resorted to Right-sizing and re-skilling talent, calibrating services to changing customer demands, changing well-tuned, multi decade processes and Sourcing/approving new suppliers

The companies availed of the opportunities by adopting shorter, less complex supply chains, accelerate digital adoption, capture business from changing behaviors and Build more efficient and more transparent business processes.

●●●

MICRO, SMALL, AND MEDIUM ENTERPRISES IN INDIA: AN EXPLAINER

MELISSA CYRILL

India has the largest MSME base in the world after China. The sector provides a wide range of services and is engaged in the manufacturing of over 6,000 products – ranging from traditional to hi-tech items. Given the government of India's push for a self-reliant economy or Atmanirbhar Bharat, the Indian MSME sector is poised for rapid growth and is seeking greater integration with major global value chains.

India's micro, small, and medium enterprises (MSMEs) enjoy significant government policy support, such as through sector-based production-linked incentives (PLI) programs, incentives targeting specific regions like the Northeastern states, or schemes for businesses linked to technical skilling and digital tools, applications, and technologies, among others. Relief measures are announced from time-to-time to combat force majeure events like the COVID-19 pandemic.

MSMEs in India: A quick overview : As per some estimates, there are about 63.05 million micro industries, 0.33 million small, and about 5,000 medium enterprises in the country. The state of Uttar Pradesh has the largest number of estimated MSMEs with a share of 14.20 percent of the total MSMEs in the country. West Bengal comes as close second with a share of 14 percent, followed by Tamil Nadu and Maharashtra at eight percent.

Responding to parliamentary questions in a written reply (July 15, 2022), the Ministry of State for Micro Small and Medium Enterprises stated that MSMEs contributed to 35.98 percent of India's total manufacturing output in 2020-21, albeit down from 36.68 percent in 2019-20.

How do you qualify as an MSME in India?

From July 1, 2020, the government has implemented the new categorization MSMEs in India based on an upward revision in the definition and criteria.

The definition of who qualifies as an MSME in India is based on investment and turnover and applies to entities in manufacturing and services sectors:

- **Micro:** Enterprises with investment in plant and machinery or equipment not more than INR 10 million and annual turnover not more than INR 50 million are defined as micro units.
- **Small:** Enterprises with investment in plant and machinery or equipment not more than INR 100 million and annual turnover up to INR 500 million are defined as small units.
- **Medium:** Enterprises with investment in plant and machinery or equipment not more than INR 500 million and annual turnover up to INR 2.5 billion are classified as medium-sized units.

MSME Classification in India: Latest Investment and Turnover Thresholds

Classification	Micro enterprise	Small enterprise	Medium enterprise
Manufacturing and Services	Investment in plant and machinery or equipment does not exceed INR 10 million (US$133,659)	Investment in plant and machinery or equipment does not exceed INR 100 million (US$1.33 million)	Investment in plant and machinery or equipment does not exceed INR 500 million (US$6.69 million)
	Annual turnover does not exceed INR 50 million (US$668,386)	Annual turnover does not exceed INR 500 million (US$6.68 million)	Annual turnover does not exceed INR 2.5 billion (US$33.44 million)

Graphic© Asia Briefing Ltd.

The Micro, Small and Medium Enterprises Development (MSMED) Act, 2006 governs the coverage and investment ceiling of MSMEs in India. The Act recognizes two categories of MSMEs – manufacturing and services, whose definition criteria have now been rationalized on an equal footing as per market and price conditions.

Prior to May 2020, the MSMED Act, 2006 had provided separate definition criteria for manufacturing and service MSME units, with very low financial limits. Changes to these criteria were announced in the first tranche of the Atmnirbhar Bharat economic package on May 13, 2020, to address the impact of the COVID-19 pandemic.

How to register as an MSME in India?

The MSME Ministry notified a new procedure of registration via the **Udyam Registration Portal**, which came in effect July 1, 2020.

Any person who intends to establish a micro, small or medium enterprise may file the Udyam Registration online on the Udyam Registration portal, based on self-declaration with no requirement to upload documents, papers, certificates or proof.

On registration, the enterprise (referred to as "Udyam" in the Udyam Registration portal) will be assigned a permanent identity number called the "Udyam Registration Number".

An e-certificate, namely, the "Udyam Registration Certificate" will be issued on completion of the registration.

Quick points:

- Only the Adhaar number will be enough for Udyam registration. The PAN and GST-linked details on investment and turnover of enterprises will be taken automatically from Government data bases. The Udyam online system is fully integrated with the Income Tax and GSTIN systems.
- The entire registration process is free of cost.
- On completion of the registration process, the Registration Certification is generated and sent to the applicant. The Certificate can also be printed from the portal itself.
- Udyam registration portal: **https://udyamregistration.gov.in/Government-India/Ministry-MSME-registration.htm**

What are opportunity areas for MSMEs in India?

Telecommunications

- Domestic manufacturing of low-cost mobile phones, handsets, and devices
- Manufacturing of telecom networking equipment, including routers and switches
- Manufacture of base transceiver station equipment
- Mobile customer data analytics – services oriented toward analytical solutions
- Development of value-added services

Healthcare

- Manufacturing of personal protective equipment (PPE)
- Manufacturing of low-cost medical devices, and medical accessories, such as surgical gloves, scrubs, and syringes
- Telemedicine
- Diagnostic labs

Electronics

- Domestic manufacturing of low-cost consumer electronics, consumer durables
- **White goods** (AC and LED)
- Nano-electronics and microelectronics
- Electronic Systems Design and Manufacturing, including **semiconductor design**, electronic components design and hi-tech manufacturing under India's 'National Electronics Mission
- Strategic electronics, as the government is keen on encouraging the domestic manufacturing of products needed by the security forces

Pharmaceuticals

- In July 2022, India launched three schemes under the banner '**Strengthening Pharmaceuticals Industry**' (SPI) for strengthening MSMEs in the pharmaceutical sector to upgrade technology, set up common research centers and effluent treatment plants in pharma MSME clusters, and create a database for the domestic pharmaceutical and medical device industry.
- The states of Andhra Pradesh, Gujarat, Maharashtra, and Goa are major **pharmaceutical** manufacturing clusters in India.
- The pharma sector is also a **PLI** beneficiary.

Other areas that offer opportunities for MSMEs include tourism; **sustainability**; hyperautomation, which include artificial intelligence (AI); machine learning (ML); RPA; and advanced analytics; information technology (IT) and IT-enabled services; chemical; **automotive**; **renewables**; **gems and jewelry**; **textile**; **food processing**; **drones-as-a-service**; and **agriculture**.

Employment generated by MSMEs in India

S.No.	State/Union Territory	2020-21*	2021-22	2022-23	2023-24#	Total
1	Andhra Pradesh	709,811	1,231,311	2,745,495	727,568	5,414,185
2	Arunachal Pradesh	14,694	20,152	35,406	8,677	78,929
3	Assam	234,963	561,497	956,912	394,341	2,147,713
4	Bihar	694,423	1,447,440	2,175,714	606,625	4,924,202
5	Chhattisgarh	282,710	398,414	556,453	162,031	1,399,608
6	Goa	64,757	59,265	82,455	21,968	228,445
7	Gujarat	2,466,078	2,241,194	2,439,554	822,168	7,968,994
8	Haryana	1,284,400	1,175,432	1,255,892	465,005	4,180,729
9	Himachal Pradesh	140,826	175,196	199,516	118,312	633,850
10	Jharkhand	379,680	683,346	922,057	246,818	2,231,901
11	Karnataka	1,957,273	2,757,427	3,578,112	1,311,507	9,604,319
12	Kerala	674,974	763,846	851,407	236,464	2,526,691
13	Madhya Pradesh	826,879	1,400,971	1,823,041	524,148	4,575,039
14	Maharashtra	4,458,451	4,566,130	4,890,908	1,442,862	15,358,351

15	Manipur	91,176	118,058	147,183	17,365	373,782
16	Meghalaya	7,340	18,757	31,128	11,606	68,831
17	Mizoram	9,499	20,606	69,215	18,488	117,808
18	Nagaland	7,916	26,062	46,227	18,681	98,886
19	Odisha	576,236	958,600	1,295,934	406,823	3,237,593
20	Punjab	913,645	934,704	1,161,308	481,552	3,491,209
21	Rajasthan	1,547,664	2,457,478	2,816,087	831,202	7,652,431
22	Sikkim	3,412	10,429	15,247	7,488	36,576
23	Tamil Nadu	3,335,236	4,054,934	4,662,649	1,474,860	13,527,679
24	Telangana	1,648,221	1,982,579	2,677,513	875,418	7,183,731
25	Tripura	15,196	83,737	179,287	33,383	311,603
26	Uttar Pradesh	2,090,951	2,832,512	4,171,713	2,209,675	11,304,851
27	Uttarakhand	217,210	403,177	401,591	124,721	1,146,699
28	West Bengal	1,107,009	2,049,849	2,932,684	752,510	6,842,052
29	Andaman and Nicobar Islands	10,248	173,158	35,782	5,491	224,679
30	Chandigarh	103,597	67,930	69,163	19,223	259,913
31	Delhi	1,333,992	1,189,801	1,236,440	814,990	4,575,223
32	Jammu And Kashmir	190,902	385,608	698,551	234,669	1,509,730
33	Ladakh	4,978	11,484	13,779	3,751	33,992
34	Lakshadweep	220	811	1,375	212	2,618
35	Puducherry	39,392	55,711	57,259	21,212	173,574
36	Dadra and Nagar Haveli and Daman and Diu	66,442	47,643	42,783	12,397	169,265
Total		27,510,401	35,365,249	45,275,820	15,464,211	123,615,681

*From July 1, 2020; #up to August 1, 2023

Source: Minister of State for Micro Small and Medium Enterprises, Shri BhanuPratap Singh Verma in a written reply to the upper house of parliament, August 7, 2023.

MSME schemes and government support measures

India has initiated **various schemes** and measures to allow MSMEs easier access to funds, to modernize the sector, and make it more competitive in the global market.

These include schemes for credit guarantee, MSME cluster development, regeneration of traditional industries, growth of rural industries, entrepreneurship and skill development, procurement and marketing support, promotion in the North East Region (NRE) and Sikkim, infrastructure development and capacity building, and digital tools, applications, and technologies, among others.

Examples include the Prime Minister's Employment Generation program (PMEGP), Scheme of Fund for Regeneration of Traditional Industries (SFURTI), 'Strengthening Pharmaceuticals Industry' (SPI), A Scheme for Promoting Innovation, Rural Industry & Entrepreneurship (ASPIRE), Credit Guarantee Scheme for Micro and Small Enterprises (CGTMSE), Micro and Small Enterprises Cluster Development Program (MSE-CDP), procurement and marketing support scheme (PMS), Promotion of MSMEs in North Eastern Region and Sikkim, etc.

In more recent measures are the INR5 trillion-Emergency Credit Line Guarantee Scheme (ECLGS), a INR 500 billion equity infusion into the MSME sector through the MSME Self-Reliant India Fund, and the inclusion of Retail and Wholesale trades as part of the MSME category. Furthermore, initiatives like the "Champions" online portal, non-tax incentives for achieving higher MSME status, and the Raising and Accelerating MSME Performance (**RAMP**) program have been introduced to boost the sector's growth.

Additionally, the Udyam Assist Platform (UAP) was launched on January 11, 2023 to formalize Informal Micro Enterprises (IMEs), enabling them to access benefits under Priority Sector Lending (PSL).

Relief measures to mitigate impact of COVID-19

Some of the concessions for MSMEs under Atmanirbhar Bharat Abhiyan to mitigate the negative impact of COVID-19 are listed below:

- INR 3 trillion worth Emergency Credit Line Guarantee Scheme (ECLGS) for businesses, including MSMEs. (Subsequently increased to INR 5 trillion under the Budget 2022-23.)
- No global tenders in government procurements worth up to INR 2 billion.
- INR 200 billion subordinate debt for stressed MSMEs.
- INR 500 billion equity infusion through the Self Reliant India Fund.

Micro and Small Enterprise-Cluster Development Program (MSE-CDP) Scheme

The Ministry of Micro, Small and Medium Enterprises has adopted the cluster development approach as a key strategy for enhancing the productivity and competitiveness as well as capacity building of micro and small enterprises (MSEs) and their collectives in the country.

A cluster is a group of enterprises located within an identifiable and as far as practicable, contiguous area or a value chain that goes beyond a geographical area and producing same/similar products/complementary products/services, which can be linked together by common physical infrastructure facilities that help address their common challenges.

The essential characteristics of enterprises in a cluster are:

- Similarity or complementarity in the methods of production, quality control and testing, energy consumption, pollution control, etc.
- Similar level of technology and marketing strategies/practices.
- Similar channels for communication among the members of the cluster.
- Common market and skill needs.
- Common challenges and opportunities that the cluster faces.

Key benefits under MSE-CDP Scheme:

- Creation of Common Facility Centers including Plug & Play Facilities.
- Support for Infrastructure Development Projects, including Flatted Factory Complexes.

Scheme applicable for:

- Existing Entrepreneurs (in form of a special purpose vehicle / SPV – which should be a section 8 company under the Companies Act, 2013).

New guidelines for 15th Finance Commission Cycle 2021-22 to 2025-26

1. **Common Facility Centers (CFCs):** The central government grant will be restricted to 70 percent of the cost of project from INR 50 million to INR 100 million and 60 percent of the cost of project from INR 100 million to INR 300 million. In case of Northeast & Hill States, Island territories, Aspirational Districts, government grant will be 80 percent of the cost of project from INR 50 million to INR 100 million and 70 percent of the cost of project from INR 100 million to INR 300 million. The project for CFC with project cost more than INR 300 million shall also be considered but the Government assistance would be calculated by taking into account the maximum eligible project cost of INR 300 million.
2. **Infrastructure Development:** The central government grant will be restricted to 60 percent of the cost of project from INR 50 million to INR 150 million for setting up of new Industrial Estate / Flatted Factory Complex and the grant will be 50 percent of the cost of project from INR 50 million to INR 100 million for up-gradation of existing Industrial Estate / Flatted Factory Complex. In case of NE & Hill States, Island territories, Aspirational Districts, the grant will be 70 percent of the cost of project from INR 50 million to INR 150 million for setting up of new Industrial Estate / Flatted Factory Complex and 60 percent of the cost of project cost from INR 50 million to INR 100 million for up-gradation of existing Industrial Estate / Flatted Factory Complex. The project for ID with project cost more than INR 100 million/INR 150 million can also be considered but the government assistance would be calculated by taking into account the maximum eligible project cost of INR 100 million/INR 150 million.

Source: Ministry **press release** dated May 27, 2022.

How to apply

Apply on **https://cluster.dcmsme.gov.in**

Status of the Micro and Small Enterprise Cluster Development Program across India

Status of MSE-CDP Interventions (as on April 22, 2022)

Status of MSE-CDP Interventions (as on April 22, 2022)				
State	Common Facility Centers (CFCs)		Infrastructure Development (ID) projects	
	Completed	Ongoing	Completed	Ongoing
Tamil Nadu	26		35	
Kerala	12	4	8	4
Haryana	3	7	28	0
Karnataka	11	13	4	1
Maharashtra	14	14	5	0
Madhya Pradesh	0	3	14	11
Uttar Pradesh	4	7	8	7
West Bengal	6	7	5	4
Andhra Pradesh	2	6	6	8
Telangana	0	1	3	16
Gujarat	2	10	2	0
Punjab	2	6	3	17

Consult with our India offices for any business support and fulfilment of compliance obligations or for information on availing incentive schemes and eligibility for regulatory relaxations.

The article was originally published September 2019. It was last updated November 1, 2023.

Source: India Briefing

NAVIGATING THE PROJECT PROCUREMENT MAZE A COMPREHENSIVE GUIDE TO STRATEGICALLY SELECTING THE RIGHT CONTRACT TYPE FORPROJECT SUCCESS

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Introduction: Project procurement encompasses the process of acquiring goods, services, or work from external sources to successfully complete a project. It involves identifying requirements, sourcing suppliers, negotiating contracts, and managing supplier relationships, ensuring timely delivery and cost-effectiveness. Project procurement plays a crucial role in achieving project objectives and maximizing value for stakeholders.Procurement transactions are conducted through the medium of contracts, which serve as the legal framework for the acquisition of goods, services, or works.

Contracts are legally binding documents outline the rights, duties, responsibilities, obligations and expectations of the parties involved, ensuring transparency, accountability, and a fair procurement process.They outline the scope of work, deliverables, payment terms, risk allocation, and dispute resolution mechanisms, ensuring clarity, transparency, and accountability throughout the project lifecycle. Effective contracts protect the interests of both parties, mitigate potential risks, and facilitate successful project execution.

In this guide let's discuss how we can **Strategically Select the Right Contract Type for Project Success**

After going through this guide, you will able to Understand:

1. Understanding Contract & Contract Management
2. Type of Project Procurement Contracts
3. Fixed-Price Contract (Lump Sum or Firm Fixed-Price)
4. Cost-Reimbursable Contract
5. Time and Materials (T&M) Contract
6. Choosing the Right Contract

1. Understanding Contract & Contract Management

Meaning of Contract : A contract is a legally binding agreement between two or more parties that defines the terms and conditions of a transaction. It outlines the rights, obligations, and expectations of each party involved. Contracts are essential for conducting business and ensuring that transactions are fair and equitable.

Important Considerations or Aspects of Contract

In India, contracts are governed by the **Indian Contract Act, 1872**.

Contracts vs. Agreements : All contracts are agreements, but not all agreements are contracts. An agreement becomes a legally enforceable contract only when it meets the specific requirements outlined in the Indian Contract Act, 1872. These requirements ensure that contracts are fair, equitable, and enforceable by law.

Essentials of a Valid Contract

Section 10 of the Indian Contract Act, 1872, lays down the essentials which are required to make an agreement into a valid contract:

For a contract to be legally enforceable, it must meet following requirements:

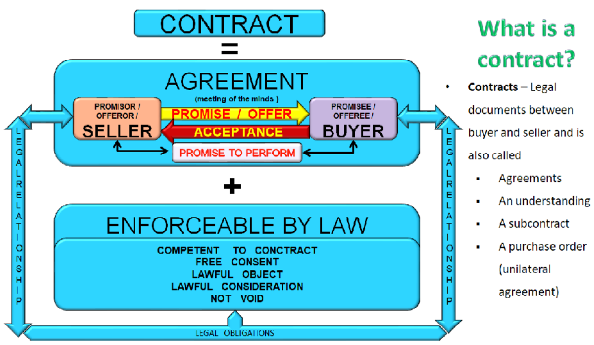
1. **Free Consent:** Both parties must enter into the agreement voluntarily, without coercion or undue influence.
2. **Capacity to Contract:** Both parties must be legally competent to enter into a contract, meaning they must be of sound mind and not under any legal disability.
3. **Lawful Consideration:** The contract must involve an exchange of value, such as goods, services, or money.
4. **Lawful Object:** The purpose of the contract must be legal and not contrary to public policy.
5. **Not Void:** The contract must not be expressly declared void by any law.

Legal Formalities - Additional Essentials : In addition to the essentials outlined in **Section 10 of the Indian Contract Act**, valid contracts to be legally enforceable, it must meet certain requirements:

1. **Offer and Acceptance:** A clear offer must be made by one party and unequivocally accepted by the other.
2. **Intention to Create Legal Relations:** Both parties

must intend for the agreement to be legally binding.

3. **Mutual Assent:** Both parties must agree to the terms and conditions of the contract.
4. **Capacity:** Both parties must have the legal capacity to enter into a contract.
5. **Legality:** The contract must not violate any laws or regulations.
6. **Certainty of Terms:** The terms of the contract must be clear and unambiguous, leaving no room for misinterpretation.
7. **Possibility of Performance:** The obligations under the contract must be capable of being fulfilled.



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By meeting these requirements, agreements can be transformed into valid contracts, ensuring legal protection for all parties involved.

When drafting or reviewing a contract, it is important to consider the following aspects:

- **Clarity and Completeness:** The contract should be clear, concise, and comprehensive, leaving no room for ambiguity or misinterpretation.
- **Identification of Parties:** Clearly identify all parties involved in the contract, including their legal names, addresses, and contact information.
- **Scope of Work:** Clearly define the scope of work or services to be provided, including specifications, deliverables, and timelines.
- **Payment Terms:** Specify the payment terms, including the amount, method of payment, and due dates.
- **Confidentiality:** If applicable, include confidentiality provisions to protect sensitive information.
- **Intellectual Property:** Define ownership and usage rights for intellectual property created during the project.
- **Dispute Resolution:** Outline the process for resolving disputes, including mediation, arbitration, or litigation.

Seller-Buyer Relationship : Contracts define the relationship between the seller and the buyer, establishing their respective rights and obligations. The seller is responsible for providing the goods or services as specified in the contract, while the buyer is responsible for making payments in accordance with the agreed-upon terms.

Importance of Contracts in Project Procurement : Contracts play a crucial role in project procurement, ensuring that projects are executed successfully and that all parties involved are protected. They:

- **Define the scope of work and expectations:** Contracts clearly outline the specific deliverables, deadlines, and performance standards expected of the supplier.
- **Protect the interests of all parties:** Contracts protect the interests of the buyer, the seller, and any other stakeholders involved in the project.
- **Minimize risks and disputes:** Contracts clearly define the rights and obligations of each party, reducing the likelihood of misunderstandings and disputes.
- **Facilitate effective communication:** Contracts serve as a reference point for communication between the parties, ensuring alignment throughout the project.
- **Support project monitoring and control:** Contracts provide a framework for monitoring project progress, measuring performance against agreed-upon criteria, and addressing any deviations.

In summary, contract is vital for ensuring legal compliance, clarifying relationships, managing risks, and facilitating successful project procurement by providing a structured framework for collaboration between parties.

Contract Management : Contract Management is an integral aspect of project success, ensuring that contractual obligations are met effectively and efficiently. It encompasses the processes of planning, organizing, executing, and monitoring contracts throughout the project lifecycle. Effective contract management involves proactive communication, risk mitigation, change management, and dispute resolution, safeguarding the interests of all stakeholders and contributing to project completion within the agreed-upon scope, budget, and schedule.

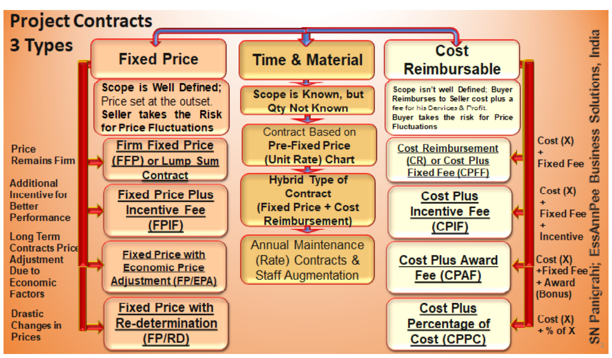
2. Type of Contracts

Procurement Contracts: Defining the Terms of Engagement : Procurement contracts serve as legally binding agreements between buyers and sellers, establishing the framework for their procurement relationship. These contracts outline the scope of work, responsibilities, and financial arrangements that govern the procurement process.

Types of Procurement Contracts: Tailored to Project Needs : Procurement contracts come in various forms to accommodate different project scenarios and risk profiles. The most common types include:

- **Fixed Price Contracts:** These contracts establish a predetermined price for the entire project, providing cost certainty and predictability.
- **Cost Reimbursement Contracts:** In cost reimbursement contracts, the buyer reimburses the seller for allowable costs incurred during the project, often with the addition of agreed-upon fees. This type of contract is suitable for projects with uncertain scope or requirements.
- **Time and Materials Contracts:** Time and materials contracts compensate the seller based on the actual hours worked and materials used. This approach is well-suited for projects with evolving requirements or when the scope is not fully defined.

The choice of contract type depends on the specific project characteristics, risk factors, and the desired level of cost and performance control. Organizations carefully evaluate these factors to select the contract type that aligns best with their project objectives.



3.Fixed Price Contracts: A Fixed Price Contract, is suitable where the scope of a specified product or service is known and well defined with details of technical specifications and buyer pays a predetermined, fixed amount. The agreed-upon price remains constant, regardless of the actual costs incurred by the seller during the contract period.

This approach offers cost certainty and predictability, making it a suitable choice for projects with the following characteristics:

- **Clear and Stable Project Requirements:** Fixed-price contracts work best when the project scope is clearly defined and is unlikely to undergo significant changes during the project lifecycle.
- **Limited Scope Changes Expected:** Since the price is fixed, unexpected changes to the project scope can lead to cost overruns or disputes between the buyer and seller.
- **Low Uncertainty in Project Execution:** Fixed-price contracts are most effective when the project execution process is well-understood and the likelihood of unforeseen challenges is relatively low.

In these situations, fixed-price contracts provide a clear understanding of the total project cost, allowing for better budgeting and financial planning. Buyer may also incentivize the seller to deliver the project early, efficiently and within the agreed-upon budget. However, it's important to note that fixed-price contracts may not be suitable for projects with a high degree of uncertainty or evolving requirements.

Who will bear the Risk in a Fixed-Price Contract: In a fixed-price contract, the **seller bears the majority of the risk**. This means that the seller is responsible for completing the project within the agreed-upon budget, regardless of the actual costs incurred. This can be a significant risk for the seller, as any unforeseen challenges or changes to the project scope could lead to cost overruns and financial losses.

Let's now discuss different variants of **Fixed Price (FFP) Contracts:**

Firm Fixed Price (FFP) or Lumpsum Contracts : An FFP contract is a type of procurement agreement in which the buyer and seller agree on a fixed price for the entire project, regardless of the actual costs incurred by the seller. This type of contract is typically used for projects with well-defined scope and requirements, as any changes to the scope could result in cost overruns or disputes.

- In a fixed-price contract, the seller agrees to provide goods or services for a fixed price, regardless of the actual costs incurred.
- This type of contract is suitable when the **scope of work is well-defined** and the buyer is willing to accept the risk of cost overruns.

Examples : Consider the construction of a new building with detailed plans and specifications. A Fixed Price Contract or Lump Sum contract would be suitable in this scenario as the scope is well-defined and changes are less likely to occur, providing cost certainty to the project owner.

Another example, consider the development of a new software application with well-defined requirements and specifications. An FFP contract would be suitable in this scenario as the scope and execution process are relatively predictable.

Fixed Price Plus Incentive Fee (FPIF): Fixed Price Plus Incentive Fee (FPIF) is a type of procurement contract that combines the elements of a fixed-price contract with an incentive fee structure. This means that the seller is still responsible for completing the project within the agreed-upon budget, but they can earn an additional fee if they meet or exceed certain performance targets.

In this contract it is essential to clearly determine the formula for calculating the incentive fee and the range of potential incentive payments.The incentive fee motivates the seller to work efficiently and manage their resources effectively up on achieving specific performance targets like early delivery target, achieve a certain quality rating on the project, system uptime, business process improvements, incorporate sustainable design and construction practices into the project, maintain a high safety record on the project etc.

Example: Project: Construction of a new office building
Contracting parties:
· Buyer: ABC Real Estate Company
· Seller: XYZ Construction Company
Contract terms:
· Fixed price: $10,000,000
· Incentive fee: 2% of the fixed price for early delivery
· Normal Delivery Period : 15 Months
· Early delivery target: 12 months from the start of construction.
Incentive structure:
· If the seller completes the project within the early delivery target, they will receive an incentive fee of $200,000 (2% of the fixed price of $10,000,000).
· The incentive fee will be prorated if the project is completed between the early delivery target and the original completion date.

Fixed Price with Economic Price Adjustment (FP/EPA) : In a fixed-price with economic price adjustment contract, the seller agrees to provide goods or services for a fixed price, plus an adjustment to the price based on changes in certain economic factors. This type of contract is suitable for long term contracts, when the contracting parties are concerned about the impact of inflation, labor cost or other economic factors on the cost of the project.

This type of contract is suitable for Long-term construction projects spanning several years where economic conditions may fluctuate. **Benefits of using an FP/EPA contract are Protects the seller from inflationary risks, ensures fair pricing for the buyer, promotes a more collaborative relationship between the buyer and seller on long term basis.**

Example :

A Long Terms Construction Contract with expected inflationary impact of Material

Say the agreed up on Fixed Price is $100,000,000 + / - Economic Price Adjustment (EPA).

Economic Price Adjustment (EPA) clause: The price will be adjusted based on changes in the cost of labor and materials.

EPA calculation:

The EPA will be calculated quarterly based on the following formula:

EPA = (New CPI - Base CPI) / Base CPI

- Where:
- New CPI: The current Consumer Price Index (CPI) for all urban consumers
- Base CPI: The CPI as of the date the contract was signed

For example, if the contract was signed on January 1, 2023, with a Base CPI of 270, and the New CPI on April 1, 2023, is 275, then the EPA would be calculated as follows:

EPA = (275 - 270) / 270 = 0.0185

The EPA would then be applied to the fixed price to determine the adjusted contract price:

Adjusted contract price = Fixed price * (1 + EPA)

In this case, the adjusted contract price would be:

Adjusted contract price = $100,000,000 * (1 + 0.0185) = $101,851,917

FP/EPA contracts are a valuable tool for managing inflationary risks in construction projects. By using an FP/EPA contract, both the buyer and seller can be confident that the project will be completed within budget.

4. Cost-Reimbursement Contracts : Cost-reimbursement contracts are a type of procurement agreement where the buyer agrees to reimburse the seller for the allowable costs incurred in completing a project. Unlike fixed-price contracts, which establish a predetermined price for the entire project, cost-reimbursement contracts allow for greater flexibility in project scope and cost management.

Essential Characteristics of Cost-Reimbursement Contracts

Cost-reimbursement contracts are characterized by the following key elements:

- **Reimbursement of Allowable Costs by the Buyer:** The buyer is obligated to reimburse the seller for the costs actually incurred during the project, provided they meet the criteria of being "allowable" as defined in the contract.
- **Fee Structure:** In addition to reimbursing costs, the seller may also receive a fee for their services. The fee structure can vary depending on the type of cost-reimbursement contract and the specific project requirements.
- **Open-Ended Pricing:** Unlike fixed-price contracts, the total cost of the project is not predetermined. The final cost depends on the actual costs incurred by the seller and the market price.

Applicability and Suitability of Cost-Reimbursement Contracts

Cost-reimbursement contracts are particularly suitable for projects with the following characteristics:

- **Uncertain Scope or Requirements:** When the project scope is not fully defined or may evolve during the project lifecycle, a cost-reimbursement contract provides the flexibility to accommodate changing requirements.
- **High Degree of Complexity:** For complex projects with technical uncertainties, cost-reimbursement contracts allow for greater adaptability and risk management.
- **Emphasis on Innovation and Development:** When the project involves research, development, or innovation, a cost-reimbursement contract can incentivize the seller to invest in new technologies or approaches.

Challenges of using a Cost-Reimbursement Contracts:

- **Cost Control**: The buyer may have difficulty controlling costs, as they are responsible for reimbursing the seller for all allowable costs at actual.
- **Administrative Burden**: Contracts can be more administratively burdensome than fixed-price contracts, as the buyer must review, verify authenticity and approve invoices for allowable costs.
- **Lack of Cost Certainty**: The buyer does not have cost certainty, as the final cost of the project will depend on the actual costs incurred by the seller.

Under Cost-Reimbursement Contracts, the Buyer will reimburse to seller all costs that are directly related to the project and are reasonable, necessary, and allocable at actuals. This includes costs such as labor, materials, equipment rental, service cost and cost of subcontracting. Thorough verification is done by the buyer to verify and authenticate the genuineness of the Invoices.

Who Bears the Risk in Cost-Reimbursement Contracts: In cost-reimbursement contracts, **the buyer bears the majority of the risk**. This is because the buyer is responsible for reimbursing the seller for all allowable costs incurred during the project, regardless of whether the project is completed on time and within budget. This means that the buyer is exposed to the risk of cost overruns, schedule delays, and quality issues.

The seller's risk is mitigated by the fact that they are guaranteed to be reimbursed for all allowable costs. However, the seller is still incentivized to manage costs effectively, as they will receive a fixed fee for their services, and the amount of the fee may be affected by the project's overall performance.

Four Main Variants of Cost-Reimbursement Contracts:

- **Cost Plus Fixed Fee (CPFF)** : In a CPFF contract, the buyer agrees to reimburse the seller for all allowable costs incurred during the project, plus a predetermined fixed fee. The fixed fee is typically a percentage of the estimated project costs and is intended to compensate the seller for their overhead and profit. CPFF contracts are suitable for projects with a high degree of uncertainty or where the buyer wants to incentivize the seller to complete the project quickly and efficiently.

Example :

Project: Construction of a House.

Contract terms: **Cost Plus Fixed Fee (CPFF)**

- Estimated Cost: $1,000,000
- Fixed Fee: 10% of Estimated Cost: $100,000

Performance:

- Costs Actually Incurred by the Seller or Contractor: $1,500,000
- Fixed Fee Payable : 10% of Estimated Costs : $100,000
- Total Amount payable by the Buyer to Seller :

Costs Actually Incurred by the Seller + Fixed Fee

= $1,500,000 + $100,000 = $1,600,000

- **Cost Plus Incentive Fee (CPIF)** : A CPIF contract is similar to a CPFF contract, but the seller gets apart from pre-determined fee some incentive based on their performance against predetermined incentive targets. These targets may be related to cost, schedule, quality, or other project metrics.

CPIF contracts are suitable for projects where the buyer wants to incentivize the seller to achieve specific performance goals. The incentive fee incentivizes the seller to achieve specific performance targets, such as completing the project on time and within budget.

Example:

Project: Construction of a new office building

Contract terms: **Cost Plus Incentive Fee (CPIF)**

- Estimated Project costs: $10,000,000
- Fixed fee: $100,000
- Project Normal Completion Period : 8 Months
- Project Target Completion for Incentive : 6 Months
- Incentive fee: 2% of the Estimated Project cost for achieving completion of project on targeted time (earlier than the Normal Completion Period).

Assume Actual Cost Incurred : $10,100,000

In case the Seller (Contractor) Completes the work on-time ie with in Target Period of 6 Months, then he will be Entitled for an Additional Incentive of 2% of the Estimated Project cost.

In such case the Buyer shall make following Payments:

Actual Cost Incurred : $10,100,000

+ Fixed fee: $100,000

+ Incentive 2% of the Estimated Project cost : $200,000

Total Amount Payable by the Buyer to Seller = $10,400,000

- **Cost Plus Award Fee (CPAF)**: In a CPAF contract, the seller is reimbursed for allowable costs and receives an award fee based on a subjective evaluation of their performance. The award fee is typically a percentage of the project costs and is determined by a team of evaluators who consider factors such as technical achievement, cost control, and schedule adherence. CPAF contracts are suitable for complex projects where the buyer wants to reward the seller for exceptional performance.

Contract terms:

- Estimated project costs: $5,000,000
- Fixed fee: $500,000
- Award fee: Up to 10% of the fixed fee ($50,000) if the the overall performance of the seller is satisfactory against a set of criteria.

Difference between Cost Plus Incentive Fee (CPIF) and Cost Plus Award Fee (CPAF) contracts:

CPIF contracts are characterized by an objective incentive structure that is based on the achievement of specific and measurable performance targets. The seller receives an incentive fee if they meet or exceed the agreed-upon targets. CPIF contracts are suitable for projects where the buyer can clearly define the desired performance outcomes and where there is a clear link between performance and project success.

CPAF contracts, on the other hand, have a subjective incentive structure that is based on the overall performance of the seller. The seller receives an award fee based on the buyer's evaluation of their performance against a set of criteria. CPAF contracts are suitable for complex projects where there are multiple performance objectives and where the buyer wants to reward the seller for overall excellence.

Feature	**CPIF**	**CPAF**
Incentive fee	Based on achievement of specific targets	Based on overall performance
Performance targets	Specific and measurable	Broad and subjective
Evaluation	Objective	Subjective
Suitability	Projects with well-defined performance targets	Complex projects with multiple performance objectives

In general, CPIF contracts are more suitable for projects with a high degree of certainty and well-defined performance targets, while CPAF contracts are more suitable for complex projects with a moderate degree of uncertainty and multiple performance objectives.

- **Cost Plus Percentage of Cost (CPPC)**: A CPPC contract is the simplest type of cost-reimbursement contract. In a CPPC contract, the seller is reimbursed for all allowable costs, plus a percentage of those costs as their fee. The percentage fee is typically a fixed amount, but it may also be based on a sliding scale. CPPC contracts are suitable for projects where the buyer wants to incentivize the seller to keep costs low.
- **Example**

Contract terms:

- Estimated Project Costs: $500,000
- Percentage fee: 10% of the Actual Cost
- Say Actual Cost : $550,000
- Fee Payable: 10% of the Actual cost costs: $55,000
- Total Amount Payable by Buyer

  = Actual Cost $550,000 + Fee (10% of Actual Cost) $55,000

  = $ 605,000

If the Actual cost $600,000, then

- Total Amount Payable by Buyer

  = Actual Cost $600,000 + Fee (10% of Actual Cost) $60,000

  = $ 660,000

In Cost Plus Percentage of Cost (CPPC) contracts, the fee is directly proportional to the actual project costs, meaning that as project costs increase, the fee and the total amount payable by the buyer also increase. This inherent characteristic of CPPC contracts can pose significant challenges for buyers, as it makes it difficult to control project costs and predict the overall cost of the project.

Buyers should exercise caution when considering CPPC contracts, especially for projects with a high potential for cost overruns. These contracts may be suitable for projects, where the buyer has a strong working relationship with the seller and is confident in the seller's ability to manage costs effectively.

Summary : Here is a table summarizing the key differences between the four types of cost-reimbursement contracts:

Feature	**CPFF**	**CPIF**	**CPAF**	**CPPC**
Fee structure	Fixed fee	Incentive fee	Award fee	Percentage of cost
Incentive	None	Specific performance targets	Subjective evaluation of performance	As Cost Increases, Fee also Increases
Suitability	High uncertainty, buyer wants quick completion, Fee is well Known	Specific performance goals - Incentive for Better Performance	Complex projects, buyer wants exceptional performance.	Simple projects, Fee is linked to Cost

The decision to use a cost-reimbursement contract should be carefully considered based on the specific project characteristics, risk factors, and the desired level of cost control. Organizations should evaluate the trade-offs between cost certainty, flexibility, and risk allocation when selecting the appropriate contract type for their projects

5. Time and Materials (T&M) Contract: Time & Material Contract combines elements of both Fixed Price and Cost Reimbursement contracts.

Time and materials (T&M) contracts represent a **hybrid approach** to project procurement, incorporating elements of both fixed-price and cost-reimbursement contracts. While the scope of work to be done is typically well-defined in T&M contracts, however, the exact quantity of work required may be uncertain. This inherent duality gives rise to a hybrid structure where fixed pricing is applied to the known, fixed-scope components, while actual costs are reimbursed for the variable, quantity-driven aspects of the project.

This means that the buyer agrees to pay a predetermined fixed price for certain well -defined deliverables or services, while the remaining costs are covered by Cost Reimbursement based on Actual Cost incurred. This hybrid approach aims to provide a balance between cost certainty and flexibility, making them suitable for projects with varying degrees of uncertainty or where the scope may evolve over time.

Who will bear the Risk in T&M Contract: The risk distribution depends on the specific terms of the contract, with the fixed-price portion usually shouldered by the seller and the cost-reimbursable portion by the buyer.

Examples of T&M Contracts:

Example -1: T&M Contract for Air Conditioner Maintenance: T&M contracts offer a practical approach for air conditioner maintenance, combining fixed pricing for routine servicing with variable cost reimbursement for component replacements. This hybrid model strikes a balance between cost predictability and flexibility, ensuring predictability for fixed-scope services and accommodating uncertainties related to variable costs.

Fixed-Scope Monthly Servicing: The contract defines fixed pricing for monthly service visits, covering labor costs and travel expenses. This predictability ensures cost control based on fixed scope for routine maintenance tasks.

Variable-Scope Component Replacements: Variable cost reimbursement is applied to component replacements as when required, accommodating the unpredictability of their need and cost. This mechanism aligns with the inherent uncertainty associated with component failures.

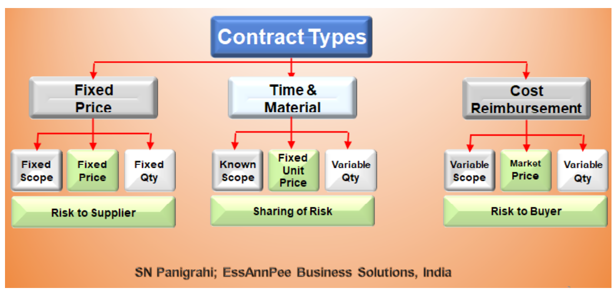
Example 2: Engineering and Design Projects : Engineering and design projects often involve phases of conceptual design, detailed engineering, and testing. The scope of work may encompass creating blueprints, specifications, and prototypes. Fixed pricing can be applied to the design and documentation phases, while the actual cost of materials, testing, and refinement is reimbursed based on the variable aspects of the project.

Example 3: IT Infrastructure Maintenance: Just like air conditioner maintenance, IT infrastructure maintenance involves a combination of routine tasks and potential hardware replacements. A T&M contract can be structured similarly, with a fixed price for regular maintenance services, such as software updates, network monitoring, and preventive maintenance, and variable cost reimbursement for hardware replacements or upgrades.

Example 4: Landscaping and Groundskeeping: Landscaping and groundskeeping services often involve a mix of predictable and unpredictable tasks. Regular maintenance activities, such as mowing, weeding, and trimming, can be covered under a fixed-price contract, while unforeseen expenses for tree removal, irrigation repairs, or seasonal enhancements can be reimbursed based on actual costs.

Example 5 : Vehicle Fleet Maintenance: Vehicle fleet maintenance contracts can also benefit from a T&M approach. Regular preventive maintenance services, such as oil changes, tire rotations, and brake inspections, can be covered under a fixed-price contract, while variable cost reimbursement can be used for unplanned repairs or component replacements.

6. Choosing the Right Contract: Contracts are essential for managing project risks and ensuring the successful execution of project activities. Fixed-price contracts provide cost certainty for the buyer but may transfer some of the risks to the seller. Cost-reimbursement contracts offer flexibility and allow for adjustments as the project progresses, but the buyer bears the majority of the risk. Time and materials contracts are suitable for projects with a high degree of uncertainty in quantity requirements, even though the scope of work is known, especially with long term contracts like maintenance contracts and manpower supply contracts.



The choice of contract type depends on the specific characteristics of the project, the risk tolerance of the buyer, and the strength of the relationship between the buyer and seller. Organizations must carefully consider the project's unique characteristics, potential risks, and desired level of cost and performance control when selecting the most suitable contract type. This strategic decision aligns the contract with the project's objectives and ensures its success.

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ARTIFICIAL INTELLIGENCE (AI) IN FASHION SUPPLY CHAINS

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Abstract : Fashion style products are having short life cycle, unpredictable demand, high profit margin and difficult to manage inventories. The purpose of this paper is to explore the applications of Artificial Intelligence (AI) in fashion supply chains. The fashion market segmentation pyramid has been discussed. The four levels of fashion industry i.e - Primary, Secondary, Retail, and Auxiliary are also discussed. AI Applications in Fashion Style Industry are discussed. The secondary data was used for discussion. The author has highlighted the Zara fashion style approach and Wal-Mart adoptions of AI tools are discussed. Traditional AI / Machine Learning (ML), Gen AI and other tools used in fashion supply chains are also highlighted.

Keywords: Artificial Intelligence, Fashion Style Industries Dynamics, Supply Chains

Introduction : Traditionally, fashion companies only had direct relationships with certain finished goods or fabric suppliers and relied on a network of agents, trading companies, and suppliers to source and take responsibility for upstream materials. Today, fashion companies are accountable for their entire supply chain due to recently proposed or implemented US and international legislation, non-governmental agency (NGO) and Congressional investigations, suits by private actors in international courts, and consumer demand for sustainable goods. Things such as clothes and shoes that retailers have to change often because the styles often change

Fashion Style Products : From Longman Business Dictionary Èfashion goods clothes or other goods that manufacturers and retailers need to replace regularly with new styles because of changing fashions '! goods.

Style and fashion are two closely related concepts that refer to the way people express themselves through their appearance and clothing. Style refers to a person's individual way of dressing and presenting themselves, including their choice of clothing, accessories, hair, makeup, and overall aesthetic.

Garments produced by clothing manufacturers fall into three main categories, although these may be split up into additional, different types: Haute couture, Ready-to-wear (prêt-à-porter) and Mass market. Numbers of products are covered under fashion style. Figure 1 represents the fashion market segmentation pyramid.

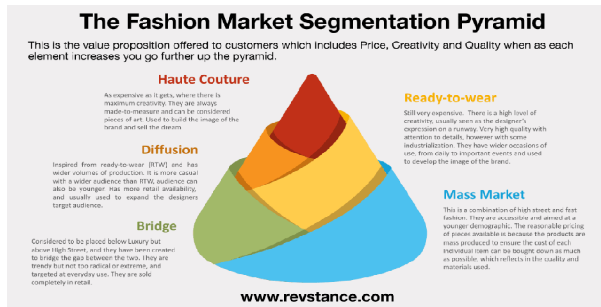

Figure 1: The fashion market segmentation pyramid.

Industry Dynamics : The dynamics of the apparel industry are changing dramatically. To succeed amid the shifting tides, companies need to build up competence in consumer target groups, sustainability, marketing channel digitalization & analyzing customer data to understand customer's needs. Global fashion industry is worth $1.2 trillion, of which $250 billion originates annually from the United States. The industry employs nearly two million people every year. It is also an industry, which suffers a tremendous trade gap for US consumers. The US exports about $6 billion in apparel each year, but imports more than $82 billion.

Fashion style products are having short life cycle, unpredictable demand, high profit margin and difficult to manage inventories. The fashion industry consists of four levels: the production of raw materials, principally fibres and textiles but also leather and fur; the production of fashion goods by designers, manufacturers, contractors, and others; retail sales; and various forms of advertising and promotion. There are four different levels of the fashion business - Primary, Secondary, Retail, and Auxiliary. Figure 2 shows the four levels of fashion business

Figure 2: Four levels of fashion business

Fashion Style Supply Chains : The steps in the fashion supply chain typically involve designing the apparel, evaluating and selecting raw material suppliers, sourcing those materials, manufacturing the apparel, transporting it to wholesalers, distributing it to retailers, and finally selling it to customers.

The supply chain management process refers to the tracing and locating of each step of the clothes or resources in the clothing manufacturing. The process starts with sourcing the fabric from the garments factories where the clothes fabric is prepared. Figure 3 describes the fashion supply chain processes.

Figure 3: Fashion Supply Chain Processes

Artificial Intelligence : Decisions in an online fashion retail supply chains are highly dependent on time-varying customers' preferences and product availability, often leading to combinatorial explosion. To address such a problem, DSSs coupled with customer models, constructed by using AI techniques (Arthur M Pereira et al., 2022).

AI Applications in Fashion Style Industry (Chandradevi Giri et al., 2019)

AI Applications	**Areas**
Machine Learning	Fashion Industry
Deep Learning	Garment Industry
Data Mining	Apparel Industry
AI	Clothing Industry
Data Analytics	Textile Industry

Applications of AI in Fashion Supply Chains

Approach of Zara Fashion Style : ZARA (Spanish: [Èèa~a]) is a Spanish multi-national retail clothing chain. It specializes in fast fashion, and sells clothing, accessories, shoes, beauty products and perfumes. The head office is in Arteixo, in A Coruña in Galicia. It is the largest constituent company of the Inditex group. In 2020 it was launching over twenty new product lines per year. Zara fashion adopts JIT principles in manufacturing and agility in the markets. Zara operates a vertically integrated business that controls all design, production, warehousing, logistics, and distribution processes for the 450 million items sold annually in their stores.

Inditex reported net income increase of 27% to €4.1 Billion ($4.4 Billion). Sales reached €32.6 billion ($35.2 billion). In fiscal 2022 sales rose 23%, reflecting greater foot traffic and increasing store productivity.

Zara is one of the largest international fashion companies. It belongs to Inditex, one of the world's largest distribution groups. The customer is at the heart of our unique business model, which includes design, production, distribution and sales through our extensive retail network. Zara's approach to AI is holistic, involving every segment of its business operations. The company combines the principles of just-in-time inventory management with AI and real-time data analytics, creating a Just-Intelligent supply chain system. By doing this, Zara can closely monitor inventory levels, supplier performance, and even consumer behavior.

Zara has collaborated with several technology partners to implement AI in its operations. For instance, it partnered with Tyco to embed microchips into its clothing's security tags, enhancing inventory visibility. The firm also collaborates with Jetlore to predict customer behavior based on structured predictive attributes like size, color, fit, and style. RFID tags and sophisticated logistics systems further allow Zara to optimize transportation and inventory, reducing waste and ensuring that popular items are always available.

Zara's turnaround time for new designs is as little as one week, far below the industry average of three to six months. It enjoys a loyal customer base and ranks among the top in global online fashion sales. The company's unique approach to using AI for real-time monitoring and forecasting has also led to reduced lead times, improved delivery accuracy, and minimized inventory carrying costs.

The integration of AI into existing systems and processes can also be complex and requires ongoing fine-tuning. Moreover, the reliance on sophisticated AI and machine learning models necessitates skilled human resources to maintain and optimize these systems.

Zara's application of artificial intelligence in its operations serves as a benchmark for the retail industry. From supply chain optimization to personalizing customer experience, the company's comprehensive AI strategy has yielded tangible benefits in efficiency, cost reduction, and customer satisfaction

Wal-Mart : Walmart Inc. is an American multinational retail corporation that operates a chain of hypermarkets, discount department stores, and grocery stores in the United States. Wal-mart has over 10,000 stores worldwide, around 40 percent of them just in the US. Its annual turnover works out to 600 billion USD. Total numbers of employees are 23 lakhs as of January 2022. Wal-mart Global Tech has centres in Bangalore and Chennai and is responsible for creating innovative tech solutions to everything related to the retail store business.

Wal-mart has adopted generative AI to summarize information. Gen AI is also playing a role in giving suggestions to customers. Traditional AI and ML applications are also playing huge role in optimizing its expansive supply chains. AI powered inventory system is becoming more advanced and autonomous. This also helps to leverage real-time data and causal factors to redistribute inventory automatically. Predictive analytics tools are used to optimize catchments and connect with driver availability, so that drivers can complete more deliveries, with less driving, delivering multiple items in one trip. AI is also used to optimizing the size based on local demand and need.

Conclusion : Fashion style supply chains are unique and have more number of linkages. The products are having short life cycle. So, the supply chains are more responsive than physically efficient (Fisher, 1997). Artificial Intelligence (AI) plays a crucial role in optimizing supply chains. Zara's application of artificial intelligence in its operations serves as a benchmark for the retail industry. From supply chain optimization to personalizing customer experience, the company's comprehensive AI strategy has yielded tangible benefits in efficiency, cost reduction, and customer satisfaction.

Wal-mart has adopted generative AI to summarize information. Gen AI is also playing a role in giving suggestions to customers. Traditional AI and ML applications are also playing huge role in optimizing its expansive supply chains. Wal-mart is also using Gen AI, Advanced AI and Predictive Analytics tools in their logistics operations.

References

1. Artur M Pereira et al.,(2022). Customer models for AI based decision support in fashion online retail supply chains, Decision Support System, Vol.158, July 2022, Elsevier.
2. Chandradevi Giri et al., (2019). A Detailed Review of AI Applied in the Fashion and Apparel Industry, IEEE Access.
3. M.L. Fisher (1997). What is the Right Supply Chain for Your Products?. Harvard Business Review, March-April, 1997.

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COUNTRIES NEED TO WORK TOGETHER FOR OPEN SUPPLY CHAINS: PIYUSH GOYAL

DHIRENDRA KUMAR

The Global South needs to discuss ways for countries to work together to keep supply chains open, secure, trusted, stable and equitable, commerce minister Piyush Goyal said at the second Voice of Global South Summit in the national capital.

Goyal highlighted that recent disruptions in global supply chains due to the COVID-19 pandemic, climate change, and geopolitical unrest have posed "monumental challenges" to food and energy security, cost of living, and the pursuit of sustainable development goals.

He advocated the adoption of the G20's general framework designed to enhance the resilience and inclusiveness of global value chains.

Goyal asserted that this framework, once in place, would bridge the gaps in logistic infrastructures and promote the greater involvement of the Global South in the international trade ecosystem.

The framework would help in achieving sustainable development goals as the phenomenal nine-fold increase in South-South trade from $600 billion in 1995 to $5.3 trillion in 2021 had a major impact on economic growth of many countries, he said at the summit.

"Most of the global challenges have not been created by the Global South, but they affect us more," Goyal said quoting Prime Minister Narendra Modi.

During its G20 presidency, India made strong interventions in strengthening the voice of the Global South by making the African Union a permanent member of the grouping, the minister added.

To make global value chains resilient and inclusive, he said, the G20 generic framework for mapping global value chains was adopted during India's presidency.

"We are in the midst of a massive global shift. The future of work will be determined by industry 4.0, energy transition and new age technologies," he added.

Source: PTI

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EVALUATION OF BIDS AND AWARD OF CONTRACT

This is the Seventh article in the series of articles for Public Procurement. This is in continuation of sixth article in the November 2023 issue from pages 5 to 13 titled "Forms of Securities, Payment Terms and Price Variations"

Tender Evaluation : The evaluation of tenders is one of the most significant areas of purchase management and the process must be transparent. All tenders are to be evaluated strictly on the basis of the terms and conditions incorporated in the tender document and those stipulated by the tenderers in their tenders. The Contracting Authority may include quality, price, technical merit, aesthetic and functional characteristics, environmental characteristics, running costs, cost-effectiveness, after-sales service and technical assistance, delivery date and delivery period or period of completion etc. No criteria shall be used for evaluation of tenders that cannot be verified. No hearsay information or hitherto undeclared condition should be brought in while evaluating the tenders. Care should be taken that preferences provided to any category of bidders on certain specified grounds should not result in single vendor selection. Similarly, no tender enquiry condition (especially the significant/essential ones) should be overlooked/ relaxed while evaluating the tenders. The aim should be ensure that no tenderer gets undue advantage at the cost of other tenderers and/or at the cost of Procuring Entity. Information relating to evaluation of tenders and the Tender Committee's (TC's) deliberations should be confidential and not be shared with persons not officially connected with the process. TC should normally comprise of three members including Financial Adviser or his representative and a representative of the user as per SoPP in order to carry out evaluation of the tenders. TC should not be very large as it may slow down the evaluation process. However, suitable domain/ technical experts may be included in the committee to render assistance in evaluation of the bids. There is no need to constitute any other committee for technical evaluation, preliminary evaluation, etc. The representative of the user Department will work as a convenor of the TC. As per Rule 173 (xxii) of GFR 2017 no member of the tender committee should be reporting directly to any other member of such committee in case estimated value of the procurement exceeds Rs. 25 lakh. Though the GFR stipulates this provision only when the estimated value of procurement exceeds Rs 25 lakh, it is desirable that the same provision should be followed in the constitution of all purchase committees irrespective of the value of procurement. The process of tender evaluation proceeds is described in the subsequent paras.

Schedule of Procurement Powers (SoPP)

There are delegations upto a threshold value below which the evaluation of the Bids may be entrusted solely and directly by individual competent authority, without involvement of a Tender committee or any evaluation report. He would himself carry out all the steps in evaluation described below, instead of the TC and directly records reasons and decision on the file itself. He may ask for a Technical Suitability report from User Departments, if so needed. In procurements above such a threshold, evaluation is by Tender Committee consisting of three or more officers, however no member of the Committee should be reporting directly to any other member of such Committee. Procuring Entity should lay down a Schedule of Procurement Powers (SoPP) detail such thresholds. It can also lay down the powers jurisdiction and composition of different levels of Tender Committee and corresponding Accepting Authority for different categories of procurement and different threshold values of procurements. A suggested format for SoPP is at Annexure 2B/2C,however exact values of threshold would have to be decided by Procuring Entity themselves. Competent authority, in direct acceptance case; and member secretary of the Tender Committee will receive the bids opened along with other documents from the tender opening officials and are responsible for safe-custody of the documents and for processing involved at all steps in finalising the Procurement.

Preparation and Vetting of Comparative Statement

Except in cases upto Rs 25 Lakh (Rupees Twenty Five Lakh) the Procuring Entity should prepare a comparative statement of quotations received in the order in which tenders were opened. In case of Techno-Commercial bid comparative statement will have information about deciding responsiveness and eligibility of bids and evaluation of Technical suitability of offers. In case of Financial bid it would have information about rates quoted (including taxes or otherwise), discount, if any, and any other information having implications on ranking of bids etc. The comparative statement so prepared should be signed by the concerned officers. It may also be vetted by the associated/ integrated Finance for veracity of information.

Preliminary Examination

Unresponsive Tenders

Tenders that do not meet the basic requirements specified in the bid documents are to be treated as unresponsive and ignored. All tenders received will first be scrutinised by the TC to see whether the tenders meet the basic requirements as incorporated in the Bid document and to identify unresponsive tenders, if any. Some important points on the basis of which a tender may be declared as unresponsive and be ignored during the initial scrutiny are:

i) The tender is not in the prescribed format or is unsigned or not signed as per the stipulations in the bid document;

ii) The required EMD has not been provided or exemption from EMD is claimed without acceptable proof of exemption;

iii) The bidder is not eligible to participate in the bid as per laid down eligibility criteria(example: the tender enquiry condition says that the bidder has to be a registered MSE unit but the tenderer is a, say, a large scale unit);

iv) The tenderer has quoted for goods manufactured by a different firm without the required authority letter from the proposed manufacturer;

v) The bid departs from the essential requirements specified in the bidding document (for example, the tenderer has not agreed to give the required performance security); or

vi) Against a schedule in the list of requirements in the tender enquiry, the tenderer has not quoted for the entire requirement as specified in that schedule (example: in a schedule, it has been stipulated that the tenderer will supply the equipment, install and commission it and also train the purchaser's operators for operating the equipment. The tenderer has, however, quoted only for supply of the equipment).

Non-conformities between Figures and Words

Sometimes, non-conformities/errors are also observed in responsive tenders between the quoted prices in figures and in words. This situation normally does not arise in case of e- Procurement. This should be taken care of in the manner indicated below:

i. If, in the price structure quoted for the required goods, there is discrepancy between the unit price and total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly;

ii. If there is an error in a total corresponding to the addition or subtraction of sub-totals, the sub-totals shall prevail and the total shall be corrected; and

iii. If there is a discrepancy between words and figures, the amount in words shall prevail.

iv. Such a discrepancy in an offer should be conveyed to the tenderer asking him to respond by a target date and if the tenderer does not agree to Procuring Entity's observation, the tender is liable to be rejected.

Discrepancies between Original and Additional/ Scanned Copies of a Tender

Discrepancies can also be observed in responsive tenders between the original copy and other copies of the same tender set. In such a case, the text, and so on, of the original copy will prevail. Here also, this issue is to be taken up with the tenderer in the same manner as above and subsequent actions taken accordingly. In e-Procurement there could be discrepancies between the uploaded scanned copies and the Originals submitted by the bidder. However normally no submission of original documents in physical format (other than Cost of Bid Documents (if any, refer Para *5.2.1*Cost and Availability of Tender Documents), Bid Security and statutory certificates if any) should be asked for in e-Procurement

i. Minor Infirmity/Irregularity/Non-conformity

During the preliminary examination, some minor infirmity and/or irregularity and/or non- conformity may also be found in some tenders. Such minor issues could be a missing pages/ attachment or illegibility in a submitted document; non-submission of requisite number of copies of a document. There have been also cases where the bidder submitted the amendment Bank Guarantee, but omitted to submit the main portion of Bid Document. The court ruled that this is a minor irregularity. Such minor issues may be waived provided they do not constitute any material deviation (please refer to Para 7.4.1 (d)) and financial impact and, also, do not prejudice or affect the ranking order of the tenderers. Wherever necessary, observations on such 'minor' issues (as mentioned above) may be conveyed to the tenderer by registered letter/speed post, and so on, asking him to respond by a specified date also mentioning therein that, if the tenderer does not conform Procuring Entity's view or respond by that specified date, his tender will be liable to be rejected. Depending on the outcome, such tenders are to be ignored or considered further.

ii. Clarification of Bids/Shortfall Documents

During evaluation and comparison of bids, the purchaser may, at his discretion, ask the bidder for clarifications on the bid. The request for clarification shall be given in writing by registered/speed post, asking the tenderer to respond by a specified date, and also mentioning therein that, if the tenderer does not comply or respond by the date, his tender will be liable to be rejected. Depending on the outcome, such tenders are to be ignored or considered further. No change in prices or substance of the bid shall be sought, offered or permitted. No post-bid clarification at the initiative of the bidder shall be entertained. The shortfall information/documents should be sought only in case of historical documents which pre-existed at the time of the tender opening and which have not undergone change since then. These should be called only on basis of the recommendations of the TC. (Example: if the Permanent Account Number, registration with sales tax/ VAT has been asked to besubmitted and the tenderer has not provided them, these documents may be asked for with a target date as above). So far as the submission of documents is concerned with regard to qualification criteria, after submission of the tender, only related shortfall documents should be asked for and considered. For example, if the bidder has submitted a supply order without its completion/ performance certificate, the certificate can be asked for and considered. However, no new supply order should be asked for so as to qualify the bidder.

b. Evaluation of Responsive Bids and Decision on Award of Contract

All responsive bids are evaluated by the TC with a view to select the lowest (L1) bidder who meets the qualification criteria and techno-commercial aspects. In case of single stage single envelop bidding, the evaluation of qualification of bidders, technical, commercial and financial aspect is done simultaneously. In single stage multiple envelops, initially only the techno-commercial bids would be opened and evaluated for bids which successfully meet the qualification criteria and techno-commercial aspects. Financial bids of such successful bidders only would be opened for selecting the L1 bidder among these and in case of manual tenders, financial bids of unsuccessful bidders would be returned unopened to them. In two stage bids, the PQB/ EoI stage would have already been evaluated as detailed in Chapter 4 and this second stage is for evaluation of responses to the Second Stage multiple envelops from the shortlisted qualified bidders. Evaluation of techno-commercial and financial aspects are, however, discussed separately below. It is of utmost importance that the authenticity, integrity and sanctity of unopened Financial Bids must be ensured, before their opening. All the financial bids may preferably be put in a large envelop, which may be dated, sealed and signed (including by some of the bidders present), to show that none of the bids were accessed during the custody.

i. Evaluation of Techno-commercial Bid

In evaluation of the techno-commercial bid, conformity of the eligibility/qualification, technical and commercial conditions of the offered goods to those in the bid document is ascertained. Additional factors, if any, incorporated in the tender documents may also be considered in the manner indicated therein. Evaluation has to be based only on the conditions included in the tender document and any other condition should not form the basis of this evaluation.

1. Evaluation of eligibility/ qualification Criteria: Procuring Entity will determine, to its satisfaction, whether the tenderers are eligible, qualified and capable in all respects to perform the contract satisfactorily. Tenders that do not meet the required eligibility/ qualification criteria prescribed will be treated as unresponsive and not considered further. This determination will, inter-alia, take into account the tenderer's financial, technical and production capabilities for satisfying all of Procuring Entity's requirements as incorporated in the tender document. Such determination will be based upon scrutiny and examination of all relevant data and details submitted by the tenderer in its/his tender as well as such other allied information as deemed appropriate by Procuring Entity.

2. Evaluation of Technical Suitability: The description, specifications, drawings and other technical terms and conditions are examined by TC in general and a technical member of the TC in particular. Nobody outside the TC should be allowed to determine this evaluation. The tender document should clearly state whether alternative offers/makes/models would be considered or not and, in the absence of an express statement to the effect, these should not be allowed. An important document is the exceptions/deviation form submitted by the tenderer. It is important to judge whether an exception/deviation is minor or major. Minor exceptions/deviations may be waived provided they do not constitute any material deviation and do not have significant financial impact and, also, would not prejudice or affect the ranking order of the price bid. Exceptions/deviations should not grant the tenderer any undue advantage vis-à-vis other tenders and Procuring Entity.

3. Evaluation of Commercial Conditions: The TC will also evaluate the commercial conditions quoted by the tenderer to confirm that all terms and conditions specified in the GCC/SCC have been accepted without reservations by the tenderer. Only minor deviations may be accepted/allowed, provided these do not constitute material deviations without financial impact and do not grant the tenderer any undue advantage vis-à-vis other tenders and Procuring Entity.

4. Considering Minor Deviations: Court has consistently taken a view that procuring entity is entitled to consider and allow minor deviations, which do not amount to material deviations. A material deviation, reservation, or omission which should not be waived are those that:

a. Affects, in any substantial way, the scope, quality or performance of the goods and related services specified in the contract;

b. Limits, in any substantial way, inconsistent with the tendering documents, the procuring entity's rights or the tenderer's obligations under the contract; or

c. If rectified, would unfairly affect the competitive position of other tenderers quoting substantially responsive tenders.

5. Declaration of Successful Bidders: If it is a multiple envelop tender, then the TC prepares a recommendation of techno-commercial bid (Annexure 11) to declare successful bidders. In such cases, after the approval of CA, the results of the Techno-commercial bid evaluation are to be announced (including informing the failed Bidders). Price bids are opened in the presence of technically suitable bidders, who are willing to attend the bid opening, at a pre-publicised date, time and place or on the portal in case of e-procurement. In single envelop/cover tender, TC proceeds to evaluate the price aspects without a reference to CA at this stage.

ii. Right of Bidder to question rejection at Techno-commercial Stage

A tenderer shall have the right to be heard in case he feels that a proper procurement process is not being followed and/or his Techno-commercial bid has been rejected wrongly. The tenderer is to be permitted to send his representation in writing. On receipt of representation it may be decided whether to withhold opening of the financial bids and bidder may be expeditiously replied. Certain decisions of the procuring entity in accordance with the provision of internal guidelines shall not be subject to review as mentioned in para below.

Evaluation of Financial Bids and Ranking of Tenders In general:

i) If the price bid is ambiguous so that it may very well lead to two equally valid total price amounts, then the bid should be treated as unresponsive;

ii) Sometime certain bidders offer suo motu discounts and rebates after opening of the tender (techno-commercial or financial). Such rebates/discounts should not be considered for the purpose of ranking the offer but if such a firm does become

L1 at its original offer, such suo motu rebates can be incorporated in the contracts. This also applies to conditional rebates, for example, rebate for faster payments, and so on;

iii) Unless announced beforehand explicitly in the tender documents, the quoted price should not be loaded on the basis of deviations in the commercial conditions. If it is decided to incorporate such clauses, these should be unambiguous and clear – and thereafter there should be no relaxation during evaluation. Moreover, sometimes, while purchasing sophisticated and costly equipment, machinery, and so on, the procuring entity also gives special importance to factors such as high quality performance, environmental-friendly features, low running cost, low maintenance cost, and so on. To take care of this, relevant details are to be incorporated in the bid document and the criteria adopted to assess the benefit of such features while evaluating the offers are also to be clearly stipulated in the tender enquiry document so that the tenderers are aware of it and quote accordingly. While evaluating such offers, these aspects are also to be taken into account. Such details, whenever considered necessary, should be evolved by the competent technical authority for incorporation in the tender document, so that there is no ambiguity and/or vagueness in them;

iv) Normally, the comparison of the responsive tenders shall be on total outgo from the Procuring Entity's pocket, for the procurement to be paid to the supplier or any third party, including all elements of costs as per the terms of the proposed contract, including any taxes, duties, levies etc, freight insurance etc. Therefore it should normally be on the basis of CIF/ FOR destination basis, duly delivered, commissioned, as the case may be:

v) In the case of goods manufactured in India or goods of foreign origin already located in India, VAT/sales tax and excise duty and other similar taxes and duties, which will be contractually payable (to the tenderer) on the goods are to be added;

vi) In the case of goods of foreign origin offered from abroad, customs duty and other similar import duties/taxes, which will be contractually payable (to the tenderer) on the goods, are to be added;

vii) As per policies of the Government from time to time, the purchaser reserves his option to give price/ purchase preferences as indicated in the tender document;

viii) In case the list of requirements contains more than one schedule, the responsive, technically suitable tenders will be evaluated and compared separately for each schedule. The tender for a schedule will not be considered if the complete requirements prescribed in that schedule are not included in the tender. However, tenderers have the option to quote for any one or more schedules and offer discounts for combined schedules. Such discounts, wherever applicable, will be taken into account to for deciding the lowest evaluated cost for Procuring Entity in deciding the successful tenderer for each schedule, subject to that tenderer(s) being responsive; and

ix) If the tenders have been invited on a variable price basis, the tenders will be evaluated, compared and ranked on the basis of the position prevailing on the day of tender (Technical Bid) opening and not on the basis of any future date.

GTE Tenders

Special aspects of evaluation of the financial offer in GTE tenders are:

i) Currency of Tender

In GTE tenders, the price in the quotation could be in US Dollar or Euro or Pound Sterling or Yen or in currencies under the RBI's notified basket of currencies, in addition to the Indian Rupees, except for expenditure incurred in India (including agency commission if any) which should be stated in Indian Rupees. All offers are to be converted to Indian Rupees based on the "Bill currency selling" exchange rate on the date of tender opening (Techno-commercial offer) from a source as specified in the tender document.

ii) Currency of Payment

The contract price will be normally paid in the currency/ currencies in which the price is stated in the contract.

iii) Evaluation of Offers

As per Government policy, Ministries/Departments/ Public Sector Undertakings (PSUs) should ensure imports on FOB/FAS basis failing which a No Objection Certificate (NOC) should be obtained from the Ministry of Surface Transport (Chartering Wing).

The foreign bidders are normally asked, in the bid documents, to quote both on FAS/FOB basis and also on Cost and Freight (CFR)/CIF basis duly indicating the break-up of prices for freight, insurance, and so on, with purchasers reserving the right to order on either basis. They should also to indicate the custom tariff number and custom duty applicable in India. In the case of FAS/ FOB offers, the freight and insurance shall be (after ascertaining, if not quoted) added to make up the CIF cost. To arrive at the Free On Rail (FOR) cost, one per cent shall be added over and above CIF as port handling charges, custom duty, countervailing duty and surcharges, as applicable on the date of opening of the tender, as well as clearing agency charges, inland freight and Octroi/ entry tax, as assessed, may be added to make it a FOR/Free On Truck (FOT) destination. The FOR/ FOT destination price for domestic offers may be calculated as in OTE tenders. For bids with Letter of Credit (LC) payment, the likely LC charges (as ascertained from Procuring Entity's bankers) should also be loaded.

In case both Indian and foreign bidders have quoted in the tender, the comparison of the offers would be done on the basis of FOR/FOT destination including all applicable taxes and duties (on the principle of the total outgo from Procuring Entity's pockets). In case there are no domestic bidders, a comparison of offers can be made on the basis of CIF/landed costs since the rest of costs would be same for all bidders.

c. Deliberations by the Tender Committee for Award of Contract.

i. Timely Processing of Tenders (Rule 174 (i) of GFR 2017)

Delays in finalising procurement deprive the public of the intended benefits and results in lost revenues and cost over-run. To enable timely decision making, complete Time schedule of finalising the Tender process from the date of issuing the tender to date of issuing the contract, should be published in the Bid Documents. Every official in the chain of the procurement operation is accountable for taking action in a specified time so that the tender is finalised on time. Any deviation from the schedule may be monitored and explained, by way of system of Management Reporting (Appendix 4 and 5). As a check, the proposed schedule of tender process may be printed on the inside cover of the Procurement File, where actual date of completion of various stages may be recorded. The suggestive time schedule in Table 2 is a guideline for finalising contracts against various modes of procurements.

Table 2. Indicative time schedule

SL.No.	Mode of Procurement	Indigenous	Imported
1	Open tender/ (e-tendering)	45days	60 days
2	Procurement through registered vendors/ (Special) limited tenders	30 days	45days
3	Proprietary basis/ nomination basis	21days	30 days

This time schedule is only indicative and the schedule shall be subject to change based on the nature of requirements, sourcing, sample evaluation, site visit/ pre-bid meeting with prospective bidders and Government, guidelines, and so on.

ii. Extension of Tender Validity Period

The entire process of scrutiny and evaluation of tenders, preparation of ranking statement and notification of award must be done expeditiously and within the original tender validity period (*Rule 174 (iii) of GFR 2017*). The validity period should not be unreasonably long as keeping the tender unconditionally valid for acceptance for a longer period entails the risk of getting higher prices from the tenderers.

If, however, due to some exceptional and unforeseen reasons, the purchase organisation is unable to decide on the placement of the contract within the original validity period, it may preferably request, before expiry of the original validity period, all the responsive tenderers to extend their tenders up to a specified period. While asking for such extension, the tenderers are also to be asked to extend their offers as it is, without any changes therein. They may also be told to extend the validity of the EMD for the corresponding additional period (which is to be specified in the request). A tenderer may not agree to such a request and this will not be tantamount to forfeiture of its EMD. But the tenderers, who agree to extend the validity, are to do so without changing any terms, conditions, and so on, of their original tenders.

iii. Variation of Quantities at the Time of Award

At the time of awarding the contract, the quantity to be procured must be re-judged based on the current data, since the ground situation may have very well changed. The tendered quantity can be increased or decreased by 25 (twenty-five) per cent for ordering, if so warranted. This may be mentioned in the tender documents. Any larger variation may throw up issues about transparency.

iv. Option clause

In case of long running, yearly procurements, to take care of any change in the requirement during the currency of the contract, a plus/minus option clause[normally 25 (twenty-five) per cent] is incorporated in the tender document, reserving purchaser's right to increase or decrease the quantity of the required goods up to that limit without any change in the terms and conditions and prices quoted by the tenderers. Higher the option limit more is the uncertainty for the tenderers in formulating their prices and more is the chance of loading on the prices quoted to take care of such uncertainties.

v. Splitting of Contracts/ Parallel Contracts

After due processing, if it is discovered that the quantity to be ordered is far more than what L1 alone is capable of supplying and there was no prior decision/ declaration in the bidding documents to split the quantities, then the quantity being finally ordered may be distributed among the other bidders by counter offering the L1 rate in a manner that is fair, transparent and equitable based on objective data available in the bids e.g. eligibility data, Quantity/ Delivery etc.

However, in case of critical/ vital/ safety/ security nature of the item, large quantity under procurement, urgent delivery requirements and inadequate vendor capacity it may be advantageous to decide in advance to have more than one source of supply. In such cases a parallel contract clause should be added to the bid documents, clearly stating that Procuring Entity reserves the right to split the contract quantity between suppliers. The manner of deciding the relative share of lowest bidder (L1) contractor and the rest of the contractors/ tenderers should be clearly defined, along with the minimum number of suppliers sought for the contract. In case of splitting in two and three, the ratio of 70:30; 50:30:20, respectively, may be used – a different ratio may also be justified.

Before splitting the quantity, it should be ensured that the L1 price is reasonable. If it is not reasonable, negotiation with the L1 party may be carried out, if justifiable, with the approval of the CA. The following guidelines are to be considered while opting for parallel contracts:

1. L1 should be awarded at least the percentage mentioned above or his spare supply capacity, whichever is lower; and
2. For the rest of the contract quantity, the lowest rate accepted will be counter offered to the L2 party. On acceptance of the counter offer, the order will be placed on L2 for the respective percentage or the spare supply capacity of the L2 bidder, whichever is lower, and so on, to other tenderers. In case of non-acceptance of the counter offer by the L2 party, a similar offer shall be made to L3 and L4, and so on.

vi. Reasonableness of Prices

In every recommendation of the TC for award of contract, it must be declared that the rates recommended are reasonable.

[For more details on judging reasonableness of prices, please see para 2.1.1 (iii)(e) in Chapter 2 above].

Where there is no estimated cost, a comparison with Last Purchase Price (LPP - the price paid in the latest successful contract) is the basis for judging reasonableness of rates. The following points may be kept in mind before LPP is relied upon as a basis for justifying rate reasonableness:

1. The basic price, taxes, duties, transportation charges, Packing and Forwarding charges should be indicated separately;
2. Where the firm holding the LPP contract has defaulted, the fact should be highlighted and the price paid against the latest contract placed prior to the defaulting LPP contract, where supplies have been completed, should be used;
3. Where the supply against the LPP contract is yet to commence, that is, delivery is not yet due, it should be taken as LPP with caution, especially if the supplier is new, the price paid against the previous contract may also be kept in view;
4. Where the price indicated in the LPP is subject to variation or if it is more than a year old, the updated price or as computed in case of the Price Variation Clause (PVC) may also be indicated;
5. In the case of wholly imported stores, the comparison of the last purchase rate should be made with the net CIF value at the current foreign exchange rate;
6. It is natural to have marginal differences in prices obtained at different cities/offices for the same item, due to their different circumstances. The

prices obtained are greatly influenced by quantity, delivery period, terms of the contract, these may be kept in view; and

7. Prices paid in emergencies or prices offered in a distress sale are not accurate guidelines for future use. Such purchase orders and TC proceedings should indicate that "these prices are not valid LPP for comparison in future procurement".

vii. Consideration of Abnormally Low Bids

An Abnormally Low Bid is one in which the Bid price, in combination with other elements of the Bid, appears so low that it raises material concerns as to the capability of the Bidder to perform the contract at the offered price. Procuring Entity may in such cases seek written clarifications from the Bidder, including detailed price analyses of its Bid price in relation to scope, schedule, allocation of risks and responsibilities, and any other requirements of the bids document. If, after evaluating the price analyses, procuring entity determines that the Bidder has *substantially failed* to demonstrate its capability to deliver the contract at the offered price, the Procuring Entity may reject the Bid/ Proposal. However it would not be advisable to fix a normative percentage below the estimated cost, which would be automatically be considered as an abnormally low bid. Due care should be taken while formulating the specifications at the time of preparation of bid document so as to have a safeguard against the submission of abnormally low bid from the bidder.

In the case of predatory pricing as well, procuring entities may refer to the above consideration of Abnormally Low Bids to assist themselves in finalization of tenders[75].

No provisions should be kept in the Bid Documents regarding the Additional Security Deposit/ Bank Guarantee (BG) in case of Abnormally Low Bids. Wherever, there are compelling circumstances to ask for Additional Security Deposit/ Bank Guarantee (BG) in case of ALBs, the same should be taken only with the approval of the next higher authority competent to finalise the particular tender, or the Secretary of the Ministry/ Department, whichever is lower[76].

viii. Cartel Formation/Pool Rates

It is possible that sometimes a group of bidders quote the same rate against a tender. Such pool/cartel formation is against the basic principle of competitive bidding and defeats the very purpose of an open and competitive tendering system. Such and similar tactics to avoid/control true competition in a tender leading to "Appreciable Adverse Effect on Competition" (AAEC) have been declared as an offence under the Competition Act, 2002, as amended by the Competition (Amendment) Act, 2007. Such practices should be severely discouraged with strong measures. In case of evidence of cartel formation, detailed cost analysis may be done by associating experts if necessary. Besides, suitable administrative actions can be resorted to, such as rejecting the offers, reporting the matter to trade associations, the Competition Commission or NSIC, etc., and requesting them, inter-alia, to take suitable strong actions against such firms. New firms may also be encouraged to get themselves registered for the subject goods to break the monopolistic attitude of the firms forming a cartel. Changes in the mode of procurement (GTE instead of OTE) and packaging/slicing of the tendered quantity and items may also be tried. A warning clause may also be included in the bid documents to discourage the bidders from indulging in such practices.

ix. Negotiations (*Rule 173 (xiv) of GFR 2017*)

1. Normally, there should be no negotiation. Negotiations should be a rare exception rather than the rule and may be resorted to only in exceptional circumstances. If it is decided to hold negotiations for reduction of prices, they should be held only with the lowest acceptable bidder (L1), who is techno-commercially responsive for the supply of a bulk quantity and on whom the contract would have been placed but for the decision to negotiate. In no case, including where a cartel/pool rates are suspected, should negotiations be extended to those who had either not tendered originally or whose tender was rejected because of unresponsiveness of bid, unsatisfactory credentials, inadequacy of capacity or unworkable rates. The circumstances where negotiations may be considered could be:

a. Where the procurement is done on nomination basis;

b. Procurement is from single or limited sources;

c. Procurements where there is suspicion of cartel formation which should be recorded; and

d. Where the requirements are urgent and the delay in re-tendering for the entire requirement due to the unreasonableness of the quoted rates would jeopardise essential operations, maintenance and safety, negotiations with L1 bidder(s) may be done for bare minimum quantum of requirements. The balance bulk requirement should, however, be procured through a re-tender, following the normal tendering process.

2. The decision whether to invite fresh tenders or to negotiate and with whom, should be made by the tender accepting authority based on the recommendations of the TC. Convincing reasons must be recorded by the authority recommending negotiations. The CA should exercise due diligence while accepting a tender or ordering negotiations or calling for a re-tender and a definite timeframe should be indicated.

3. Normally all counter offers are considered negotiations by other means and the principles of

negotiations should apply to such counter offers. For example, a counter offer to L1, in order to arrive at an acceptable rate, shall amount to a negotiation. However, any counter offer to L2, L3, and so on (at the rates accepted by L1) in case of splitting of quantities shall not be deemed to be a negotiation.

4. After the CA has decided to call a specific bidder for negotiation, the following procedure should be adopted:

a. It must be understood that, if the period of validity of the original offer expires before the close of negotiations, the original offer will not be available for acceptance. The period of validity of the original offer must, therefore, be extended, wherever necessary, before negotiations;

b. The tenderer to be called in for negotiations should be addressed as per the format of letter laid down in Annexure 12, so that the rates originally quoted by him shall remain open for acceptance in the event of failure of the contemplated negotiation;

c. A negotiations meeting should be started only after obtaining a signed declaration from the negotiating supplier as per Annexure 12; and

d. Revised bids should be obtained in writing from the selected tenderers at the end of the negotiations in the format of letter laid down in Annexure 13. The revised bids so obtained should be read out to the tenderers or their representatives present, immediately after completing the negotiations. If necessary, the negotiating party may be given some time to submit its revised offer. In case, however, the selected bidder prefers to send a revised bid instead of being present at the negotiation, the offer should be taken into account. In case a bidder does not submit the revised bid, its original bid shall be considered.

x. Consideration of Lack of Competition in OTE/ GTE and LTE [Rule 173 (xix) and (xxi) of GFR 2017]

Sometimes, against advertised/limited tender cases, the procuring entity may not receive a sufficient number of bids and/or after analysing the bids, ends up with only one responsive bid – a situation referred to as 'Single Offer'. As per Rule 21 of DFPR (explanation sub-para), such situation of 'Single Offer' is to be treated as Single Tender. It has become a practice among some procuring entities to routinely assume that open tenders which result in single bids are not acceptable, and to go for re-tender as a 'safe' course of action. This is not correct. Re-bidding has costs: firstly the actual costs of retendering; secondly the delay in execution of the work with consequent delay in the attainment of the purpose for which the procurement is being done; and thirdly the possibility that the re-bid may result in a higher bid. Even when only one Bid is submitted, the process may be considered valid provided following conditions are satisfied:

i) The procurement was satisfactorily advertised and sufficient time was given for submission of bids.

ii) The qualification criteria were not unduly restrictive; and

iii) Prices are reasonable in comparison to market values

However restricted powers of Single tender mode of procurement would apply. In case of price not being reasonable, negotiations (being L1) or retender may be considered as justifiable.

Unsolicited offers against LTEs should be ignored, however Ministries/Departments should evolve a system by which interested firms can register and bid in next round of tendering. However, under the following exceptional circumstances, these may be considered for acceptance at the next higher level of competency:

a) Inadequate Competition

b) Non-availability of suitable quotations from registered vendors

c) Urgent demand and capacity/capability of the firm offering the unsolicited being known, etc.

xi. Cancellation of Procurement Process/ Rejection of All Bids/Re-tender [Rule 173 **(xix) of GFR 2017]**

i) The Procuring Entity may cancel the process of procurement or rejecting all bids at any time before intimating acceptance of successful bid under circumstances mentioned below. In case where responsive bids are available, the aim should be to finalise the tender by taking mitigating measures even in the conditions described below. If it is decided to rebid the tender, the justification should balance the perceived risks in finalisation of tender (marginally higher rates) against the certainty of resultant delays, cost escalations, loss of transparency in re-invited tender. After such decision, all participating bidders would be informed and bids if not opened would not be opened and in case of manual tenders be returned unopened:

a) If the quantity and quality of requirements have changed substantially or there is an un-rectifiable infirmity in the bidding process;

b) when none of the tenders is substantially responsive to the requirements of the Procurement Documents;

c) none of the technical Proposals meets the minimum technical qualifying score;

d) If effective competition is lacking. However lack of competition shall not be determined solely on the basis of the number of Bidders. (Please refer to para above also regarding receipt of a single offer).

e) the Bids'/Proposals' prices are substantially higher than the updated cost estimate or available budget;

f) If the bidder, whose bid has been found to be the lowest evaluated bid withdraws or whose bid has been accepted, fails to sign the procurement contract as may be required, or fails to provide the security as may be required for the performance of the contract or otherwise withdraws from the procurement process, the Procuring Entity shall re-tender the case[78].

ii) Approval for re-tendering should be accorded by the CA after recording the reasons/proper justification in writing. The decision of the procuring entity to cancel the procurement and reasons for such a decision shall be immediately communicated to all bidders that participated in the procurement process. Before retendering, the procuring entity is first to check whether, while floating/issuing the enquiry, all necessary requirements and formalities such as standard conditions, industry friendly qualification criteria, and technical and commercial terms, wide publicity, sufficient time for bidding, and so on, were fulfilled. If not, a fresh enquiry is to be issued after rectifying the deficiencies.

xii. Handling Dissent among Tender Committee

Tender Committee duties are to be discharged personally by the nominated officers. They may take help of their subordinate officers by way of reports/ evaluations, but they would still be answerable for such decisions. TC members cannot co-opt or nominate others to attend deliberations on their behalf. TC deliberations are best held across the table and not through circulation of notes.

All members of the TC should resolve their differences through personal discussions instead of making to and fro references in writing. In cases where it is not possible to come to a consensus and differences persist amongst TC members, the reasons for dissent of a member should be recorded in a balanced manner along with the majority's views on the dissent note. The final recommendations should be that of the majority view. However, such situations should be rare. The Competent Authority (CA) can overrule such dissent notes after recording reasons for doing so clearly. His decision would be final.

In cases where the CA does not agree with the majority or unanimous recommendations of the TC, he should record his views and, if possible, firstly send it back to TC to reconsider along the lines of the tender accepting authority's views. However, if the TC, after considering the views of the CA, sticks to its own earlier recommendations, the CA can finally decide as deemed fit, duly recording detailed reasons. He will be responsible for such decisions. However, such situations should be rare.

xiii. Independence, Impartiality, Confidentiality and No Conflict of Interest at all Stages of Evaluation of Bids

All technical, commercial and finance officials who have contributed to the techno- commercial or financial evaluation of bids, even though they may not be part of the TC should deal with the procurement in an independent, impartial manner and should have no conflict of interest with any of the bidder involved in the procurement. They should also maintain confidentiality of the information processed during the evaluation process and not allow it to reach any unauthorised person. They should sign a declaration at the end of their reports/notings stating that, "I declare that I have no conflict of interest with any of the bidder in this tender". TC members may make such a declaration at the end of their reports.

xiv. Tender Committee Recommendations/Report

The TC has to make formal recommendations (Annexure 11)for the award of the contract to the bidder whose bid has been determined to be substantially responsive and the lowest evaluated bid, provided further that the bidder is determined to be qualified to perform the contract satisfactorily and his credentials have been verified. It is a good practice that TC should spell out salient terms and conditions of the offer(s) recommended for acceptance. It should also be ensured by the TC that any deviation/variation quoted by the supplier in his bid are not left undiscussed and ruled upon in the TC; otherwise there may be delay in acceptance of the contract by the supplier. These recommendations are submitted for approval to the tender accepting authority. Since a nominee of Financial Adviser of the Department is usually a member of the Tender Committee, there is no need for the CA to consult the FA of the Department before accepting the TC recommendations. In any purchase decision, the responsibility of the CA is not discharged merely by selecting the cheapest offer or accepting TC recommendations but ensuring whether:

1. Offers have been invited in accordance with this manual and after following fair and reasonable procedures in prevailing circumstances;

2. He is satisfied that the selected offer will adequately meet the requirement for which it is being procured;

3. The price of the offer is reasonable and consistent with the quality required; and

4. The accepted offer is the most appropriate taking all relevant factors into account in keeping with the standards of financial propriety.

After the acceptance of these recommendations by the tender accepting authority, the Letter (Notification) of Award (LoA) can be issued.

d. Award of Contract

i. LoA to Successful Bidder

Prior to the expiry of the period of bid validity, the successful bidder will be notified (briefly indicating therein relevant details such as quantity, specification of the goods ordered, prices, and so on) in writing by a registered letter or any other acknowledgeable and fool proof method that his bid has been accepted. Legally communication of acceptance of offer is considered complete as soon as it is submitted to Postal authorities (please refer to Para 2.9.1 of Appendix 2). A template for the Letter of Acceptance (or Notice of Award, or Acceptance of Tender) is given in Annexure 14. In the same communication, the successful tenderer is to be instructed to furnish the required performance security within a specified period (generally 14(fourteen) days).

In respect of contracts for purchases valued Rupees two and a half lakh and above, where tender documents include the GCC, SCC and schedule of requirements, the letter of acceptance will result in a binding contract. All delivery liabilities would be counted from the date of LoA.

Publication of Tender Results and Return of EMD of Unsuccessful Bidders

[Rule 173 (xviii) of GFR 2017]

The details of award of contract and name of the successful tenderer should be mentioned mandatorily on the CPPP and also in the notice board/bulletin/ website of the concerned Ministry or Department/e-Procurement Portal. In case publication of such information is sensitive from commercial or security aspects, dispensation may be sought from publishing of such results by obtaining sanction from the Secretary of the Department with the concurrence if associated Finance. Upon the successful bidder furnishing the signed agreement and performance security, each unsuccessful bidder will be promptly notified and their bid security be returned without interest within 30 (thirty) days of notice of award of contract. The successful supplier's bid security shall be adjusted against the SD or returned as per the terms of the tender documents. In cases, where PSUs compete with private firms in public tenders, publication of details of contracts awarded by the PSU concerned to various sub-vendors, suppliers, technology providers and other associates before firming up their offer, may hurt the interest of the PSU as the competitors may get to know the details of sub-venders, suppliers, technology providers and other associates as well as the price at which the contracts are placed. Therefore, in such cases, publication of details of contracts awarded may be dispensed with.

Bidders right to question rejection at this stage

A tenderer shall have the right to be heard in case he feels that a proper procurement process is not being followed and/or his tender has been rejected wrongly. The tenderer is to be permitted to send his representation in writing. Bidding documents should explicitly mention the name, designation and contact details of officers nominated to receive representations in this regard. But, such representation has to be sent within 10(ten) days from the date of LoA. The procuring entity should ensure a decision within 15 (fifteen) days of the receipt of the representation. Only a directly affected bidder can represent in this regard:

i) Only a bidder who has participated in the concerned procurement process i.e. pre-qualification, bidder registration or bidding, as the case may be, can make such representation

ii) In case pre-qualification bid has been evaluated before the bidding of Technical/ financial bids, an application for review in relation to the technical/ financial bid may be filed only by a bidder has qualified in pre-qualification bid;

iii) In case technical bid has been evaluated before the opening of the financial bid, an application for review in relation to the financial bid may be filed only by a bidder whose technical bid is found to be acceptable

iv) Following decisions of the procuring entity in accordance with the provision of internal guidelines shall not be subject to review:

a) Determination of the need for procurement;

b) Selection of the mode of procurement or bidding system;

c) Choice of selection procedure;

d) Provisions limiting participation of bidders in the procurement process;

e) The decision to enter into negotiations with the L1 bidder;

f) Cancellation of the procurement process except where it is intended to subsequently re-tender the same requirements;

g) Issues related to ambiguity in contract terms may not be taken up after a contract has been signed, all such issues should be highlighted before consummation of the contract by the vendor/ contractor; and

h) Complaints against specifications except under the premise that they are either vague or too specific so as to limit competition may be permissible.

Performance Security

The supplier receiving the LoA is required to furnish the required performance security, if it is part of tender conditions, in the prescribed form by the specified date; failing this necessary action including forfeiture of EMD will be taken against the supplier.

Acknowledgement of Contract by Successful Bidder

and Execution

After the successful bidder is notified that his bid has been accepted, he will be sent an agreement for signature and return, incorporating all agreements between the parties.

The supplier should acknowledge and unconditionally accept, sign, date and return the agreement within 14 (fourteen) days from the date of issue of the contract in case of OTE and 28 (twenty-eight) days in case of GTE. Such acknowledgements may not be required in low value contracts, below Rupees two and a half Lakh or when the bidders offer has been accepted in entirety, without any modifications. While acknowledging the contract, the supplier may raise issues and/or ask for modifications against some entries in the contract; such aspects shall be immediately be looked into for necessary action and, thereafter, the supplier's unconditional acceptance of the contract obtained. If both parties (Procuring Entity and the supplier) simultaneously sign the contract across the table, further acknowledgement from the supplier is not required. It should also be made known to the successful tenderer that in case he does not furnish the required performance security or does not accept the contract within the stipulated target dates, such non-compliance will constitute sufficient ground for forfeiture of its EMD and processing the case for further action against it (the successful tenderer).

All contracts shall be signed and entered into after receipt and verification of the requisite performance security, by an authority empowered to do so by or under the orders of the President of India in terms of Article 299 (1) of the Constitution of India. The words "for and on behalf of the President of India" should follow the designation appended below the signature of the officer authorised on this behalf. The various classes of contracts and assurances of property, which may be executed by different authorities, are specified in the DFPR. No contract on behalf of an organisation of Procuring Entity should be entered into by any authority which has not been empowered to do so under the orders of the state Government.

Framing of Contract

The following general principles should be observed while entering into contracts:

i) Any agreement shall be issued strictly as per approved TC recommendations, be vetted by the Associated/ integrated Finance and approved by CA. The terms of contract must be precise, definite and without any ambiguities. The terms should not involve an uncertain or indefinite liability, except in the case of a cost plus contract or where there is PVC in the contract. In other words, no contract involving an uncertain or indefinite

liability or any condition of an unusual character should be entered into without the previous consent of the Associated/ integrated Finance.

ii) All contracts shall contain a provision for

a) Recovery of liquidated damages (LD) for delay in performance of the contract on the part of the contractor;

b) A warranty clause/defect liability clause should be incorporated in contracts for plant and machinery, above a threshold value, requiring the contractor to, without charge, replace, repair or rectify defective goods/ works/services;

iii) All contracts for supply of goods should reserve the right of the Government to reject goods which do not conform to the specifications;

iv) Payment of all applicable taxes by the contractor or supplier; and

v) When a contract is likely to endure for a period of more than two years, it should, wherever feasible, include a provision for an unconditional power of revocation or cancellation by the Government at any time on the expiry of six months' notice to that effect.

vi) Standard forms of contracts should be invariably adopted, except in following cases:

a) Authorities competent to make purchases may, at their discretion, make purchases of value up to Rupees two and a half lakh by issuing purchase orders containing basic terms and conditions;

b) In cases where standard forms of contracts are not used or where modifications in standard forms are considered necessary in respect of individual contracts, legal and financial advice should be taken in drafting the clauses in the contract and approval of CAs is to be obtained; and

c) Copies of all contracts and agreements for purchases of the value of Rs. 25 (Rupees twenty-five) lakh and above, and of all rate and running contracts entered into by civil Departments of the Government should be sent to the Accountant General.

Procurement Records

The Procurement file should start with the Indent and related documents. All subsequent documents relating to procurement planning; Copy of Bid Document and documents relating to its and formulation, publishing and issue/ uploading; Bid Opening; Bids received; Correspondence and documents (including Technical Evaluation and TC report) relating to pre-qualification, evaluation, Award of Contract; and finally the Contract copy, should be kept on the file. In case of bulky Bids received, all bids received may be kept in a separate volume, with a copy of accepted bids later being put on the main volume. To maintain integrity of the records relating to Procurement, these files should be kept secure and for contract management a new volume of file may be opened to obviate frequent exposure of sensitive procurement file. In contract management volume, copies of successful bid, Tender Committee Report, Contract may also be kept for ready reference, besides correspondence and documents relating to Contract Management and its closure.

Evaluation of Bids and Award of Contract - Risks and Mitigations

Risk Mitigation

Evaluation of bids is subjective or leaves room for manipulation and biased assessments. Some TC members may not be independent or neutral or may have conflict of interest.
TC should give an undertaking at the appropriate time that none of the members has any personal interest in the companies/agencies participating in the tender process. Any member having an interest in any company should refrain from participating in the TC. Some members of a TC may be subordinate to or related others in a strictly hierarchical organisation, so that they are not free to express independent views – such a situation must be avoidedwhen constituting the TC.

Discriminating against a Best Value Bid: In case a bidder's bid (not in the good books of the procuring entity) becomes the best value bid as per the evaluation criteria, some of the following actions may have risks of misuse. There is also a reverse risk in theseactions if a favourite becomes best value bid:
Mitigation for each type of risk is mentioned below.

Unwarranted rebidding: Rejecting all bids and calling for rebidding on the pretext of prices being high, change of specifications,budget not being available, and so on.
In case a procurement is rebid more than once, approval of one level above the CA may be taken. Please also see the complaintmechanism.

Sudden quantity reduction/increase or splitting of quantity work at the time of award: Many organisations have provisions for change/ splitting in the bid quantity at the time of award. Some organisations varyquantity even without such provisions
Bid conditions must specify a limit beyond which originally announced quantity/scope cannot be reduced/increased. If parallel contracts are envisaged, clear criteria for the splitting may be specified inthe bid documents beforehand.

Unwarranted negotiations: negotiations are called without justification. Sometimes a counter-offer is made to discourage lowest acceptable bidder.
Normally, there should be no post-tender negotiations. In certain exceptional situations, for example, procurement of proprietary items, items with limited sources of supply, and items where there is suspicion of a cartel formation, negotiations may be held with L-1. In case of L-1 backing out,there should be re-tendering.

Unwarranted delays in finalizing or varying the terms of preannounce contract agreement: even after the TC recommendations are accepted, signing of the contract is delayed on one pretext or the other. Although there is a standard contract form in the bid documents, the contract maybe drafted in a fashion to favour or
A target timeline of finalisation of procurement should be laid down. Delays and reasons thereof should be brought out before the CA on the file at the time of TC's acceptance or contract signing. The contract should be strictly as per the bid conditions and accepted offer.

Evaluation of Bids and Award of Contract - Risks and Mitigations

Risk Mitigation discourage the successful bidder.

Anti-competitive practices: Bidders, that would otherwise be expected to compete, secretly conspire to frustrate the buyer's attempts to get VfM in a bidding process. Anti-competitive conspiracies can take many forms. Sometimes the officers involved in procurement may be part of such collusion.

Bid coordination: The bidders collude to the quote same or similar rates that are much higher than the reasonable price to force the buyer to settle the procurement at exorbitant prices.

Cover bidding: Cover bidding is designed to give the appearance of genuine competition by way of supporting bids for the leading bid- rigger.

Bid suppression: Bid suppression means that a company does not submit a bid for final consideration in support of the leading bid-rigger.

Bid rotation: In bid-rotation schemes, conspiring firms continue to bid but they agree to take turns being the winning (i.e., lowest qualifying) bidder in a group of tenders of a similar nature.

Market allocation: Competitors carve up the market and agree not to give competitive bids for certain customers or in certaingeographic areas.

These strategies, in turn, may result in patterns that procurement officials can detect and steps can be taken to thwart such attempts. Such anti-competitive activities come under the purview of the competition law, where there is provision of stringent penalties. Regular training should be held for officers involved in procurement to detect and mitigate such practices and also use of the competition law against such bidders.

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UNLOCKING THE G20'S GREEN PUBLIC PROCUREMENT POTENTIAL

TASK FORCE 4: REFUELLING GROWTH CLEAN ENERGY AND GREEN TRANSITIONS

Abstract : Green Public Procurement (GPP) practices in the construction sector have the potential to support countries' decarbonisation initiatives. Harnessing this potential will require concerted efforts within and among G20 countries, including establishing effective governance, building implementation and monitoring structures, and setting out ambitious goals and policies. This Policy Brief reports on the uptake of GPP policies in selected member states of the European Union (EU),[a] including France and Germany, the European Union (EU) as an entity, and a few other G20 countries including Brazil, Canada, China, India, Indonesia, Japan and the United States (US). Building on previous studies conducted by Stockholm Environment Institute (SEI) and the Clean Energy Ministerial (CEM) Industrial Deep Decarbonisation Initiative (IDDI), it outlines the scale of opportunity in developing markets for low-embodied carbon construction materials. The brief also highlights the importance of implementing coordinated and ambitious procurement policies that align with the net-zero goals and target both direct and embodied carbon emissions.

1. The Challenge : The implementation of Green Public Procurement (GPP) policies[b] across G20 countries is slow, and weak monitoring systems make it difficult to track progress. The historical focus of climate reporting on direct emissions, instead of embodied emissions,[c] means the true scale of procurement-related emissions remains unknown.[1] Strategically employed by G20 members, GPP can send out a powerful signal to global markets in support of green transition, stimulate markets for low-carbon construction materials, and aid climate commitments of G20 members. The EU recognises GPP as a policy instrument capable of influencing the market.[2]

However, the EU's indicative target of meeting EU GPP criteria in 50 percent of all public tendering procedures by 2010 has yet to be met.[3] Moreover, the EU has set a target to reduce greenhouse gas (GHG) emissions by 55 percent by 2030, compared with the 1990 baseline. Analysis suggests that focusing GPP policies on emission-intensive sectors with sizeable public procurement volumes, such as construction, can help accomplish the targeted reduction in emissions.[4] Available estimates for GHG emissions, generated by public procurement, focus on direct emissions, whereas embodied carbon in products and services is rarely reported.

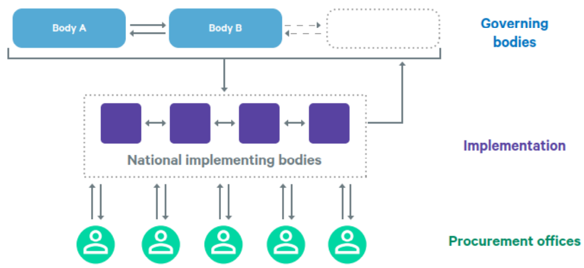
Globally, public procurement of construction products accounts for 12 percent of procurement-related GHG emissions.[5] However, this estimate does not include embodied emissions, such as those stemming from the manufacture of steel or cement, implying that a significant environmental impact is unaccounted for; in most cases, government monitoring and disclosure systems do not report these emissions. Lack of reliable information about embodied carbon emissions is primarily explained by insufficient standards for measurement and reporting and hides the role that emission-intensive sectors can play in establishing environmentally responsible business standards.

2. The G20's Role : Government agencies are top buyers of emission-intensive products, such as steel, cement and concrete. In the G20, this procurement power represents an opportunity to support and grow thriving markets for low-carbon products, create regulatory confidence for investors, and ultimately mitigate procurement-related emissions. Specifically, public procurement spending represents about 13 percent of the combined GDP of G20 countries[6] and 15 percent of the EU's GDP.[7]

Governance Systems : Procurement is frequently overseen at the national level by government bodies responsible for trade, economics or planning. Communication of GPP policy from governing bodies to implementing bodies, and thereafter to procurement offices, is key to its successful implementation;[8] there are trade-offs in having several governing bodies or only one managing these stages.

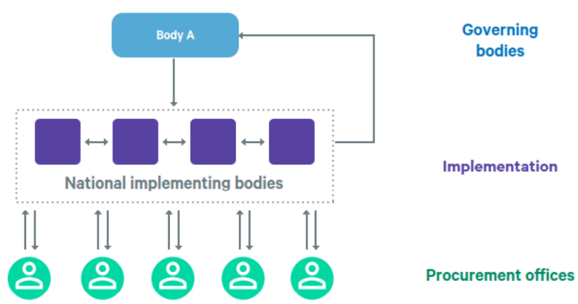
Governance structures for GPP vary among the countries studied, but two broad structures or models are common. In Model 1, governance is shared between two or more entities. For example, one entity is responsible for the overarching procurement legislation and the second one provides environmental oversight and expertise (see Figure 1). In Model 2, a single entity oversees the procurement legislation and establishes environmental guidelines for GPP (see Figure 2). In both models, the governing bodies provide GPP policy to one or more implementing bodies, which are responsible for executing and monitoring GPP through procurement offices.

Figure 1: Governance Model 1: Independent Governing Bodies for Procurement and GPP Legislation



Source: Authors' own

Figure 2: Governance Model 2: A Single Governing Entity for Procurement and GPP Legislation



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Having several governing bodies (Model 1) requires effective communication and agreement between different ministerial offices or departments to design and enact a policy. Canada, France and Japan have succeeded in ensuring effective cooperation between governing bodies through an institutional champion that leads interdepartmental collaboration. Meanwhile, having a single governing body (Model 2), such as in the EU and China, centralises responsibility, curtailing the requirement for strong interdepartmental communication but reducing the probability of bringing in sectoral expertise.

Some G20 countries, such as India, Indonesia and the US, follow neither models; instead, these operate interdepartmental task forces with varying governance structures. This task force-based governance can be represented as Model 3.

India's and Indonesia's efforts in this regard are in the initial stages. India has set up a Task Force on Sustainable Public Procurement, comprising representatives from at least nine government bodies, including environment, industry, economy and procurement entities.[9] Similarly, Indonesia's GPP technical team includes representatives from eight government bodies.[10] In the US, the Buy Clean Task Force includes representatives from 14 government departments, agencies and offices, accounting for 90 percent of all federally financed and purchased construction materials.[11]

Goals, Policies and Legislation

Measurable, actionable and time-bound objectives are key to delivering near-term action on GPP and building the foundation for its long-term success.

In the EU, GPP is voluntary and can be applied to the public procurement processes of all EU member states.[12] In parallel with the umbrella GPP policy, sector-specific policies define mandatory environmental requirements for certain goods and services. These are not directly related to procurement but can be applied to products that may be procured. For example, construction products are covered by a range of energy efficiency policies, such as the Energy Performance of Buildings Directive and the Energy Efficiency Directive.[13]

EU member states set goals for GPP in their national action plans (NAPs).[d] The structure of NAP includes the proposed policy framework and goals, mandatory GPP criteria, and means of implementation.[14] Some include concrete actions for applying GPP (see Case Study 1).

Case Study 1 – Goals and Policies

In France, the NAP includes measurable, actionable and time-bound objectives for GPP. This also sets out a non-binding target: by 2025, all public procurement will include at least one environmental criterion. This will be achieved using the 22 actions on sustainable procurement, outlined in the NAP.[15]

In Germany, the Federal Climate Change Act aims to make the federal administration climate-neutral by 2030.[16] The Act states that procurement preference should be accorded to goods "with which the aim of reducing greenhouse gas emissions over the whole lifetime of a good can be achieved at the lowest cost."[17] In Germany, GPP policy considers the energy efficiency of products and services through the life-cycle costing[18] and extends to construction procurement.[19] At the regional level, German states have the freedom to set independent procurement objectives.[20] In Berlin, procurement is considered an important lever for reaching climate neutrality by 2045. The city's Procurement Law requires disclosure of environmental information for construction project tenders valued over 50,000 euro. A result of this law is a 47-percent reduction in GHG emissions, achieved through environmental considerations for 15 product groups, including office equipment, consumables, construction, transport and waste disposal.[21]

GPP policy at the national level is mandatory in Canada, Japan and the US. Legislation in Indonesia intends to make GPP mandatory, but lack of enforcement means that in practice, it is not.[22] In the EU as a whole, France and Brazil, GPP is voluntary.[23]

In China, the Ministry of Finance has issued national regulations for implementing government procurement of Energy Conservation Products (ECPs). This is complemented by the Environmental Labelling Products (ELPs) list, issued by the Ministry of Environmental Protection.[24] China's public procurement prioritises products from the ELP and ECP lists.[25] Procuring agencies are required to use the ECP list for certain product categories, while use of ELP is voluntary.

India intends to enact a GPP framework by establishing the Task Force on Sustainable Public Procurement, but continues to lack concrete policy instruments.[26]

Case Study 2 – Goals and Policies

In Canada, the Policy on Green Procurement (2006) requires that life-cycle environmental impact of products and services be considered in procurement, in addition to the principle of 'best value for money'.[27] Early implementation of this policy allowed Canada to develop further guidance, such as the Standard on Embodied Carbon in Construction[28] (effective since 31 December 2022) and the Standard on the Disclosure of Greenhouse Gas Emissions and the Setting of Reduction Targets[29] (effective since 1 April 2023). Under the latter, procurement worth more than US$18 million (25 million Canadian dollars) must disclose GHG emissions and adopt a science-based target in line with the Paris Agreement.[30] Canada is a front-runner in legislation to facilitate disclosure of embodied carbon emissions in construction.[31]

In Japan, the Green Procurement Act (2000) requires that all government agencies and public institutions prepare green procurement policies, set yearly targets for purchasing eco-products, and report annually on the targets to the Ministry of the Environment. GPP is voluntary, but strongly encouraged for procurement at the sub-national level and in the private sector.[32]

In the US, Executive Order 14057, Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability (2021), sets out measurable, time-bound federal environmental targets and requires the heads of government agencies to propose targets to support the achievement of the government goals. Section 303 directs the Buy Clean Task Force to develop policies and procedures to improve reporting and transparency of embodied emissions and pollutants, related to the manufacture of construction products.[33]

Monitoring Systems

Monitoring implementation of GPP policies against national targets allows governments to track GPP activities and evaluate and manage procurement processes. However, even where GPP policy exists, procurement reporting does not always include information about how the procured products align with the recommended GPP criteria at the national level. Canada, France, Germany and Japan have well-developed systems for monitoring and publicly disclosing procurement information against GPP criteria (see Table 1).

Periodic procurement surveys are a common strategy for gathering data. In Canada, annual surveys for sustainable procurement have informed the quadrennial Sustainable Procurement Barometer.[34] It allows public and private organisations to self-assess and compare themselves with others.[35]

In Japan, public institutions report procurement of goods and services, included in the Green Procurement Act, to the Ministry of the Environment annually. Reported data includes estimated procured quantities of eco-friendly goods and services and a ratio of the quantity of eco-friendly goods to the total quantity of goods and services procured.[36] The results are disclosed on the Ministry of the Environment's website. Similarly, in the US, heads of government agencies are required to propose targets and report on annual Sustainability Plans, which are based on the annual guidance, provided centrally by the Council on Environmental Quality.[37]

At the procurement office level, there are limited standardised methodologies to help procurement officers evaluate the environmental impact of construction products. This curtails the potential of procurement offices to identify low-carbon products and inhibits implementation bodies from monitoring and reporting on GPP. Environmental Product Declarations (EPD) have been adopted in some regions; however, where adopted, the methodologies vary.

Tools, Labelling and Support

While efforts are underway to build environmental criteria into public procurement, embodied emissions in materials have yet to be widely considered. Measuring the progress made on GPP implementation and comparing the G20 members studied is a challenge, as monitoring systems vary across countries, even across EU member states.

G20 members use a range of procurement tools, including databases of approved materials, educational guides, ecolabelling systems and data visualisation software, to identify 'greener' industrial products and monitor procurement volumes. Canada's Office of Greening Government Operations manages the development of tools and training materials[e] to support procurement officers.[38] Canada has also integrated GPP monitoring into internal business and resource management software to track the use of sustainability criteria in procurement.[39]

Japan uses the Eco Mark programme[f] to identify products compliant with the standards of the International Organization for Standardization (ISO), namely ISO 14020 and ISO 14024. Additionally, non-profit groups, such as Japan's Green Purchasing Network,[g] support implementation, promotion and recognition of GPP in the country. In India, the Eco Mark labelling scheme has not been widely adopted by manufacturers or requested by buyers.[40] However, the labelling is required for certain products (e.g. steel and cement).[41]

The EU has developed tools and support materials to bolster GPP in its member states. The GPP website[h] acts as a repository for EU GPP materials, including guidelines,[i] a training toolkit,[j] NAPs,[k] updated EU GPP criteria,[l] and a GPP helpdesk.[m] The EU Ecolabel is found on a wide range of products and commonly used to evaluate the environmental impact of products. Member organisations, such as the EU Big Buyers for Climate and Environment initiative,[n] incentivise collaboration between sectoral buyers.[42]

In Brazil, the government's product catalogue, CATMAT, helps procurers identify the green goods and services that are available.[43] Brazil also uses ecolabels to identify products, based on life-cycle environmental performance, and these are mainly used for construction-related procurement. For example, timber procurers can look for the PEFC and CERTFOR labels while energy efficiency products can display the Eletrobras and PROCEL labels.[44]

The US Inflation Reduction Act (2022) includes funding for the Environmental Protection Agency to develop Environmental Product Declarations and low-carbon material labelling to help manufacturers differentiate between low-carbon products in the market and assist buyers in identifying these.[45]

Table 1: Characteristics of GPP in the G20 countries studied

G20 member	Has GPP-specific legislation	Applicability	Defined goals	Monitoring	Public disclosure	Has construction-Specific GPP policy	Governance structure	Average procurement spend as share of GDP
Brazil	Yes	Voluntary	No	Information not available	No – general procurement info via ComprasNet [o]	Yes	Model 1	15% [p]
Canada	Yes	Mandatory	Yes	Yes	Yes	Yes	Model 1	17% [q]
China	Partially	Partially mandatory	No	Monitoring framework under development	Information not available	Partially	Model 2	35% [r]
EU	Yes	Voluntary	Yes	No	No – general procurement info via TED [s]	Yes	Model 2	15% [q]
France	Yes	Voluntary	Yes	Yes	Yes	Yes	Model 1	16% [q]
Germany	Yes	Partially mandatory	Yes, at the federal level	Yes	Yes	Yes	Model 2	18% [q]
India	No	Voluntary	No	Information not available	Information not available	No	Model 3	30% [t]
Indonesia	Yes	Planned to be mandatory	No	No	No	Yes	Model 3	7% [q]
Japan	Yes	Mandatory	Yes	Yes	Yes	Yes	Model 1	14% [q]
The USA	Yes	Mandatory	Yes	Yes	Yes – in development	Yes	Model 3	10% [q]

3. Recommendations to the G20

To accelerate the uptake of effective GPP policy, this Policy Brief recommends fostering collaboration to align the policy across all levels of the national government, establishing standardised environmental reporting and monitoring methods, setting sector-specific and time-bound targets, empowering and upskilling procurers and strengthening public-private collaboration to develop shared visions and strategies.

GPP commitments can act as part of a policy mix alongside climate policies such as carbon pricing, ecolabelling, and green product standards. Such commitments could also support the business case for deploying certain technologies that will be required to produce low-carbon construction products.

This brief outlines five policy recommendations that G20 countries can adopt to support the effective implementation of GPP.

1. Foster collaboration to align GPP policies at all governance levels.

Collaboration across the government can ensure coherent implementation. Green procurement criteria should be introduced to tender processes at all governance levels, including accepted levels of embodied carbon in procured materials as a central GPP criterion.

This can be achieved by establishing clear responsibilities for GPP policy development, communication and implementation and creating working groups for green procurement that include representatives from procurement offices. Countries that have delineated responsibilities for GPP include Japan and Canada, where it is managed by several governing bodies (Model 1), with institutional champions leading green procurement.

2. Establish mandatory GPP, including standardised environmental reporting, monitoring and disclosure standards for embodied carbon emissions in procured products.

In most of the countries studied, GPP is voluntary (see Table 1). Introducing mandatory policies alongside voluntary mechanisms to recognise best-performing tender bids will ensure a minimum level of implementation. Penalties for non-compliance can support this process.

Data can potentially strengthen GPP policies. Accurate, verified and transparent data on the carbon footprint of construction products can inform procurers' strategy and decision-making.[46] This data can reveal the environmental impact of existing procurement, identify sources of emissions in supply chains, and support policy evaluation.

3. Establish sector-specific, time-bound targets and roadmaps.

Procurement can meaningfully contribute to national decarbonisation targets only if action plans are designed to address the country's needs. Beyond the good intentions of including green criteria for procurement, a roadmap for implementing GPP, such as NAP, mentioned earlier, will need to state a timeline and measurable targets for each sector.

4. Provide procurers with a clear mandate, goals and adequate financial and knowledge resources so that they can play a strategic role in implementing GPP.

The design of NAP or a similar strategic procurement plan should study the potential effects of implementation at local and sectoral levels, prior to its launch. This should include considering the capacities of implementing bodies as well as the skills and resources needed for local procurement officers to manage and use green procurement criteria.

5. Strengthen public-private collaboration to develop shared visions and strategies.

Establishing concrete targets for procuring goods and services with a reduced environmental impact can send strong market signals from the public sector to the private one. G20 governments should work with industrial sector associations to establish product-specific baseline values for embodied carbon as well as emission reduction targets for high-emitting products, such as steel, cement and concrete. For the construction sector, this collaboration includes but is not limited to manufacturers across the value chain, sectoral associations and construction firms.

This interaction can also be facilitated by initiatives dedicated to sharing best practices for industrial decarbonisation with a global perspective. The Industrial Deep Decarbonisation Initiative (IDDI)[u] provides guidance on setting measurable and time-bound targets for industry decarbonisation, focusing on steel, cement and concrete. Additionally, the Leadership Group for Industry Transition (LeadIT)[v] provides tools for developing industry transition roadmaps and tracks investments in low-carbon steel and cement.

Partnerships and collaboration between public and private sectors can help identify good practices and strengthen the purpose of GPP criteria for construction projects.

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Bibliography

APRSCP and SWITCH-Asia. 'Indonesia Current Status of Green Public Procurement (GPP)', 2022. https://www.switch-asia.eu/site/assets/files/3400/indonesia_country_report.pdf.

Bureau of Indian Standards. 'Products under

Compulsory Certification'. Bureau of Indian Standards, 2023. https://www.bis.gov.in/product-certification/products-under-compulsory-certification/.

Casier, Liesbeth, and LaurinWuennenberg. 'Leveraging the Power of the Public Purse: Using Public Procurement of Low-Carbon Innovation for Sustainable Infrastructure'. Policy brief. i24c, 14 December 2017. https://i2-4c.eu/wp-content/uploads/2017/12/I24C_Policy_1.5_web.pdf.

Economic and Social Research Council. 'EXECUTIVE SUMMARY OF THE REPORT: SUSTAINABLE PUBLIC PROCUREMENT IN BRAZIL', 2012. https://assets.publishing.service.gov.uk/media/57a08a7ae5274a31e0000608/60956_Exec_summary_SPP_in_Brazil.pdf.

ECPAR. 'Sustainable Procurement Barometer', 2018. https://www.ecpar.org/en/sustainable-procurement-barometer.

Environment and Economy Division, The Ministry of the Environment Government of Japan, and Environmental Policy Bureau. 'Introduction to Green Purchasing Legislation in Japan'. Japan, 2016. https://www.env.go.jp/policy/hozen/green/kokusai_platform/2015report/handbook_eng.pdf.

European Commission. 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Public Procurement for a Better Environment'. European Commission, 2008. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52008DC0400.

———. 'GPP National Action Plans'. Green Public Procurement, 2022. https://ec.europa.eu/environment/gpp/action_plan_en.htm.

———. 'Green Public Procurement'. European Commission: Environment, 2021. https://ec.europa.eu/environment/gpp/index_en.htm.

———. 'Studies', 2021. https://ec.europa.eu/environment/gpp/studies_en.htm.

———. 'What Is GPP', 2022. https://ec.europa.eu/environment/gpp/what_en.htm.

Federal Ministry of Justice. Federal Climate Change Act of 12 December 2019 (2019). http://www.gesetze-im-internet.de/englisch_ksg/englisch_ksg.pdf.

Hasanbeigi, Ali, ReniIdeBecqué, and Cecilia Springer. 'Curbing Carbon from Consumption: The Role of Green Public Procurement'. Global Efficiency Intelligence, 2019. https://www.climateworks.org/wp-content/uploads/2019/09/Green-Public-Procurement-Final-28Aug2019.pdf.

Japanese Law Translation, Ministry of Justice, Japan. 'Act on Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities', 2000. https://www.japaneselawtranslation.go.jp/en/laws/view/2719#je_at7.

Liebert, Tilmann, Jason Dion, Lei Huo, and Benjamin Denjean. 'Green Public Procurement in China: Quantifying the Benefits'. International Institute for Sustainable Development, 2015. https://www.iisd.org/system/files/publications/green-public-procurement-china-quantifying-benefits-en.pdf.

Nilsson Lewis, Astrid, KaidiKaaret, Eileen Torres Morales, Evelin Piirsalu, and Katarina Axelsson. 'Green Public Procurement: A Key to Decarbonizing Construction and Road Transport in the EU', 9 February 2023. https://doi.org/10.51414/sei2023.007.

OECD. 'Government at a Glance 2021', 2021. https://www.oecd-ilibrary.org/content/publication/1c258f55-en.

Open Data Institute. 'Tackling the Climate Crisis with Data: What the Built-Environment Sector Can Do', 2021. https://www.theodi.org/article/tackling-the-climate-crisis-with-data-what-the-built-environment-sector-can-do/.

Public Works and Government Services Canada. 'Green Procurement'. Government of Canada, Public Works and Government Services Canada, 7 October 2011. https://www.tpsgc-pwgsc.gc.ca/app-acq/ae-gp/index-eng.html.

The White House. 'Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability'. The White House, 8 December 2021. https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/08/executive-order-on-catalyzing-clean-energy-industries-and-jobs-through-federal-sustainability/.

———. 'FACT SHEET: Biden-Harris Administration Announces New Buy Clean Actions to Ensure American Manufacturing Leads in the 21st Century'. The White House, 15 September 2022. https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/15/fact-sheet-biden-harris-administration-announces-new-buy-clean-actions-to-ensure-american-manufacturing-leads-in-the-21st-century/.

Treasury Board of Canada Secretariat. 'Standard on Embodied Carbon in Construction', 4 November 2022. https://www.tbs-sct.canada.ca/pol/doc-eng.aspx?id=32742.

———. 'Standard on the Disclosure of Greenhouse Gas Emissions and the Setting of Reduction Targets', 9 November 2022. https://www.tbs-sct.canada.ca/pol/doc-eng.aspx?id=32743.

UNEP. 'Comparative Analysis of Green Public Procurement and Ecolabelling Programmes in China, Japan, Thailand and the Republic of Korea: Lessons

Learned and Common Success Factors'. United Nations Environment Programme, 2017. https://www.greengrowthknowledge.org/sites/default/files/downloads/resource/UNEP_green_public_procurement_ecolabelling_China_Japan_Korea_Thailand_report.pdf.

UNODC. 'G20 PRINCIPLES FOR PROMOTING INTEGRITY IN PUBLIC PROCUREMENT – Turkey G20', 2015. https://www.unodc.org/documents/corruption/G20-Anti-Corruption-Resources/Thematic-Areas/Public-Sector-Integrity-and-Transparency/G20-Principles_for_Promoting_Integrity_in_Public_Procurement_2015.pdf.

US EPA. 'Inflation Reduction Act Programs to Fight Climate Change by Reducing Embodied Greenhouse Gas Emissions of Construction Materials and Products'. Overviews and Factsheets, 12 January 2023. https://www.epa.gov/inflation-reduction-act/inflation-reduction-act-programs-fight-climate-change-reducing-embodied.

World Bank. 'Green Public Procurement: An Overview of Green Reforms in Country Procurement Systems', 4 November 2021. http://hdl.handle.net/10986/36508.

World Economic Forum. 'Green Public Procurement: Catalysing the Net-Zero Economy', January 2022. https://www3.weforum.org/docs/WEF_Green_Public_Procurement_2022.pdf.

World Green Building Council. 'Bringing Embodied Carbon Upfront', 2019. https://worldgbc.org/advancing-net-zero/embodied-carbon/.

Endnotes

[a] EU member states selected: Estonia, France, Germany, Italy, the Netherlands, Poland, Spain and Sweden.

[b] The European Commission defines Green Public Procurement as "a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured." See: European Commission, 'What Is GPP', 2022.

[c] Embodied carbon or embodied emission is defined as the GHG emission associated with a material throughout its entire life cycle, stretching from raw material extraction to the end of life. See: World Green Building Council, 'Bringing Embodied Carbon Upfront', 2019.

[d] NAPs in the EU publicly.

[e] See: https://www.tpsgc-pwgsc.gc.ca/app-acq/ae-gp/index-eng.html

[f] See: https://ecomark.jp/nintei/index_en.html

[g] See: https://www.gpn.jp/english/

[h] See: https://ec.europa.eu/environment/gpp/index_en.htm

[i] See: https://ec.europa.eu/environment/gpp/buying_handbook_en.htm

[j] See: https://ec.europa.eu/environment/gpp/toolkit_en.htm

[k] See: https://ec.europa.eu/environment/gpp/action_plan_en.htm

[l] See: https://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm

[m] See: https://ec.europa.eu/environment/gpp/helpdesk.htm

[n] See: https://public-buyers-community.ec.europa.eu/about/big-buyers-working-together

[o] See: http://paineldecompras.economia.gov.br/

[p] See: https://www.oecd-ilibrary.org/sites/18dc0c2d-en/index.html?itemId=/content/component/18dc0c2d-en – Figure 8.1

[q] https://www.international.gc.ca/trade-agreements-accords-commerciaux/topics-domaines/gp-mp/index.aspx?lang=eng#:~:text=Some%20estimates%20suggest%20that%20government,gross%20domestic%20product%20(GDP)

[r] See: https://www.open-contracting.org/wp-content/uploads/2020/08/OCP2020-Global-Public-Procurement-Spend.pdf – Page 23

[s] See: https://ted.europa.eu/TED/browse/browseByMap.do

[t] See: https://www.climateworks.org/wp-content/uploads/2019/09/Green-Public-Procurement-Final-28Aug2019.pdf

[u] https://www.unido.org/IDDI

[v] https://www.industrytransition.org/

[1] OECD, 'Government at a Glance 2021', 2021.; UNODC, 'G20 PRINCIPLES FOR PROMOTING INTEGRITY IN PUBLIC PROCUREMENT – Turkey G20', 2015.

[2] European Commission, 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Public Procurement for a Better Environment' (European Commission, 2008).

[3] European Commission, 'Studies', 2021.

[4] World Economic Forum, 'Green Public Procurement: Catalysing the Net-Zero Economy', January 2022.

[5] World Economic Forum, 'Green Public Procurement: Catalysing the Net-Zero Economy', 7.

[6] UNODC, 'G20 PRINCIPLES FOR PROMOTING INTEGRITY IN PUBLIC PROCUREMENT – Turkey G20'.

[7] OECD, 'Government at a Glance 2021'.

[8] LiesbethCasier and LaurinWuennenberg, 'Leveraging the Power of the Public Purse: Using Public Procurement of Low-Carbon Innovation for Sustainable Infrastructure', Policy brief (i24c, 14 December 2017), 27.

[9] Ali Hasanbeigi, RenildeBecqué, and Cecilia Springer, 'Curbing Carbon from Consumption: The Role of Green Public Procurement' (Global Efficiency Intelligence, 2019).

[10] APRSCP and SWITCH-Asia, 'Indonesia Current Status of Green Public Procurement (GPP)', 2022.

[11] The White House, 'FACT SHEET: Biden-Harris Administration Announces New Buy Clean Actions to Ensure American Manufacturing Leads in the 21st Century', The White House, 15 September 2022.

[12] European Commission, 'Green Public Procurement', European Commission: Environment, 2021.

[13] Astrid Nilsson Lewis et al., 'Green Public Procurement: A Key to Decarbonizing Construction and Road Transport in the EU', 9 February 2023.

[14] European Commission, 'GPP National Action Plans', Green Public Procurement, 2022.

[15] Nilsson Lewis et al., 'Green Public Procurement'.

[16] Federal Ministry of Justice, 'Federal Climate Change Act of 12 December 2019' (2019).

[17] Federal Ministry of Justice.

[18] European Commission, 'GPP National Action Plans'.

[19] Nilsson Lewis et al., 'Green Public Procurement'.

[20] Nilsson Lewis et al.

[21] Nilsson Lewis et al.

[22] APRSCP and SWITCH-Asia, 'Indonesia Current Status of Green Public Procurement (GPP)'.

[23] Economic and Social Research Council, 'EXECUTIVE SUMMARY OF THE REPORT: SUSTAINABLE PUBLIC PROCUREMENT IN BRAZIL', 2012.; European Commission, 'What Is GPP', 2022.; Nilsson Lewis et al., 'Green Public Procurement'.

[24] Tilmann Liebert et al., 'Green Public Procurement in China: Quantifying the Benefits' (International Institute for Sustainable Development, 2015).

[25] UNEP, 'Comparative Analysis of Green Public Procurement and Ecolabelling Programmes in China, Japan, Thailand and the Republic of Korea: Lessons Learned and Common Success Factors' (United Nations Environment Programme, 2017).

[26] Hasanbeigi, Becqué, and Springer, 'Curbing Carbon from Consumption: The Role of Green Public Procurement'.

[27] Hasanbeigi, Becqué, and Springer.

[28] Treasury Board of Canada Secretariat, 'Standard on Embodied Carbon in Construction', 4 November 2022.

[29] Treasury Board of Canada Secretariat, 'Standard on the Disclosure of Greenhouse Gas Emissions and the Setting of Reduction Targets', 9 November 2022.

[30] Treasury Board of Canada Secretariat.

[31] Treasury Board of Canada Secretariat, 'Standard on Embodied Carbon in Construction'.

[32] Environment and Economy Division, The Ministry of the Environment Government of Japan, and Environmental Policy Bureau, 'Introduction to Green Purchasing Legislation in Japan' (Japan, 2016).

[33] The White House, 'Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability', The White House, 8 December 2021.

[34] ECPAR, 'Sustainable Procurement Barometer', 2018.

[35] World Bank, 'Green Public Procurement: An Overview of Green Reforms in Country Procurement Systems', 4 November 2021.

[36] Japanese Law Translation, Ministry of Justice, Japan, 'Act on Promotion of Procurement of Eco-Friendly Goods and Services by the State and Other Entities', 2000, art. 8 (1).

[37] The White House, 'Executive Order on Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability'.

[38] Ali Hasanbeigi, RenildeBecqué, and Cecilia Springer, 'Curbing Carbon from Consumption: The Role of Green Public Procurement' (Global Efficiency Intelligence, 2019).

[39] Hasanbeigi, Becqué, and Springer.

[40] Hasanbeigi, Becqué, and Springer.

[41] Bureau of Indian Standards, 'Products under Compulsory Certification', Bureau of Indian Standards, 2023.

[42] Astrid Nilsson Lewis et al., 'Green Public Procurement: A Key to Decarbonizing Construction and Road Transport in the EU', 9 February 2023, https://doi.org/10.51414/sei2023.007.

[43] Hasanbeigi, Becqué, and Springer, 'Curbing Carbon from Consumption: The Role of Green Public Procurement'.

[44] Hasanbeigi, Becqué, and Springer.

[45] US EPA, 'Inflation Reduction Act Programs to Fight Climate Change by Reducing Embodied Greenhouse Gas Emissions of Construction Materials and Products', Overviews and Factsheets, 12 January 2023.

[46] Open Data Institute, 'Tackling the Climate Crisis with Data: What the Built-Environment Sector Can Do', 2021.

Source: t20ind.org

5 PROVEN WAYS TO BUILD BETTER CUSTOMER RELATIONSHIPS

Customer is king' is an old-age business mantra that reflects the importance of customers for every business, regardless of its type or size. As a business owner, you must always meet their expectations and give them enough reasons to remain loyal to you. Especially when new players are being introduced in the market every other day, ensuring that your customers do not abandon you when approached by competitors with better offers has become even more important. This is only possible when you manage to create a loyal customer base for your brand and build a strong connection with the users.

This connection between a brand and its customers is known as a customer relationship, and it encompasses all the interactions between both parties. Customer relationships are directly associated with the financial well-being of the business. This also means they can help a business survive, even in market and economic turbulence.

Although strong customer relationships are considered the backbone of any business, they are even more important for startups. If you've started your own business and are looking for ways to create a strong bond with your customers, here are a few actionable tips for you:

Communication is the key : In every business, having an open line of communication with the customers is always important. It establishes and maintains trust between the client and the business. As a business owner, this is the best way to understand the specific requirements of your customers. You can start by determining an effective communication strategy for your business. You can either use a forum or send a regular newsletter, but the basic idea is to engage with them. This way, you can make them feel valued and involved in the process throughout.

Value Their Opinion : There is no denying that getting regular customer feedback can help you in many ways. To become a customer-oriented brand, asking for feedback is not enough. When they share their experience with your brand, you get helpful information that can be used to make changes to your offerings. This way, you can ensure that your product or service can fit their needs more accurately.

Meet Their Expectations : No matter your industry, you always need to deliver consistently and reliably. Being a newbie on the block, your complete focus should be on delivering what you have promised to offer. You should always ensure that the product or service you are offering can meet or even exceed your customers' expectations.

Reward Customers' Loyalty : In today's time, when the market is flooded with competitors, finding loyal customers is no less than a challenge. Showing appreciation is the best way to strengthen the bond with such customers. There are several ways of doing so, such as offering additional discounts, giving some freebies, etc.

Keep Upgrading : The ultimate goal of every business is to offer its customers the best. This is only possible when you stay up-to-date on market trends and make necessary changes from time to time. This will help you build better strategies and find better business opportunities. When you know what is gaining more traction in the market, capturing customers and catering to their needs becomes easier.

Building strong customer relationships is crucial for every business, but it gets even more important for startups. This lengthy process requires a certain amount of time and effort. With these simple tips, you can easily nurture your customer relationships. If you are a startup founder looking for more tips, explore our blog section. Startup India is a platform that provides budding entrepreneurs with the right guidance and enough networking opportunities.

References:

https://www.onstartups.com/tabid/3339/bid/10155/building-startup-sales-teams-tips-for-founders.aspx

https://www.shopify.com/blog/customer-relationship

https://www.linkedin.com/advice/1/how-do-you-build-maintain-strong-relationship-your-customers

https://www.caycon.com/blog/the-importance-of-building-customer-relationships

https://www.eatmy.news/2020/07/5-reasons-why-customer-is-king.html

INDIA

Source: Startup India

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GOVERNMENT E-MARKET PLACE (GEM) WITNESSES REMARKABLE GROWTH IN SERVICE PROCUREMENT

Government e-Marketplace (GeM) has achieved significant milestones in the procurement of services over the past few years. GeM, India's leading online platform for government procurement, witnessed an extraordinary increase in the transaction value, reinforcing its commitment to streamlining the procurement process and fostering efficiency and transparency in government purchases.

GeM's robust growth in service procurement has been nothing short of remarkable. Over the last two to three years, the transaction value has surged from approximately INR 8,505 crore in FY 20-21 to an impressive INR 65, 957 crore in FY 22-23. The services sector has exhibited a staggering increase in the overall contribution to GeM Gross Merchandise Value or the total order value transacted through the platform, having jumped from 23% in FY 21-22 to nearly 47% in the current financial year. GeM has set a forward-looking target of surpassing INR 1.50 lakh crore in the current fiscal year.

This unprecedented success can be attributed to the active involvement of top Government buyers from various sectors. Leading Central Public Sector Enterprises (CPSEs) such as Coal India Limited, NTPC Limited, Oil and Natural Gas Corporation Limited, and Bharat Petroleum Corporation Limited have actively leveraged GeM for their service procurement needs. Furthermore, a multitude of states and union territories, including Gujarat, Uttar Pradesh, Delhi, Uttarakhand, and Punjab, have embraced GeM as their go-to platform for services procurement.

GeM offers a diverse range of services across multiple categories such as:

Manpower Outsourcing Services: With approximately 40,000 contracts placed for hiring manpower services in FY 22-23, the total contract value exceeded INR 14,000 crore.

Vehicle Hiring Services: A staggering 30,000 contracts were placed for hiring vehicle services in FY 22-23, with a total contract value exceeding INR 2,900 crore.

Handling, Transport & Other Mining Services: Major subsidiaries of Coal India Ltd. and NTPC Ltd. have placed numerous orders, with substantial order values. Approx. 175 Orders were placed by subsidiaries of Coal India Ltd. With total order value of INR 24, 558 Cr. for handling, transport & other Mining activities.

Insurance Services: GeM has also expanded its large portfolio of services offerings to include Insurance services. This service offering is particularly beneficial as GeM mandates all IRDA-approved Insurance Companies to directly sell insurance cover sans intermediaries like brokers and agents. Recently, Government of Gujarat placed an order for Group Mediclaim Insurance worth [1] 2302 Crore under Pradhan Mantri Jan ArogyaYojana to provide health insurance cover to nearly 62 lakh families.

IT Services: Several key organisations and ministries have harnessed GeM for IT services for procuring complex IT services including core banking solutions and digital healthcare solutions.

Local Chemist Empanelment: Orders worth approximately INR 1038 crore have been placed by Central Government Health Schemes (CGHS) after empanelling Chemists at various medical centres across the country.

Medical Services: Contracts for hiring healthcare manpower placed for more than INR 1100 Cr. till date. Other medical services including Healthcare Sanitation Services, Ambulace services, Heathcare Kitchen and dietary services etc, are available on GeM.

GeM actively supports the implementation of various government schemes, including the Jal Jeevan Mission, Mission Karmayogi, Swachh Bharat Abhiyaan, and SakshamAnganwadi and Poshan 2.0 Scheme by creating suitable services to facilitate implementation of these schemes.

GeM has facilitated unique service orders such as:

Hiring of Chartered Aircrafts: The Ministry of Defence hired 830 Chartered Aircrafts for multiple routes, including Leh, Shrinagar, Andaman& Nicobar to & from flights, with an order value of approximately INR 142 crore.

Air International Logistics Service: Munitions India Ltd., under the Ministry of Defence, hired an agency for the international logistics of approximately 24,000 kg of IMO Class-I Dangerous Goods from Sweden Airport to India, with an order value of approximately INR 3 crore.

Drone as a Service: Survey of India and Coal India Ltd. have harnessed Drone as a Service (DaaS) for various applications, such as surveying and aerial mapping.

Many other unique service offerings have also been facilitated by GeM under the service categories like leasing of High Value Medical Equipment, Market research/Survey, Examination Service, Cyber security services, Hiring of AV/VR Services for events etc.

GeM continues to drive high-value service bids in areas such as:

Hiring, Operation And Management Of ATM: Bids have been published for the supply, installation, operation, and management of thousands of ATMs by State Bank of India, Punjab National Bank, and Bank of Baroda, with estimated bid values reaching several crores. For instance, Bid published for supply, installation, operation & Management of 13,500 ATMs for 7 years by SBI worth INR ~7000 Cr.

Energy Audit Service: The Ministry of Railways has issued an Energy Efficiency Policy for sustainable buildings, energy efficiency in equipment and appliances, power quality restoration, capacity building, and awareness. Several bids have been published for the Investment Grade Energy Audit of buildings.

GIS Survey - Drone Mapping: Survey of India, under the Ministry of Science & Technology, has published a bid for hiring an agency for GIS mapping, covering an extensive area of approx. 30000 sqkm using drone images for Haryana State.

Also, there are multiple ongoing High value bids in the service categories like Warehousing Service, IT Services, Hiring of Vessels, Handling, Transport & other Mining Services.

Source: PIB

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80% OF INDIAN WAREHOUSES TO EMBRACE AUTOMATION BY 2030: A&M

The report predicts Grade A warehousing demand set to grow almost two-fold over next five years, use of automated package sorters can reduce sortation cost by half and payback period for select automation solutions can be as low as 2.5 to 3.5 years.

The global professional services firm Alvarez &Marsal (A&M) launched its 'Building Warehousing Competitiveness: Automation And Beyond' report during a one-day conference organized by the CII Institute of Logistics and predicts that approximately 80 percent of Indian warehouses will integrate some level of automation by 2030. "The combined impact of India's logistics sector accounts for 14 percent of the country's gross domestic product (GDP) and its compound annual growth rate (CAGR) of nine to ten percent underscores the importance of Indian warehouse automation as emphasized in the report," reads the release. Warehouse automation is driven by multiple factors including increased demand, operational complexities, and the necessity for modernization. The growing adoption of automated technologies and processes into warehouse operations reflects the growing maturity of warehouse automation. The report defines automation maturity between Level 0 to Level 4, with Level 0 as only manual operations and Level 4 as end-to-end automation.

Currently, warehouses in India have varying automation maturity levels, primarily falling within Levels 0 to 2. Level 3, characterized by island automation, remains relatively rare, underscoring the potential for increased automation adoption in India. The report predicts that approximately 80 percent of Indian warehouses will integrate some level of automation by 2030. It emphasizes the uniqueness of India warehouse automation journey, the importance of maintaining a balance between human and machine labor in Indian warehousing, and key considerations for organizations and solution providers navigating this evolving landscape. The report also highlights that India's journey toward adopting warehouse automation will be unique, emphasizing the importance of striking a delicate balance between human involvement and automation. Manish Saigal, managing director, Alvarez &Marsal and Co-lead of the India Business Transformation Services practice, said, "Implementing automation technologies in warehousing necessitates an assessment of the associated costs and benefits to determine economic viability.

Automation improves efficiency, reduces human error and pilferage. However, organizations must ensure that their chosen technologies align with their strategic goals and operational requirements. In India, Grade A warehouses are expected to expand at a CAGR of 12.5 percent culminating in approximately 324 million square feet by FY28. This robust growth is poised to drive a surge in automation within the warehousing sector." Anshuman Singh, Chairman, CII Warehouse National Network and Chairman & managing director, Stellar Value Chain Solutions Pvt. Ltd. said, "CII Institute of Logistics has had a longstanding collaboration with Alvarez &Marsal, marked by a shared commitment to fostering growth in Indian logistics. Our collaboration stems from an understanding of the transformative power of informed insights and strategic initiatives. The Building Warehousing Competitiveness Conference, supported by the CII Warehouse National Network, aims to provide stakeholders with profound insights into the transformation of Indian warehousing through advanced automation strategies. This event underscores the pivotal role of technology in shaping modern business operations."

Source: www.itln.in

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HOW CAN INDIA BECOME THE HUB FOR GLOBAL FOOD, PHARMA COLD SUPPLY CHAINS

SWARUP BOSE

India's potential as a global cold supply chain hub has never been more evident than in recent years. With the growth of its pharmaceutical and food industries, there is a rising demand for efficient and reliable temperature-controlled logistics.

The COVID-19 pandemic served as a wake-up call, highlighting the need for a robust cold supply chain network in the country. And since then, the cold chain sector in India has witnessed exponential growth. The market size is estimated to be around USD 17 billion and is projected to grow at a CAGR of approximately 12% from 2021 to 2026. This growth is primarily driven by the increasing demand for temperature-sensitive goods, such as pharmaceuticals and perishable foods. The pharmaceutical industry, in particular, plays a significant role in the cold chain sector, with India being one of the world's largest producers of vaccines and medicines. However there are still a lot of challenges that the sector faces:

While India is making strides in the cold supply chain sector, challenges like inadequate infrastructure in certain regions, unreliable power supply, lack of standardized practices, and gaps in last-mile connectivity continue to plague the sector. However, the NLP and supportive policy infrastructure is helping solve these issues, including improving connectivity through the road, rail and waterway transport infrastructure, encouraging private sector participation, and incentivizing investment in logistics infrastructure.

Additionally, the government's focus on building agriculture supply chains and dedicated freight corridors, for building food security, is also helping drive efficient cold storage infrastructure. These policy measures are crucial steps toward overcoming existing challenges and positioning India as a global leader in the cold supply chain industry. Some key areas that can help propel India on the global map for cold supply chain include : Tech adoption for efficiency To become a global cold supply chain hub, India must focus on adopting advanced technologies that enhance efficiency and reliability.

Automation, real-time monitoring, and data analytics are crucial components of a modern cold supply chain. By implementing these technologies, India can reduce wastage, ensure product integrity, and optimize transportation routes. Furthermore, the integration of IoT (Internet of Things) devices and blockchain technology can provide end-to-end visibility and transparency in the supply chain, assuring stakeholders of the products' quality and authenticity. These tech-driven solutions not only improve operational efficiency but also enhance India's competitiveness in the global market.

Green supply chains and international standards Sustainability and environmental responsibility are central to modern supply chains. India should prioritize the development of greener supply chains that adhere to international standards. This includes reducing carbon emissions, adopting clean energy sources, and minimizing waste throughout the supply chain. Meeting international standards such as Good Distribution Practices (GDP) and Good Manufacturing Practices (GMP) is essential for India to establish itself as a global cold supply chain hub. Compliance with these standards ensures product safety, quality, and traceability, which are paramount for pharmaceutical and food industries. Domestic infrastructure development Investing in temperature-controlled storage and transportation infrastructure is critical. India must expand and upgrade its cold storage facilities, including refrigerated warehouses and distribution centers. Additionally, the transportation segment needs to be equipped with refrigerated trucks, containers, and specialized packaging solutions. Integration of stakeholders To put India on the global map of the cold supply chain sector, collaboration and integration among all stakeholders are vital. This includes government agencies, private sector companies, logistics providers, and regulatory bodies. A coordinated effort is needed to create a seamless and efficient cold supply chain network that can meet the diverse needs of various industries. India's journey to becoming a global cold supply chain hub is well underway, fueled by the growth of the pharmaceutical and food industries.

To realize this ambition, India must continue to invest in technology adoption, green supply chains, and infrastructure development. Compliance with international standards and the integration of stakeholders will be key to success. The COVID-19 vaccine distribution success story serves as a testament to India's capabilities in managing temperature-sensitive logistics. With the right strategic focus and collaboration, India can lead the way in efficient international cold supply chains, benefitting not only its economy but also the global pharmaceutical and food industries. As the market size continues to expand, India's cold supply chain sector has a bright future ahead, poised to play a pivotal role in the global supply chain landscape. The views and opinions expressed in this article are those of the author and do not necessarily reflect the views of Indian Transport & Logistics News.

Source: ITLN

IMPACT OF SUPPLY CHAIN DECARBONIZATION ON LOGISTICS AND GLOBAL TRADE

DILIP SHARMA, CHIEF OPERATING OFFICER AT PROCONNECT SUPPLY CHAIN SOLUTIONS

Agreements like the Paris Agreement and the Copenhagen Accord are ways that ensure effective methods are undertaken to reduce carbon emissions. Different countries are taking the initiative to become carbon neutral in their sustainable plans. Decarbonization of the supply chain has an impact on both logistics and global trade.

While fighting climate change is the current motto, there's no doubt that the road ahead is not an easy one to take. While many companies are engaging in different ways to reduce carbon footprints, decarbonization of the supply chain has an impact on both logistics and global trade.

Agreements like the Paris Agreement and the Copenhagen Accord are ways that ensure effective methods are undertaken to reduce carbon emissions. Different countries are taking the initiative to become carbon neutral in their sustainable plans. Active supply chain decarbonization is becoming a license to operate for businesses, but companies aiming to be role models in the fight against climate change must overcome roadblocks along the way. Let us deep-dive into making decarbonization a priority for all.

Why Is Supply Chain Decarbonization Important?

The main goal of any logistics company is to reduce as many carbon emissions as possible. When it comes to the supply chain, the entire operation contributes a great deal to greenhouse gases. Thus, it becomes crucial throughout the process to take measures to reduce carbon footprints.

This is why many international organizations, governments and other bodies have implemented agreements upon a specific number of emissions to reduce the production of these greenhouse gases. This is because approximately 75% of the emissions are generated by the supply chain operations in any industry. These processes are also important because they often include optimizing operations which makes them cost-effective and helps reduce wastage. This also ensures all processes are streamlined and run in an optimal manner in the long term.

With so many challenges coming our way because of climate change, decarbonization has several benefits for companies. However, maintaining these steps in itself is challenging. There are several factors that have an impact. One of the most important factors when it comes to any company's tracking of greenhouse gases (GHGs) is the amount of carbon emissions they each emit. The rise in carbon emissions today is a big deal. According to McKinsey, carbon is traded at €50 per metric ton on the EU Emissions Trading System. Thus, it only makes it imperative to have firm carbon accounting strategies in place.

Carbon accounting is the process of tracking down the total number of these emissions. It is important to evaluate carbon emissions because it is one of the crucial factors when it comes to decarbonization. When companies do not have a healthy foundation for carbon-accounting, then it becomes a problem.

A strategically developed framework will help address this challenge with the collaboration of different stakeholders and organizations to help establish efficient carbon accounting foundations. Many companies these days use data analysis to develop such frameworks and strategies. And a lot of them rely on secondary data instead of getting firsthand information directly from the relevant sources. When second- and third-party sources are used to gather data, there's always a chance of a lack of authenticity. Not all data is always reflective and reliable. '

Thus, it becomes important to collect data from primary sources through different cloud-based, data sharing systems and platforms. These sources will help companies make better decisions by implementing strategies to reduce emissions in those areas that emit more. Additionally, when it comes to data, estimates are always different when taken into account by different companies. This makes it difficult to come to one conclusion. Getting data directly from the supplier thus becomes important.

Forming alliances in this matter becomes important because suppliers, customers and all other parties are involved. This also helps in achieving common sustainability goals. However, one factor here is that companies cannot work alone to achieve a competitive feat. Additionally, different alliances have different value systems that need to be looked after. Thus, when it comes down to alliances, it is important that different stakeholders are engaging with commitments to reduce as many emissions as they can. While communication is the key aspect in this case, a shared understanding becomes important when it comes to similar goals. It creates room for a collaborative problem-solving process to take place.

The process of decarbonization alone involves several steps and investment of a great deal of capital. It requires high levels of business strategies for it to be successful. Along the way, the challenges that come are far more complex. To navigate through these challenges, addressing these issues becomes an important element for efficient sustainable practices. These processes, despite their challenges, provide room for innovation and growth to take place.

(Disclaimer: Views expressed are personal.

Source : The Financial Express

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INDIA SIGNS SUPPLY CHAIN RESILIENCE AGREEMENT WITH IPEF MEMBERS TO REDUCE RELIANCE ON CHINA

This international agreement on supply chain resilience is perceived as a response to the imperative of reducing overdependence on China, especially in the wake of substantial supply disruptions following the impact of the COVID-19 pandemic.

With an aim to help reduce dependence on China, and shift production of critical sectors and key goods to member countries, India, the US and 12 other members of the Indo-Pacific Economic Framework For Prosperity (IPEF) grouping have signed a supply chain resilience agreement that would provide benefits such as potential shifting of production centres in critical sectors and mitigating risks of economic disruptions from supply chain shocks.

India and the United States, along with 12 other countries, are recognized as supply chain resilience partners within the IPEF. The list includes Australia, Brunei Darussalam, Fiji, Indonesia, Japan, the Republic of Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand, and Vietnam.

This international agreement on supply chain resilience is perceived as a response to the imperative of reducing overdependence on China, especially in the wake of substantial supply disruptions following the impact of the COVID-19 pandemic. The proposed accord aims to establish a framework that enhances the collective understanding of significant supply chain risks among IPEF partners. Additionally, it seeks to improve crisis coordination and responses to disruptions in the supply chain.

The agreement also focuses on ensuring that both workers and businesses, with a particular emphasis on micro, small and medium-sized enterprises, reap the benefits of resilient, robust, and efficient supply chains. To achieve this, the partners intend to guarantee the availability of an adequate number of skilled workers in critical sectors and key goods. This involves initiatives such as upskilling and reskilling workers, among other measures.

In a post on microblogging site X, after the signing of the agreement, Union Minister Piyush Goyal who is currently on a four-day visit to the US said that first-of-its-kind international agreement will "fortify and strengthen" global supply chains, and "foster adaptability, stability and sustainability." Goyal thanked his US counterpart Gina Raimondo for her leadership and personal commitment to ensuring the "truly historic" moment towards a more resilient future.

Following the launch of IPEF in Tokyo, Japan on May 23 last year and the subsequent release of the IPEF Ministerial Statements on September 9, the partners have worked constructively, including through four rounds of in-person negotiations, several virtual intersessional meetings, and numerous bilateral meetings, according to a US Department of Commerce statement.

Earlier on November 13, Goyal participated in the Investors Round Table organized in collaboration with the US-India Strategic Partnership Forum and Indiaspora.

The event was attended by venture capitalists and entrepreneurs from a wide spectrum of industries in the US, including from the domains of energy, manufacturing, logistics, and technology, among others.

In an interactive session held in San Francisco as part of the first leg of the tour in the US, the Union Minister held wide-ranging discussions with the participants and highlighted the various steps taken by the government of India to improve the ease of doing business. He has so far held various bilateral meetings with his counterparts of various countries.

"…highlighted how the country offers promising opportunities for investors, thanks to the unique combination of our demographic dividend, manufacturing capabilities & conducive business environment," Goyal posted on X, contending that India is an attractive investment destination for the world.

The Commerce and Industry minster kicked off his US official tour with a visit to the theTesla Factory Unit in Fremont and interacted with the senior executives of the Tesla group. In a post on X Goyal said that the US electric car maker is on its way to double its component imports from India. He said that he is "delighted" to see Indian engineers and finance professionals working in senior positions and contributing to Tesla's journey to transform mobility.

Tesla CEO Elon Musk had in June this year said that he was planning to visit India next year, adding that he was confident that the electric carmaker will be in India and will do so "as soon as humanly possible."

With ANI inputs.

Source: Firstpost

SUPPLY CHAIN SUMMIT: IT TAKES TAIWAN AND INDIA TOGETHER TO MAKE SEMICONDUCTORS A TRILLION-DOLLAR INDUSTRY BY 2030

At the opening ceremony of the Supply Chain Summit co-organized by DIGITIMES and the India-Taipei Association (ITA) on November 14 in Taipei, DIGITIMES chairman and president Colley Hwang and India's IT hardware guru, HCL Group co-founder Ajay Chowdhry, emphasized how essential the collaboration of Taiwan and India is in the global semiconductor supply chain for the years to come.

Colley Hwang, a senior semiconductor industry expert who was head of Taiwan's government think tank Market Intelligence Center (MIC) under the Institute of Information Industry (III) before founding DIGITIMES 26 years ago, has been a strong advocate for Taiwan-India partnership in information technology, saying "IT" stands for India and Taiwan in many occasions.

"If we believe the year 2030 The total revenue of the semiconductor industry can reach US$1 trillion, then we need a compound annual growth rate as high as 10% for the coming years," explained Hwang. "How is it possible? It's only possible that India and Taiwan work together. Only the Indian market is big enough. And the Southeast Asian countries as well.

As a key hub of semiconductor manufacturing that supplies to customers worldwide, Taiwan produces more than 60% of all the semiconductor chips used in all electrical and electronics devices that one can imagine, and the 914 ICT companies listed on the stock exchange in Taiwan, their total revenue in 2022 was US$900 billion, more than half of which is contributed by mass production manufacturing firms.

"There are 250 Taiwanese companies investing in India already, but the investments are pretty small at this moment, not consistent with the size of your industry," said Chowdhry, urging the Taiwanese industry leaders attending the Supply Chain Summit to see the growth opportunities of India created by the supply chain shifts amid geopolitical uncertainties.

According to Indian government statistics, Taiwan's accumulated investment in India as of today totaled around US$4 billion. Foxconn's Indian operations account for $10 billion, which is less than 5% of the company's annual sales.

Making and designing chips in India

"We are giving about US$7 billion worth of incentives just in electronic manufacturing," said Manharsinh Yadav, director general of ITA. He added that Morgan Stanley is projecting that India will become the world's third-largest economy by 2027. "By 2025-26, we'll have more than 85,000 semiconductor industry-ready manpower, that's what is required for the Taiwanese semiconductor industry. And we are gearing up for it. We have changed our curriculum and 625 colleges have adopted that curriculum. We are also tying up with most good institutes across the world, including here in Taiwan," according to Yadav.

Chowdhry has been advocating for semiconductor manufacturing in India for more than 30 years. He sees the Indian government's determination to make it happen, and reiterates that since the central government of India is committed to providing incentives upfront for 50% of the capital expenditure of semiconductor companies to operate in India, and the state government is promising another 20%, "there is no better deal in the world other than India!"

Chowdhry emphasizes the potential of India not only as a market and a manufacturing hub but also as a design center for advanced technology, where 1,600 multinational companies are already investing in India to tap into the abundant and young IC design talent and capability, including MediaTek.

"Taiwan is seriously missing out on the opportunity that India presents if you are only looking at India as a market." Chowdhry went on to say that Taiwan has helped China to become a product manufacturing country and helped it to have IC design capabilities. "China has thousands of design companies. Our ambition is that with our engineering and R&D knowledge, we also want to create thousands of design companies. That is where Taiwan can participate, come and set up a large number of design centers in the country."

"India has a US$5 trillion opportunity by 2027, in which the electronics industry alone is expected to increase by US$400 billion in value," said Chowdhry. He also invited Colley Hwang, who reiterated his firm confidence that India will be successful in building its own semiconductor supply chain, to cooperate and facilitate the synergy between Taiwan and India.

"We have a dream to make India the most advanced country by 2047. My Prime Minister has already declared during our Independence Day about two years back, that by 2047, India will be a developed nation. In this dream, Taiwan can be a partner," said Yadav, with pride in his eyes.

Source: www.digitimes.com

SUPPLY CHAIN DISRUPTIONS: NAVIGATING IN 2023 AND BEYOND

SUSHIL GOYAL, CO-FOUNDER AND COO, RAHI

The ongoing economic and political climate is still impacting supply chain disruptions across the globe. Supply shortages, rising inflation, and massive layoffs in the job market are only expected to make the situation worse. In fact, as per KPMG, 6 out of 10 global enterprises expect the ongoing situation to continue to get worse for the next three years.

Supply chain leaders believe that despite the challenges ahead, today's organizations are better equipped to respond to disruptions as freight rates surged to 28 percent YoY in early 2022 but saw a decline of two percent in July of the same year, enterprises can expect costs to decrease as supply gradually stabilizes. They urge enterprise leaders to stay up-to-date on key supply chain agility strategies while mitigating disruptions' impact. Here are a few ways that enterprises can swiftly navigate supply chain disruptions:

Diversifying Suppliers : Depending on a single vendor or supplier for critical components can get risky. While a few suppliers might be equipped with the devices required by their partners but most are still struggling to deliver on their promise due to the ongoing disruptions. Hence, enterprises should partner with multiple suppliers to meet their needs. They should identify additional suppliers for the same components. This can help them to mitigate the impact of any disruptions in the supply chain industry.

Identify ways to tackle cybersecurity challenges : As the supply chain industry accelerates its digital transformation, sensitive data becomes more vulnerable to threats. In the past couple of years, the supply chain industry has been heavily targeted by threat actors, causing massive disruptions, with SolarWinds being the first to expose the vulnerability in today's supply chain industry. According to the European Union Agency for Cybersecurity (ENISA), 58 percent of cybersecurity attacks on supply chains were targeted at suppliers with weaker infrastructure to gain access to the entire company's network.

Therefore, in 2023, more enterprises will need to focus on their efforts on strengthening their data security. They need to invest heavily in upgrading and potentially revamping their cybersecurity to prevent threat actors from breaching their networks. Taking strict measures and following best security practices will enable enterprises to prevent and mitigate the impact of cyberattacks.

Prioritize customer centricity : Prioritizing customer experience will be key for many enterprises to navigate supply chain disruptions. As the business landscape becomes more complex and competitive, enterprises need to seek ways to enhance their customer service and differentiate themselves from their competitors.

Achieving this will require them to concentrate on customer-centricity, meaning they'll need to collaborate with their customers to understand their requirements and provide the most effective and relevant personalized solutions. By partnering with their customers from the early stages of the supply chain process, enterprises can gain critical insights into customer behavior and preferences. This will allow them to build innovative solutions that help build trust and loyalty among their customer base.

Boost in safety storage : The pandemic has shown the devastating impact of not having enough safety stock which can lead to serious trouble. Inaccurate forecasting and constant fluctuation can lead to manufacturing and delivery disruptions that can lower customer service levels. Moving forward, supply chain leaders will need to work with multiple partners, especially financial leaders to identify the financial impact of larger safety stocks. While this means that more money will be spent on inventory, having a safe buffer will allow the enterprise to navigate the supply chain issues in the long run.

Increase use of automation : Supply chain leaders are recognizing the benefits of integrating automated systems into business operations. Not only do these technologies enable them to lower costs, streamline processes and increase efficiency but enable them to make informed decisions in real-time data. Many leaders have already adopted automation technologies, with 47%Chief Supply Chain Officer (CSCO) confirming that they have introduced automation technologies in the past two years. With sustainability on top of their agenda, many CSCOs confirmed that they can add predictability, flexibility, and intelligence to supply chain operations with the use of automation technologies.

Thrive with resilient supply chains : The persistent instability in the supply chain has prompted enterprises to recognize the need for effective supply chain strategies. The geopolitical conflicts, inflationary pressures, looming recession, and labor shortages are affecting the supply chain; hence businesses must prioritize supply chain resilience. Enterprises must invest in strategies that can improve supply chain flexibility, responsiveness, and risk management to mitigate disruptions and ensure business continuity during unexpected events.

Source: DQINDIA

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INFRASTRUCTURE QUIZ

1. Which city forms the eastern corner of the Golden Quadrilateral
   a) Howrah
   b) Guwahati
   c) Darjeeling
   d) Bagdogra

2. East Dedicated Freight Corridor (EDFC) does not pass through which of the following state
   a) Punjab
   b) Haryana
   c) Uttarakhand
   d) Jharkhand

3. A statement NOT true about Sagarmala project is
   a) It aims to harness the coastline of the country to unleash it economic potential
   b) It aspires to reduce carbon emission from transportation sector
   c) It is aimed to bring about a steep change in India's logistic performance
   d) Itaspires to have an overall cost savings of Rs 1,00,000 crores

4. The envisaged total length of Sagarmala project is
   a) 203 km
   b) 117 km
   c) 108 km
   d) 281 km

5. The Indian Port Rail and Ropeway Corporation Ltd. (IPRC) is incorporated under companies act and works under Ministry of
   a) Shipping
   b) Railways
   c) Commerce
   d) Road Transport and Highways

6. Which is the first Indian state that has achieved 'Har Ghar Jal" under the Jal Jeevan mission?
   a) Kerala
   b) Himachal Pradesh
   c) Goa
   d) Delhi

7. All are true about Parvatmala programme EXCEPT
   a) The aim is to decongest mountains
   b) It is under ministry of Road Transport and Highways
   c) It is announced under 2022 budget
   d) It is a purely Govt. funded programme

8. All are pillars of Digital India Except
   a) Broadband highways
   b) Information for all
   c) Early harvest programme
   d) Digital mobility

9. All are true about BharatNet EXCEPT
   a) It operates under Ministry of Communications
   b) Its earlier name was National Optical Fibre Network
   c) It is worlds largest broadband connectivity programme
   d) It is implemented by BSNL

10. All are facilities at logistics park EXCEPT
    a) Warehouses
    b) Banks
    c) Fuel pumps
    d) Transport depots

ANSWERS TO JIT QUIZ

1.	d
2.	c
3.	b
4.	d
5.	d
6.	d
7.	a
8.	b
9.	c
10.	a

DIGITALIZATION OF PUBLIC PROCUREMENT AND GOVERNMENT COMMERCIAL PAYMENTS

Public procurement is a vital part of any nation's economy, serving key policy goals and representing around 13% to 20% of GDP on average.* Because of its scale and strategic role, government procurement can present both valuable opportunities and unique challenges.

What are public procurement and government commercial payments?

Public procurement is the purchasing of goods and services by the government sector. It covers everything from pens and paper to major construction projects such as constructing schools, hospitals, and roads. It also involves services provided by third parties, such as social care and health services. Managed by various ministries, departments, municipalities, and public corporations, there are two main types of spend: Strategic and Tail.

Opportunities for card payments

Commercial payments are digital payments initiated by the public sector to pay private companies for goods and services either purchased as part of the public procurement process or paid as reimbursement for public officials' travel and entertainment costs. Commercial payments can be handled via a number of different instruments: this paper focuses on the opportunities provided by card payments.

Public procurement represents a significant proportion of national GDP

The sheer scale of public procurement—representing between 6 and 19 percent of national GDP for 80 percent of the countries captured in the World Bank Global Public Procurement Database [1] —and the use of taxpayers' money place public officials under intense scrutiny over the use of these funds. As a result, governments must ensure that the purchasing and payment processes are fair, efficient, and transparent. This means guarding against conflicts of interest and ensuring fair competition and equal treatment of their business partners. They must also optimize public resources by ensuring that they purchase the best goods and services at the lowest possible price, and that they pay vendors on time.

Opportunity for digitalization

This paper offers in-depth insight into the opportunity for digitalization to advance and improve government purchasing and commercial payments. Drawing on a global perspective, this paper explores the different stages of digital maturity and discusses the power of digitalization to address the shared challenges faced both by the public sector (including government procurement and treasury managers) and by private sector companies participating in public tenders. It also highlights examples of successful digitalization and its positive impact on efficiency, accountability, transparency, participation of SMBs, and national economic growth. This paper outlines a range of different approaches to digitizing public purchasing and government commercial payments—from cards for travel and entertainment (T&E) and procurement (P-cards) to procurement e-marketplaces—that can empower governments to advance the digital procurement effort independent of their starting point and technological sophistication.

Source: Global Government Forum

GeM to make public procurement more inclusive

ByRajeev Jayaswal

Government e-Marketplace looks to facilitate collateral-free working capital loans up to ₹ 10 lakh in just 10 minutes at an interest rate of 10% to small businesses

The Government e-Marketplace (GeM) is likely to make public procurement more inclusive by facilitating collateral-free working capital loans up to ₹ 10 lakh in just 10 minutes at a concessional interest rate of 10% to small businesses, and boost its platform by adding over 250,000 gram panchayats as new buyers, a senior official directly involved in the scheme said.

GeM's CEO Prashant Kumar Singh on Wednesday said that the provision will be rolled out shortly, and that the loans will be particularly beneficial for businesses owned by Scheduled Caste, Scheduled Tribe and women entrepreneurs.

"A digital financing facility based on 10x10x10 philosophy of right loan to right person at cost effective rate in least possible time is being launched soon," Singh said, adding that a pilot project was successful with 13,400 registered sellers availing about ₹ 22 crore in loans with an excellent repayment record. "About 95% loans have been paid on time," he added.

The loans are extended by financial institutions, mostly banks and non-banking finance companies (NBFCs), on the basis of orders in hand which also come through the portal. Small entrepreneurs have an online option to avail instant loans and recovery is easy as payments are processed through the same portal, Singh said.

According to official data, some of the partners in the projects are Aditya Birla Capital, AU Small Finance Bank, ICICI Bank, Kotak Mahindra Bank, Lendingkart, Oxyzo, Tata Capital, UGRO Capital, Union Bank of India. Public sector banks will participate soon, another GeM official said.

Singh said corporate majors are also interested in handholding small entrepreneurs in this endeavour. GeM and Godrej Capital Nirmaan Platform have signed an agreement to strengthen the micro, small and medium enterprises (MSME)-seller ecosystem on GeM, he said. They will focus on activating an additional 15,000 MSMEs on GeM by providing training and helping in the disbursing of easy credit to them, he added.

GeM, which has already achieved transactions of about [1] 5.5 lakh crore — [1] 2 lakh crore of this has come in FY23 alone — is also planning to add about 250,000 gram panchayats as buyers. “Capacity-building was done through the government’s CSC (Common Service Centres) network,” Singh said. This move will give depth to the portal and promote “Make in India” in a big way, he added.

Roping in gram panchayats is an extension of the government’s move to include cooperatives. In June last year, it allowed about 854,000 cooperatives, including Amul and IFFCO, to purchase from the GeM portal. Though private players were allowed to sell their goods and services on GeM, this was the first time that private entities (cooperatives in this case) were allowed access to the government’s procurement portal as buyers.

According to Singh, GeM also has a stringent validation process to check the selling of goods from prohibited countries. The process has detected several prohibited sellers, particularly those dealing in laptops, desktops and servers, he said.

The government’s public procurement policy announced on July 23, 2020 bars the supply of goods or services from countries that share land borders with India without prior registration with competent authorities.

Source: Hindustan Times

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GOVERNMENT E-MARKETPLACE SURPASSES INR 1 LAKH CRORE GROSS MERCHANDISE VALUE MILESTONE IN RECORD TIME

GeM achieves milestone within 145 days in FY 2023-24 against 243 days in FY 2022-23

Accelerated growth, increased efficiency and unwavering trust propel Government e-Marketplace (GeM) to achieve an impressive milestone, crossing INR 1 lakh crore in Gross Merchandise Value (GMV) within a remarkable span of 145 days in the current financial year, FY 2023-24. This outstanding achievement underscores GeM’s commitment to revolutionizing government procurement and signifies a substantial improvement compared to the previous year, where this GMV landmark was reached in 243 days. The average GMV per day has also witnessed significant growth from INR 412 crore per day in FY 22-23 to INR 690 crore per day in FY 23-24.

This notable milestone firmly establishes GeM as one of the largest public procurement portals globally, both in terms of transaction value and the breadth of the buyer-seller network within its unified digital ecosystem. Since inception, GeM has crossed INR 4.91 Lakh Crore in GMV and has facilitated over 1.67 crore orders on the platform.

Among the noteworthy contributors to this remarkable GMV achievement, the contribution of Central Public Sector Enterprises (CPSEs) , Central Ministries and State Governments has been 54%, 26% and 20% respectively.

Additionally, GeM’s efforts to foster inclusivity and accessibility have been commendable. The platform’s integration with e-Gram Swaraj to streamline Panchayat-level procurement exemplifies its commitment to reaching last-mile sellers and optimizing costs at the grassroots level of administration.

Looking ahead, GeM’s vision encompasses a wider federal reach, customized processes, and policies that will enhance public savings while upholding the highest quality standards for products and services. Its remarkable performance in achieving the INR 1 lakh crore GMV milestone within an accelerated time frame not only reflects its growth trajectory but also solidifies its position as the key player in transforming government procurement practices in the country.

The past financial year concluded with a GMV of INR 2 lakh crore, setting a formidable foundation for this year’s achievement. GeM’s strategic focus in FY 2023-24 centers on expanding its reach by integrating government buyers across all tiers into its robust e-procurement infrastructure. The portal’s extended range of service offerings has contributed significantly to its widespread adoption during this period.

With a vast assortment of over 30 lakh listed products and an impressive portfolio of over 300 service categories, GeM is well-equipped to meet the diverse product and service needs of government departments nationwide. Consequently, the platform has also witnessed a substantial surge in orders from various State Governments and affiliated entities, firmly establishing GeM as a go-to solution for government procurement.

About GeM: Government e-Marketplace (GeM) is an online public procurement portal developed facilitate the procurement of goods and services by various government departments, agencies, and public sector undertakings. It was launched in August 2016 as a part of the government’s “Digital India” initiative to bring transparency, efficiency, and cost-effectiveness to public procurement. GeM aims to simplify the public procurement process, reduce paperwork, and promote the use of digital technology for government procurement.

Source: PIB

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TO BOOST 'MAKE IN INDIA', CENTRE FLAGS UNFAIR TENDER NORMS

S. VIJAY KUMAR

Advisory identifies over a dozen conditions commonly introduced in tender conditions that went against the local suppliers

The Union Government has flagged over a dozen "restrictive and discriminatory" conditions which prevented local suppliers from participating in the bidding process. The tweaking of the tender conditions was in violation of the Public Procurement (Preference to Make in India) Order, 2017, issued to protect the interests of local suppliers.

Last week, the Ministry of Railways directed General Managers of all Zonal Railways and Production Units to make sure that all procuring agencies across the railway network complied with the PPP-MII Order and avoid including any "restrictive and discriminatory" conditions against the local suppliers.

The communication follows the latest guidelines issued by the Department of Promotion of Industry and Internal Trade, Ministry of Commerce and Industry on December 20, 2022, which highlighted some of the common examples of "restrictive and discriminatory" conditions against local suppliers and some other eligibility norms that were non-compliant to the PPP-MII Order.

The DPIIT in consultation with the Department of Expenditure and the Government e-Marketplace (GeM) had identified over a dozen conditions commonly introduced in tender conditions that went against the local suppliers but suited the interests of foreign manufacturers and issued an advisory.

Foreign standards : For instance, the advisory said that foreign technical standards like minus 25-degree temperature compatibility for certain equipment procured for airports were incorporated to eliminate 'Make in India' products without any justification of requirement of that specification value for intended end use of the equipment/service.

Why 'Make in India' has failed : Among other tweaked tender norms were standard certification by foreign agencies without specifying any equivalent Indian certification or alternative in the procurement of medical and electronic devices.

Excessive turnover requirement as a pre-qualifying criteria, not commensurate with the financial capacity required for executing the contract, insisting on specific experience of supplying products to other nations such as export to G8 countries, additional requirement of bank guarantee and delayed payment terms were among other conditions that prevented the local manufacturers from taking part in the procurement process.

Global brands

Another criteria which was observed in the procurement of IT, electronic and electrical products was specifying foreign brands either for finished products or for part of scope of work. The report explained that while CISCO, NEC, Alcatel, Siemens products were specified in telecom products, HP, Dell, Lenovo were insisted on IT products. In the purchase of lifts, the tender conditions specified use of OTIS, Mitsubishi, Schindler, Kone and Johnson products.

The advisory noted that stipulating in the bid conditions that the particular goods/works/service category was exempted from the provisions of the PPP-MII order since the concerned nodal ministry had not issued any notification for the same was another condition that made the bid non-compliant with the procurement rules. It also clarified that the PPP-MII Order applied to purchase of all categories of goods/ works/services exceeding ₹5 lakh in value.

The PPP-MII Order of 2017 was issued to promote domestic value addition in public procurement. The policy provided for purchase preference to domestic manufacturers and service providers who complied with local content requirements in public procurement activities over entities merely importing to trade or assemble items.

Source: www.thehindu.com

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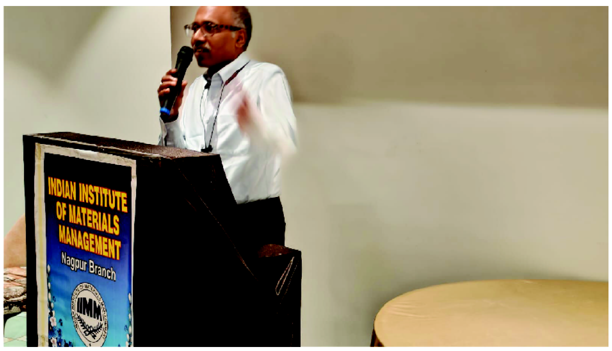
BRANCH NEWS

NAGPUR BRANCH

TALK ON DIGITAL ENABLEMENT- INDUSTRY NEXT, INTELLIGENCE, AGILITY- IN SCM : IIMM Nagpur Branch conducted its first evening programme in FY 23-24 for the members of IIMM Nagpur Branch on Saturday the 4th of November 2023. The resource person for this evening program was Mr. Arvind Kumar, an eminent speaker and a technocrat in the field of providing leadership for business growth, innovation, delivery, administration and operations.



Mr. Arvind kumar has been with TATA Consultancy Services for the past 31 Years, and currently the Head of TCS Nagpur, with an employee base of over 9000 employees. He has been responsible, under his leadership, for delivering successes, bringing innovative business models, products and solutions. He is very deeply involved in digital enablement in the Industry, intelligence, ability and Supply Chain Management.

Mr. Arvind Kumar took the spell bound audience through the entire journey of TATA group's involvement from Textile, Steel, Power, IT, Automobiles, Hospitality, Health Care, fashion, Daily needs, etc, and now the deep involvement of the TATA group in development of new technologies like Artificial Intelligence, etc. He explained the benefits of implementation of technology in many areas of Supply Chain Management.

The evening program was attended by over 35 members of IIMM Nagpur branch, as well as a few invitees from the industry. The members were engrossed and the programme was very highly appreciated by all the members. The Chairman of IIMM Nagpur Branch, Dr. Y. Venkata Ramana, in his welcome address mentioned that this is the first of the series of evening talks organized by the new EC team of IIMM Nagpur Branch and EC has more plans in their agenda for conducting many more of such evening lectures by eminent personalities / academicians in off line and online modes.

The evening program was conducted by Mr. Madhu Rughwani, Honorary Secretary, IIMM Nagpur Branch. Mr. Sukumar Adhikari, NC member IIMM Nagpur, introduced the resource speaker. The evening concluded with a time of fellowship and a sumptuous and delicious dinner.

MUMBAI BRANCH

Mumbai branch had organised Inhouse Training ProgramPublic Procurement on 19th and 20th Oct,2023 at MazagaonDOCK ship builders' Ltd Dockyard Road MUMBAI 400010. The Training program was a great successful event for 30 staff members of material management dept, public procurement dept and finance dept. IIMM Commended Challenges and reforms a robust. Supply chain is crucial for Industrial growth in PUBLIC Procurement.

IIMM Advisor & Director Program coordinator D. R.H. Shete gave brief details of activities of IIMM Mumbai Branch. He gave introduction of four faculties appointed on behalf of IIMM. The following topics on PUBLIC PROCUREMENT were shared amongst four faculties. Theory, procedures, government Directives, Group discussions and case studies

Duration 02 days : As Per IIMM Mumbai Branch experience, the Training Course Outline for the Two days may consist of following sessions

1) Indian Contract Act
2) General Principles of Public Procurement
3) General Financial Rules - 2017 (and its latest

Amendments) For Procurement of Goods
4) General Financial Rules - 2017 (and its latest Amendments) For Procurement of Services
5) General Financial Rules - 2017 (and its latest Amendments For Procurement of Works Contracts
6) Procurement Through GeM Portal
7) Formulation of Specifications
8) Public Procurement Policy for Micro & Small enterprises
9) Make In India, order 2017 and its subsequent orders/amendments
10) Group discussions on a) Preventive Vigilance b) CVC Guidelines c) CPPP Portal d) OEM Procurement
11) GST and Post GST Compliances —GST Invoicing/e - Invoicing/E -Way bill /GST Portal Compliances
12) Project Procurement/Capital Goods procurement
13) Contract Management, Contract Drafting, Legal Implications & Remedies
14) Logistics management for Imported & Indigenous Goods
15 Latest Public Procurement related Compliances, TreDs formalities, Start up Provisions and Compliances, Changes in Govt Policies
16) Legal Aspects, Sale of Goods Act, Company Act & Provision from Buyers Perspective
17) Latest Trends in Stores & Inventory Management
18) Disposal of Scrap : Best Practices
19) Reverse Auction & Forward Auction
20) Dispute Resolution
21) Inco Terms
22) Customs Duty

1 . Mr. Alok Ranjan Sarkar Ex G M Materials and Ex G M [Engineering and Project] BPCL and also Advisor IIMM

Discussed the following topics

1) Indian Contract Act
2) General Principles of Public Procurement
3) General Financial Rules
4) Formulation of Specifications
5) Public Procurement Policy for MSE Enterprises
6) Make in India order 2017 and its subsequent amendments
7) Project Procurement /Capital Goods procurement
8) Reverse Auction & Forward Auction
9) Disposal of Scrap — Best Practices
10) Dispute Resolution
11) Group Discussions on a) Preventive Vigilance b) CVC Guidelines c) CPPP Portal 4) OEM Procurement

2. Mr T .L. Sharnagat Vice President Contracts Mahanagar gas Ltd Mumbai explained following topics

1. Logistics Management for Imported and Indigenuous goods
2. Latest Public Procurement related Compliances, TreDs formalities, Start up Provisions & Compliances

Changes in Government Policies

Legal aspects , Sale of Goods act , Company Act & provisions from Buyers Perspective

Latest Trends in Stores & Inventory Management

3. MR P. KENNEDY G M FINANCE ONGC REGINAL OFFICE MUMBAI spoke on

1) GST and Post GST Compliances —— GST Invoicing /e -Invoicing / E -Way bill / GST Portal Compliances

4 . Mr.RajeshDeshmukh Deputy G M Contracts and Procurement

Custom Duty

Inco terms

Contracts Management

Feedback from the participants was excellent faculties and solved many of the practically solved solutions. Great success.

BANGALORE BRANCH

28th October 2023 - Golden Era of IIMM Bangalore

It's been 50 years of God's blessings to IIMM, Bangalore. It was a great and successful story of 50years from 1973-2023. Accordingly, October 28th, 2023 was the day chosen to bring down the curtain on the Golden Jubilee Celebrations of IIMM, Bangalore. The venue of the function was Hotel Woodlands, Bangalore. There were honors, prizes, speeches, entertainment and of course dinner.

The large Krishna Hall at the venue was occupied by a sizable audience well before the scheduled time of commencement of function. The activities and achievements of IIMM Bangalore for 50years were presented by Mr. Paul George, N.C. Member and Master of Ceremony. The function was started with invocation by Mrs. Devika. at 6.00 pm. The guests were invited in a procession, specially designed by Dr. K. Bheemappa, All India Radio Artist and team, with flowering on them and holding of traditional umbrellas, dress and dance. The guests were accompaniedby all members of Executive Committee 2023, former National Presidents, and former Branch Chairmen, Faculty and Members.

High tea was arranged before the function to begin, allowing fellow members of IIMM to network each other. A Rangoli Art made with the theme of IIMM, Bangalore Golden Jubilee by Mrs. Dasari Rohini, Admin Officer from UIIC, Bangalore was being the main attraction and made meaningful of the Event.?A special lapel pin on "IIMM Bangalore Branch, golden jubilee year 2023" were distributed to all the members and gathering of event on the occasion of IIMM Golden Jubilee Celebrations.

The august function was presided over by the Guest of Honour- Prof. Sadagopan Chairman, BoG, IIITDM-Kancheepuram, Founder Director IIIT - Bangalore. He graced the dais along with Guest of Honour Ms. Ushasri T.S. Executive Vice President, General Manager, Manhattan Associates and Guest of Honour Dr. S. Devarajan, Senior Vice President, TVS Motors and President, Bangalore Chamber of Industries and Commerce. The guests were escorted and welcomed on the stage by Mr. Jayakumar, Branch Chairman, Mr. K.C Harsha, Chairman – SCALE 2023 and Mr. P.M. Biddappa, Convener – SCALE 2023. ?The Chairman of the Golden Jubilee Celebrations Mr. Mr. Jayakumar, Branch Chairman, IIMM-Bangalore, invited the guests to the dais with bouquet and welcomed the gathering with a warm and scintillating speech.

Mr. M.S.Vittal, former IIMM Bangalore Chairman and **Mr. Kapoor, former IIMM National President** were honoured for being completed 50 years of membership with IIMM and service. Life time Achievers Award, was felicitated to **Mrs. Ushasri Executive Vice President & General Manager, Manhattan Associates** by Guest of Honours, Prof. Sadagopan and Dr. S. Devarajan and Branch Chairman, Jayakumar and his team Mr. K.C. Harsha & Mr. P.M. Biddappa.

Golden Jubilee Award 2023: **Mrs. Ushasri T.S. Guest of Honour, honoured Golden Jubilee 2023** -Best Practices Award to BOSCH Ltd and Best Innovation Award to Titan Ltd. Key note addresses given by Ms. Ushasri T.S. Executive Vice President and General Manager of Manhattan Associates.

Dr. S. Devarajan, Sr Vice president of TVS Group, honoured all the former Chairmen and Senior Members of IIMM (25 years completed), those who participated in the Golden Jubilee:

Past Chairmen Honoured

SL NO	NAME
1	Mr K.C. Harsha
2	Dr.C. Subbakrishna
3	Mr. P.M. Biddappa
4	Mr. Paul George
5	Mr. D. Subramani
6	Mr. M.S. Shankar Narayanan
7	Mr. Srinivas. V. RAO
8	Mr. B. Jayaraman
9	Dr. Sengottaiyan. P
10	Current Chairman Mr.Jayakumar. M

Honoured to 25 Years Completed Members

Sl No	Name
1	Mr.Shekar
2	Mr.Venkatakrishna Sharma A.N.
3	Mr. Mohammed Haroon
4	Mr.G. Balasubramanian
5	Mr.Mallik Sharif
6	Mr. D.Lakshmaiah

Guest of Honour Dr. S. Devarajan,Sr.Vice President- TVS Group Addressed the gathering and given a hint of how the future manufacturing will be.

Chief Guest Prof. Sadagopan addressed the gathering with his vast experience in public and private sector, facts filled with humour.

Golden Jubilee 2023 Talents Day Award 2023:

Guest of Honour Prof. Sadagopan honoured **Young Achievers Award** / 1st Prizes to Mr. Abhishek. K.S from Titan Company and 2nd Prize to Mr. A Babu from SEG Automotive**.**

Quiz Competition -Institution the Prize was awarded to Mr. Hemanth & Mr. Adarsh, team from Acharya B School, Bangalore.

Quiz Competition -SCM/ MM Professionals: 1st Prize awarded to Mr. Rajesh & Ms. Anjana Reji, and 2nd Prize awarded to Mr. Satish & Mr. Deebac, teams from Titan Company.

IIMM- Bangalore Golden Jubilee Celebration - Organising Team

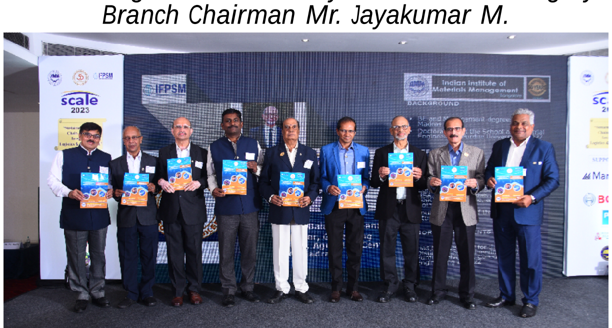
IIMM - Bangalore Golden Jubilee Celebration - Cultural Program

Essay Competition Award: 1st Prize Awarded to Mr. Somanathan and **2nd Prize Awarded to** Mr. Deepak - SCM/MM Professionals from Titan Co. Ltd.

Best Student Award: Felicitated to Mr. Anil Kumar Patil**,** BIAL, CSCM student.

All guest of Honours' speech was very relevant to the occasion and very much accepted and acknowledged by the gathering of MM/SCM professionals with a big round of applause. Afterwards the guests of Honour Prof. S. Sadagopan and Dr. S. Devarajan were felicitated.

Lectue Program on Chandrayaan -3 - Welcoming By Branch Chairman Mr. Jayakumar M.



Releasing SCALE 2023 - Golden Jubilee - SOUVENIR

Life time achievement Award to Ms. Ushasri T.S. - Executive Vice President of Manhattan Associates - On the Occassion of Golden Jubilee - IIMM Bangalore

Mr. M.S. Vittal and Mr. C.L. Kapoor - Past President, Felicitated - Senior Members 50 Years Completed

Concluding with a formal vote of thanks, by Mr. M.R. Achyuth Rao, Vice Chairman, IIMM Bangalore Branch.

With the best efforts of Executive Committee,Organizing Committee and IIMM Bangalore Staff, the golden jubilee celebrations went on very well and was a grand success.

Cultural program started at 8.00 pm by Dr. K Bheemappa, All India Radio Artist and his group.

This program proved to be a visual treat, with well synchronized lighting and sound to accompany the movements of the dancers. It was a mix of Bharatanatyam, Fusion and Modern style, was choreographed by Mr. Vinod and team. The highlight of the event was 50 years IIMM, Bangalore Golden Jubilee theme song with dance, written and composed by Dr. K. Bheemappa,

Golden jubilee celebrations were concluded with Dinner.

4TH November 2023 – SCALE -2023 :

A great success of appreciation was achieved by IIMM Bangalore Branch for conducting one day mega event SCALE 2023 on 4th November 2023 at The Chancery Pavilion, Residency Road, Bangalore. The event got praises and accolades for its organizing, hospitality, choice of theme and host of speakers who unequivocally endorsed the possibility of "**Sustainable Supply Chain Through Integrated Logistics & Digitization**". The program is a benchmark for expressing IIMM expertise in the field of Supply Chain Management, but also proven a huge platform for sharing knowledge on the best and latest in the professional field across the globe. The delegates derived maximum input through various high powered "Sustainable Supply Chain and Logistics Digitalization in India" technical sessions which are extremely useful for their day today's professional field, implementing professional development.

Dr. K.N. Subramanya, Principal and Professor, RV College of Engineering was the Chief Guest for the inaugural function ofSCALE 2023 program. **Mr. Ankit Sharma Associate Director, Capgemini** delivered the Keynote address on this occasion. **Mr. Jayakumar M. Branch Chairman** welcomed the gathering. **Mr. K.C. Harsha, Chairman SCALE 2023** spoke about the SCALE and Theme.

SCALE 2023 - Inaugural Program on 4.11.2023 at Hotel Chancery

SCALE 2023 - Organising Team

SCALE 2023 - Speaker from Man hatten handling the session

Technical Sessions Speakers were: **Mr. Narasimha Kamath** Sr. Vice President, 09 Solutions spoke on ESG, sustainability and Supply Chain, **Mr. Alind Agrawal**, Sr. Director R&D Manhattan Associates on Navigating your SCM Digital Journey, **Mr. Dinakar Murthy Krishnan**, Managing Partner, Samuhana Consultancoaching LLP, **Mr. P.K. Gopala Krishnan**, Co-Founder, Malabar Angel Network on Key personal attributes for an outstanding Supply Chain Profession – a practitioner's Perspective, **Mr. Debojyoti Dey**, AVP, Multi Commodity Exchange of India.

Post lunch sessions SCALE 2023: Golden Jubilee Innovation Award winners, presented their materials for their innovative work on simplified E-warranty card process. Narrated this provides the customers with anytime, anywhere warranty services – a bench mark for all white goods manufactures. Notable feature: Wide Spread Innovative Culture by **Mr. Niranjan P.** and his team from Titan Company Ltd. **Golden Jubilee Best Practices Award Winners** by **Mr. Nisanth J.**and his team BOSCH Ltd. Nashik presented his materials and he explained for their intense focus in identifying and implementing Best Practices with strong processes. The results are major sustainable positive outcomes across multi business performance indicators.

Mr. N. Swayabhu, Vice President (South) IIMM, M. Jayakumar, Chairman, IIMM Bangalore and **Manhattan Team** handed over Mementos to winning Teams.

Other Technical sessions on Sustainable Supply Chain in healthcare by **Mr. Hemanth Patel**, Sr. Director Supply Chain, Manipal Health Enterprises, Supply Chain Digitization by **Mr. Pandurang Prabhu**, Sr. Director Manhattan Enterprises, on Sustainable Supply Chain and Logistics Digitalization in India by **Mr. Karthi Baskar**, MD & CEO, FFAF Logistics India Pvt. Ltd. and on Sustainable Supply Chain **Mr. Madhav Dusane**, Vice President BOSCH Ltd.

On the occasion of Valedictory of SCALE 2023 Chief Guest was **Dr. P. Balasubramanian**, Members, Governing Board, Agua MAP Center, IIT- Madras and he has released Golden Jubilee - SCALE 2023 Commemorative issue of Souvenir, and accompanied by **Dr. C. Subbakrishna**, Past National President, **Mr. P.M. Biddappa**, Convener SCALE 2023 **Mr. Jayakumar M**, Branch Chairman, **Mr. M.R. Achyuth Rao**, Vice Chairman, **Mr. Paul George**, NC Member and MC and SCALE 2023 souvenir committee members **Mr. Akash Gupta**, **Mr. C.S. Subhash.**

Program followed by Question and answer session. Participants had an opportunity of interacting directly with Speakers and events were well appreciated by the participants. The entire program was very well organized by EC and SCALE 2023 team, with the leadership of **Mr. K.C. Harsha,** Chairman -SCALE 2023, **Mr. P.M. Biddappa**, Convener and **Mr. JayakumarM**. Branch Chairman.

Mr. Paul George, N.C. Member, IIMM moderated and Managing Committee of SCALE 2023. **Mr. Kishore Kumar P**. EC Member proposed Vote of Thanks.

Event concluded and received excellent feedback from the participants.

16th November 2023 : Evening Lecture Program :

An evening lecture program on **"Success Story of Mission Chandrayaan-3 and Ongoing Space Programmes"** was organized by IIMM Bangalore Branch on 16th November 2023 at 6.00 pm at Paraag Hotel, Bangalore. Speaker**Shri B.N. Ramakrishna**, Director ISRO Telemetry Tracking and Command Network (ISTRAC) has addressed the gathering. He shared his vast experience in the ISRO and given presentation on **Success Story of Mission Chandrayaan-3 and Ongoing Space Programmes".**

Mr. Jayakumar M. Branch Chairman welcomed the speaker, IIMM Membersand Invitees. **Mr. P.B. Biddappa,** NC Member Introduced speaker.**Mr. M.R. Achyuth Rao,** Branch Vice Chairman proposed vote of Thanks. The audience had a direct opportunity to interact with speaker. **It was very informative sessions, and well appreciated by the participants.**

EXECUTIVE HEALTH

COMMON WINTER AILMENTS AND HOW YOU CAN AVOID THEM

By taking good care of your health and body, you can avoid serious ailments during the winters

It's that time of the year when you sip hot cups of coffee or ginger tea while enjoying the foggy mornings and chilly evenings. While you look forward to being bundled up in your favourite winter outfits and relishing cosy nights under the blanket, you cannot ignore the fact that this season has a downside to it as well.

If you fail to take proper care of your health and body, you can end up with severe ailments during the frigid winter months. A sudden drop in temperature can cause significant health issues such as bronchitis, pneumonia etc. What seems like a common cold or flu, in the beginning, can progress into a more severe illness if not taken care of properly.

Read on to know about a few common winter ailments, their symptoms and prevention tips.

Common cold : This is one of the most common winter diseases, and most of us often ignore it, thinking it's due to the changing season. Though we are right to an extent, if this common cold or viral infection doesn't subside in two to four days, we need immediate medical help. Common cold can affect anyone, but children and senior citizens are more vulnerable to severe disease symptoms.

Symptoms of the common cold: The common cold symptoms include headache, sore throat, runny nose, sneezing, and coughing. However, if the condition worsens, you may also experience high fever, chest congestion and breathing difficulties.

Prevention tips:
- Drink plenty of water and other fluids
- Get adequate rest and sleep
- Wash your hands frequently to avoid infection
- Avoid outside food as much as possible
- Wear multiple layers of clothing
- Gargle with hot water or inhale steam

Flu : Flu is often mistaken for the common cold by most people. However, that may not be the case every time. Flu, also known as influenza, is an infectious health disease that mainly affects the infected person's respiratory tract. The leading cause of flu is the contamination of the body with the influenza virus. It can last from 2 to 7 days, depending upon the severity.

Symptoms of flu: Most of the symptoms of flu are similar to that of the common cold. A person suffering from flu may experience mild to high fever, sore throat, body ache, headache, nasal congestion, runny nose, cough, and cold. In some cases, patients may also experience pain in their ears and redness or itchiness in their eyes.

Prevention tips:
- Cover your nose and mouth while sneezing or coughing
- Maintain a safe distance from people showing flu symptoms
- Wash your hands frequently
- Maintain respiratory hygiene
- Exercise daily and consume immunity-boosting food

Bronchitis : Bronchitis is an infection in the person's respiratory tract, caused by Respiratory Syncytial Virus (RSV). Children or toddlers below the age of two and people with weak immunity are mainly affected by this disease. Bronchitis causes inflammation of the small airways in the lungs, causing breathing difficulties. If the symptoms persist for more than ten days, medical intervention is required.

Symptoms of bronchitis: As mentioned above, the person suffering from bronchitis experience difficulty breathing due to the inflammation of airway passage in the lungs. Other symptoms of bronchitis include mild fever, wheezing, coughing, nasal congestion and dehydration.

Prevention tips:
- Get adequate rest and sleep
- Drink lots of fluids to keep yourself hydrated
- Wash your hands frequently
- Avoid smoking and exposure to smoke, firecrackers etc.

Pneumonia : Pneumonia is another common lung disease which can occur during the winter season. Unlike other winter diseases, pneumonia is caused by a bacterial infection. You can usually treat it at home, but hospitalisation is necessary if symptoms get severe. Pneumonia can prove to be a life-threatening disease for children below five years of age and senior citizens.

Symptoms of pneumonia: A person suffering from pneumonia experiences constant cold and high fever for several days. Other pneumonia symptoms include excessive coughing, difficulty in breathing, chest pain, fatigue, loss of appetite, heavy sweating, and shortness of breath. Though pneumonia symptoms can vanish in one or two weeks, weakness and fatigue can last for a month or so.

Prevention tips:
- Wash your hands frequently
- Eat lots of fruits and leafy vegetables
- Avoid smoking and exposure to smoke
- Exercise daily to boost your immunity
- Visit your physician if the symptoms persist

Source:www.icicilombard.com/

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