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INSTITUTE FOR SUPPLY MANAGEMENT

ISM-INDIA

# Digital Procurement FRAMEWORK

*(Digital Permeates Everything We do Today)*

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# Key Takeaways

- ❖ Decoding the concept of Digital Procurement
- ❖ Evolution of Procurement
- ❖ ERP vs. E-Procurement vs. Digital Procurement
- ❖ Procurement Journey from Procurement 1.0 to 4.0
- ❖ Digital Enablers to add Value
- ❖ Digitalization of Procurement (Procurement 4.0)
- ❖ Changing Face of Procurement



*Key Objective: Procurement to defend Value and become Innovator of Change*



## Quote of the Day

*“Procurement Professionals have the best job in the organization by far, simply because no other has the ability to influence the company in the same way Procurement Does.”*

# ROLE OF PROCUREMENT

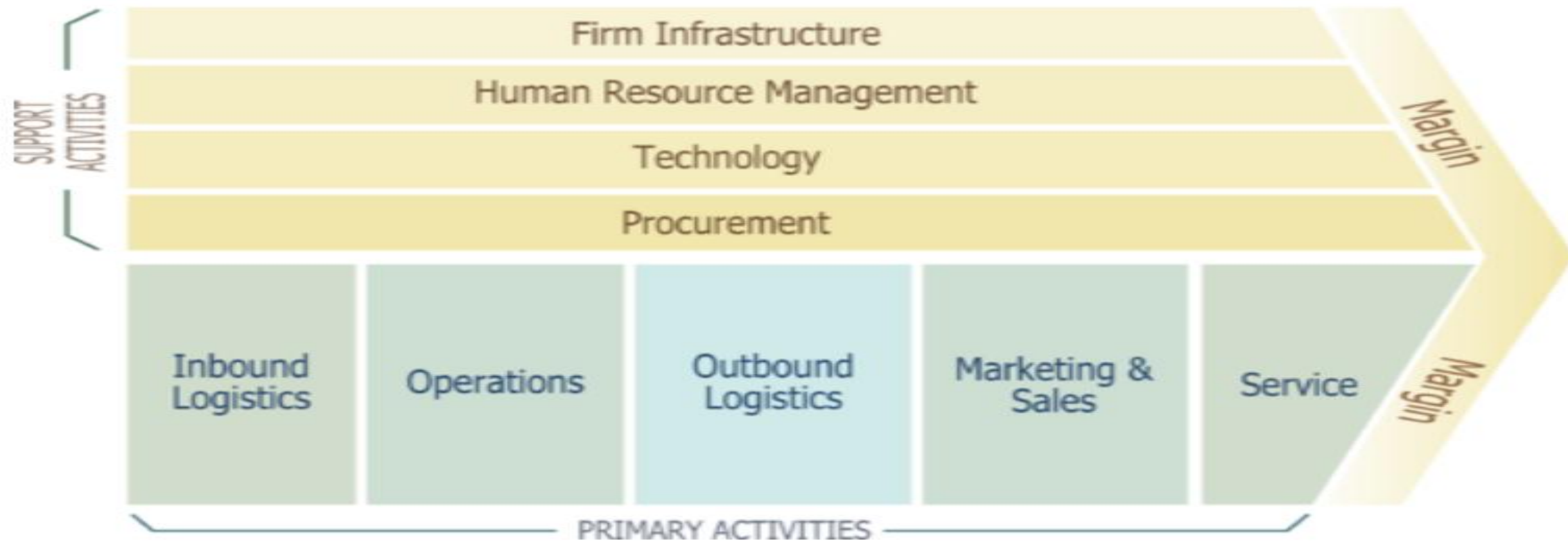


- ❖ Procurement represents a major function of business.
- ❖ Considering that the average company spends 40-70 percent of its revenue on purchases from third parties
- ❖ Under Public Sector Procurement it represents nearly 20-25% of GDP.
- ❖ Procurement can drive 5-12 percent savings on expenditures under its influence.
- ❖ Procurement is still seen as support function and there is urgent need to strategize and digitalize it.

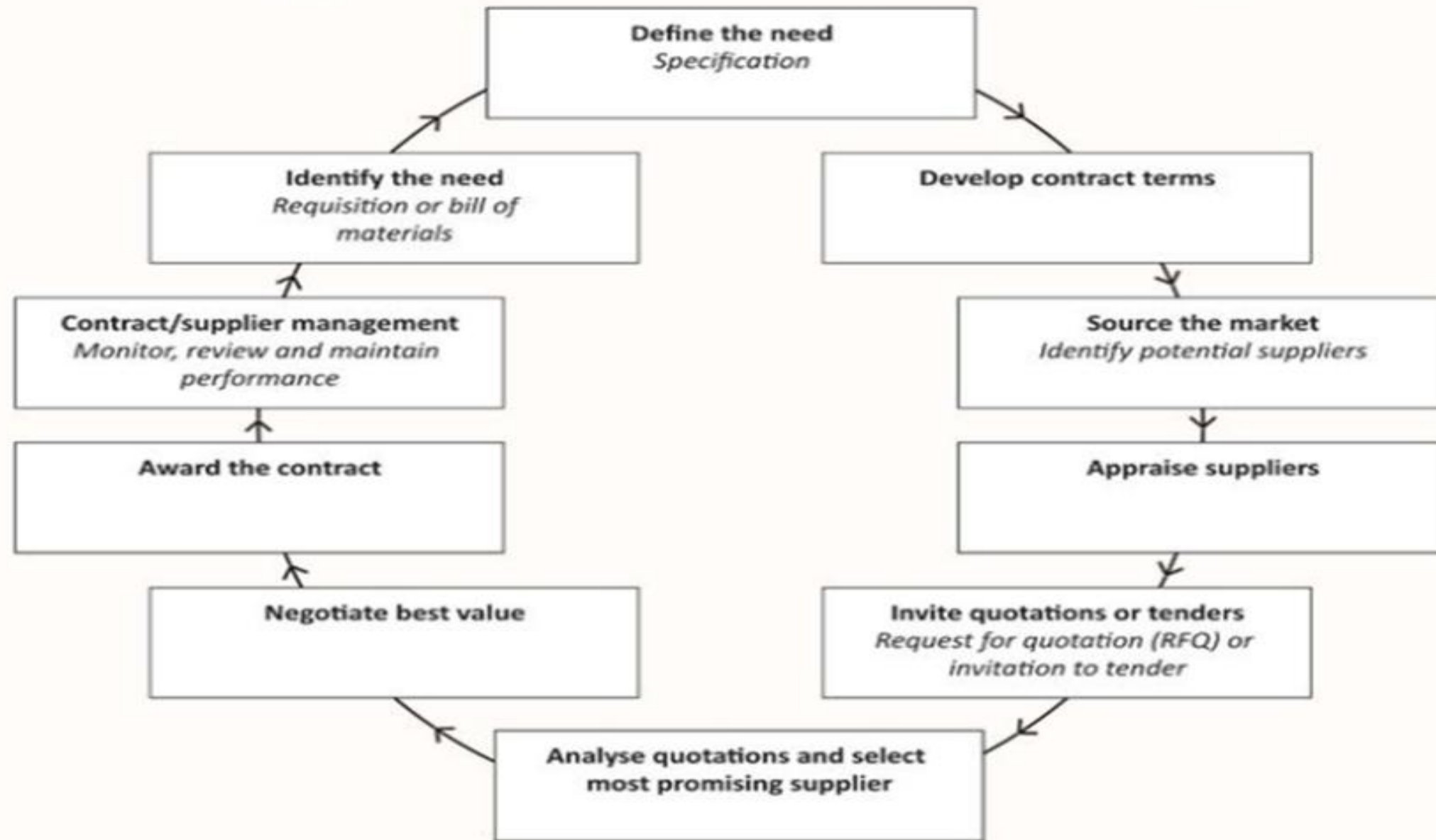


# Procurement in the Value Chain

1. Procurement is — still — largely viewed as a *secondary* activity in most organizations' value chains.
2. Porter's Value Chain



# Traditional Procurement Cycle





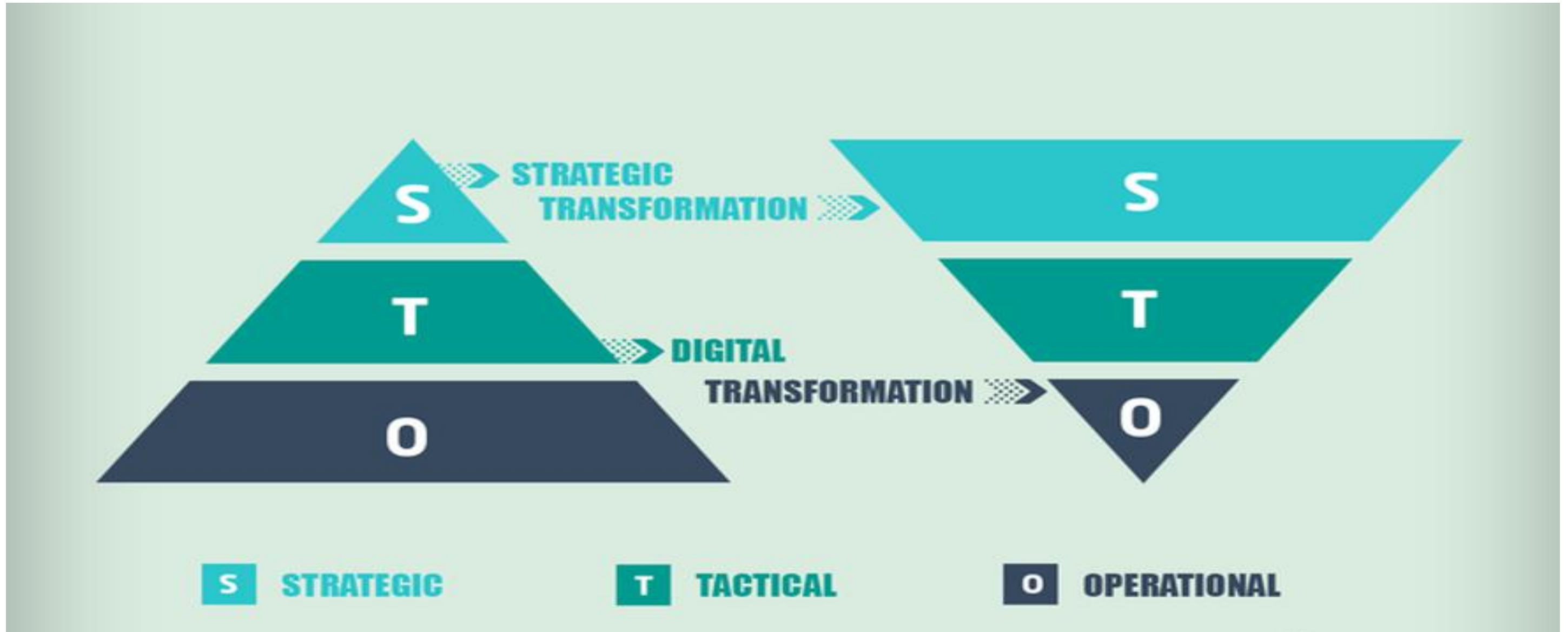
# Procurement as a Fire Fighting Deptt.



75% of procurement managers' time is spent on fighting fires.

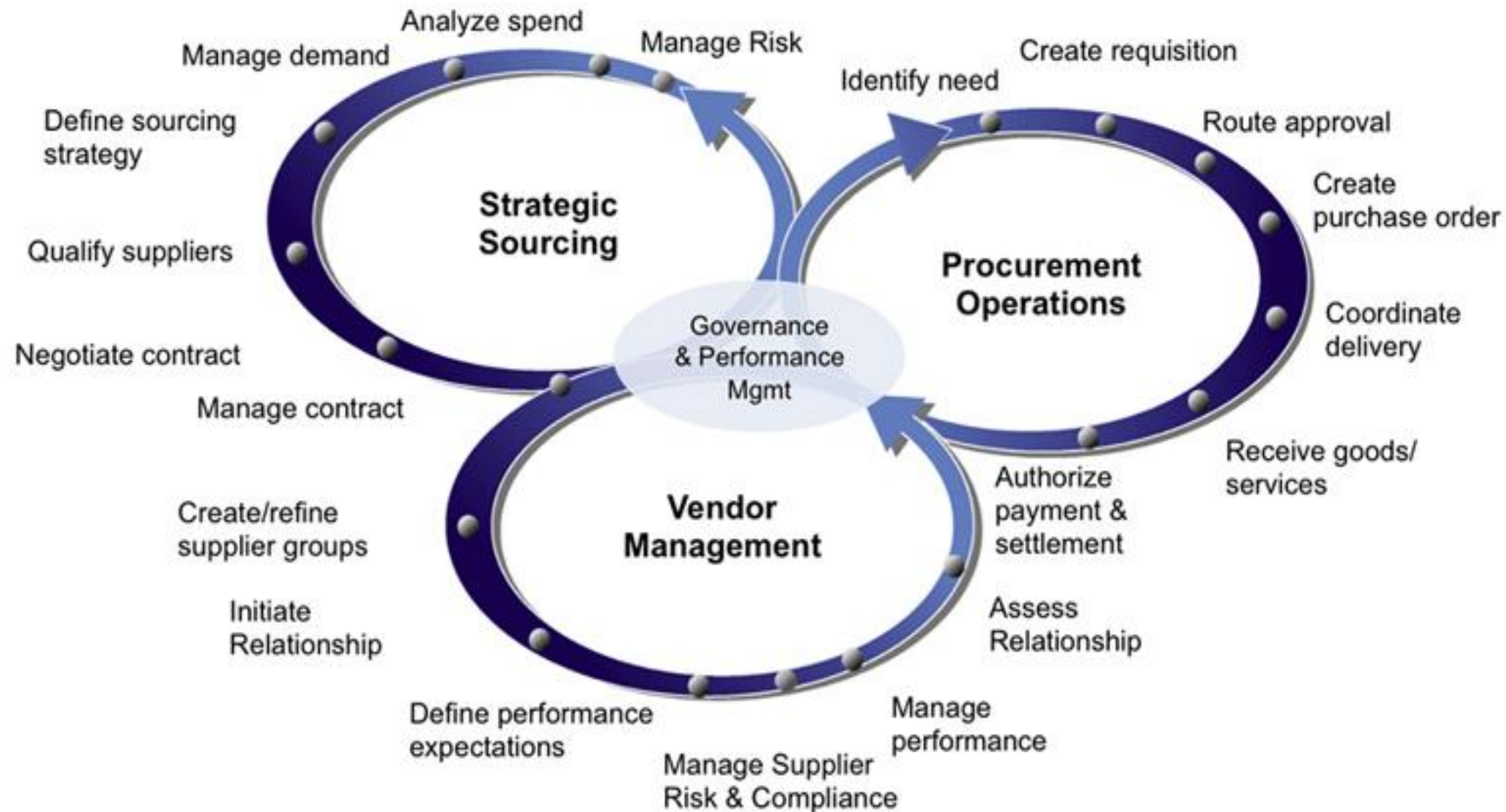


# Strategy-Ugly Duck of Transformation

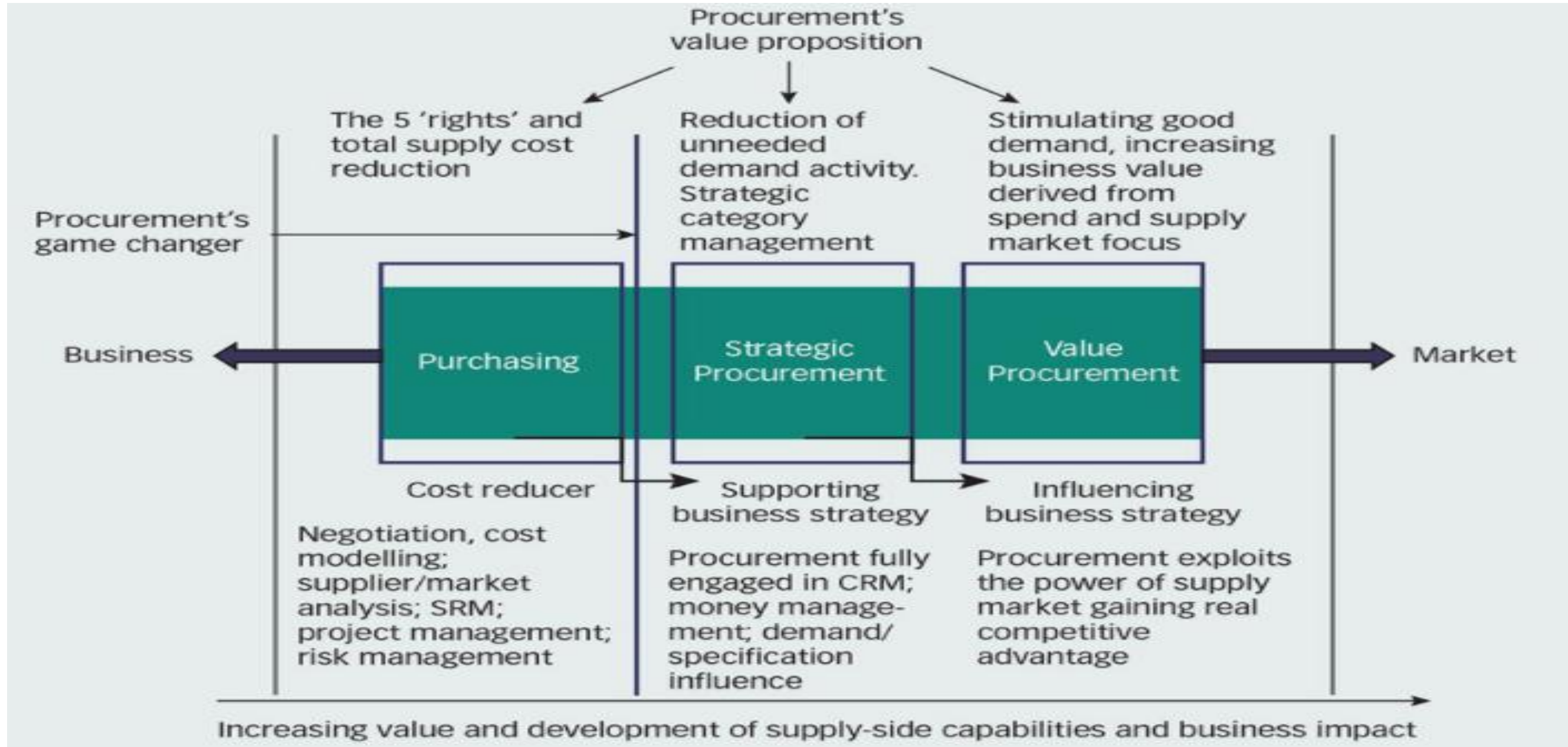




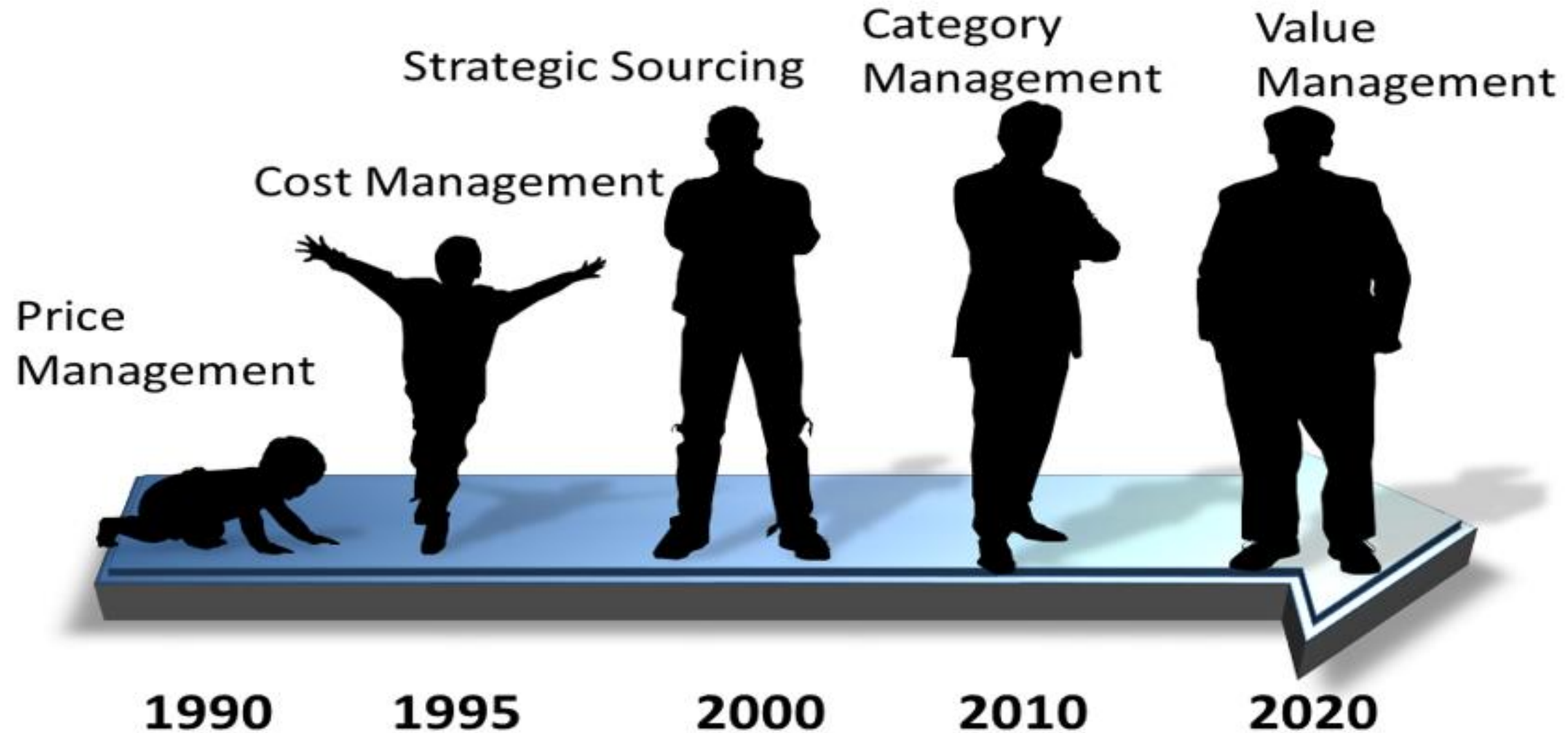
# Strategic Sourcing & SRM



# PROCUREMENT VALUE PROPOSITION



# Key Procurement Trends







# Digital Journey

- ❖ Digital transformation is buzzing everywhere.
- ❖ Government of India has launched **DIGITAL INDIA** Program to transform India into digital empowered society and knowledge economy.
- ❖ For many business people (Mainly Small & Medium Industries), it's hard to identify whether digital **transformation is a sink hole or a ladder.**
- ❖ Above feeling is because of cost involved.
- ❖ Some large companies have initiated major program to make use of it as a ladder of growth.
- ❖ For few it is **becoming a Game Changer Tool.**

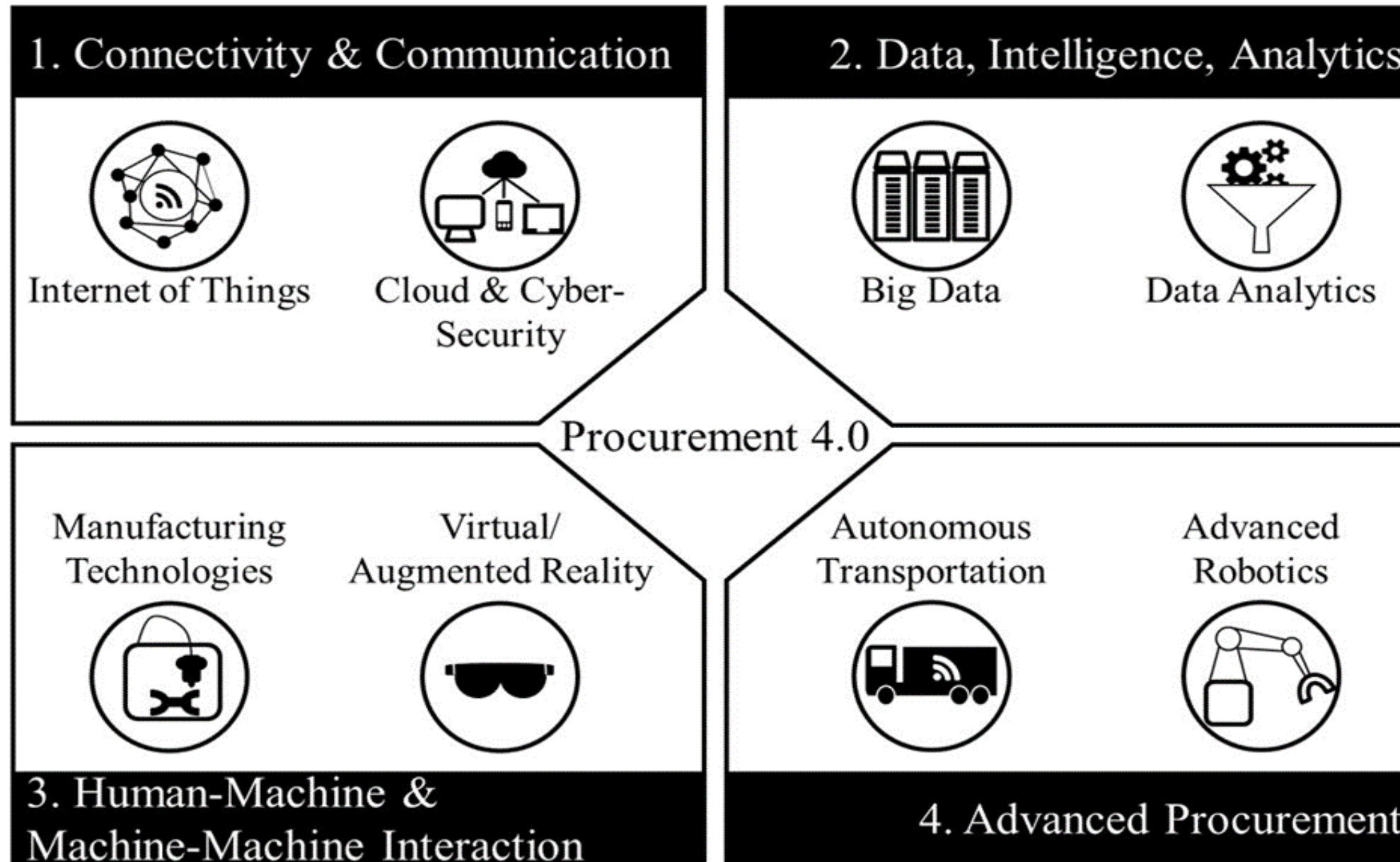
# Understanding Digital Procurement



- ❖ Digital Procurement calls for use Disruptive Technologies
- ❖ Digital procurement **streamlines routine tasks to maximize productivity and decrease expenses.**
- ❖ It helps fetch real-time data on Procurement Chain.
- ❖ This is achieved through the use of artificial intelligence (AI) and other convenient tools available online.
- ❖ **Automates repeatable tasks to boost efficiency and reduce costs.**



# Procurement 4.0 Technologies



# Digitization of Procurement



ERP is not a Solution to address Procurement Pain Areas. You require assistance in making effective purchasing decisions, leverage spend analytics and create economies of scale.



# E-PROCUREMENT



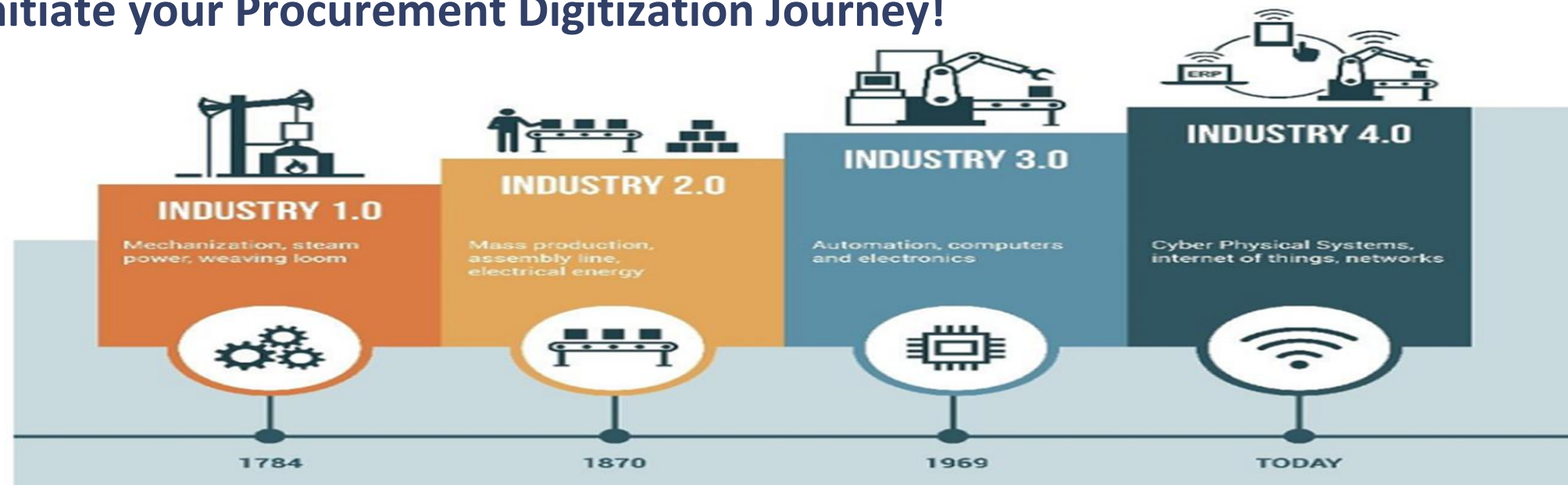
- ❖ eProcurement, also known as electronic procurement or supplier exchange, is the purchase and sale of supplies, equipment, works and services through a web interface or other networked system.
- ❖ The technology is designed to centralise and automate interactions between an organisation, customers, and other value chain partners to improve speed and efficiency of procurement practices.
- ❖ eProcurement is designed to streamline the regular procurement process.



# Procurement Digitization Journey!



- ❖ Major focus of Industry 3.0 was to computerize the processes in the industry.
- Industry 4.0 is a transition towards Digitizing and Automating the processes and various functions in the industries.
- You need to leverage these technologies and gain a competitive edge? Then this is the right time to initiate your Procurement Digitization Journey!



# Procurement Today & in Future



## Strategic Era:

- ❖ By late 1990s, the role of procurement had begun its **transition into strategic sourcing**.
- ❖ Procurement officials looked at **supplier as partners**. This was the **beginning of procurement's modern day evolution**.
- ❖ It **solidified its spot** at the management roundtable.

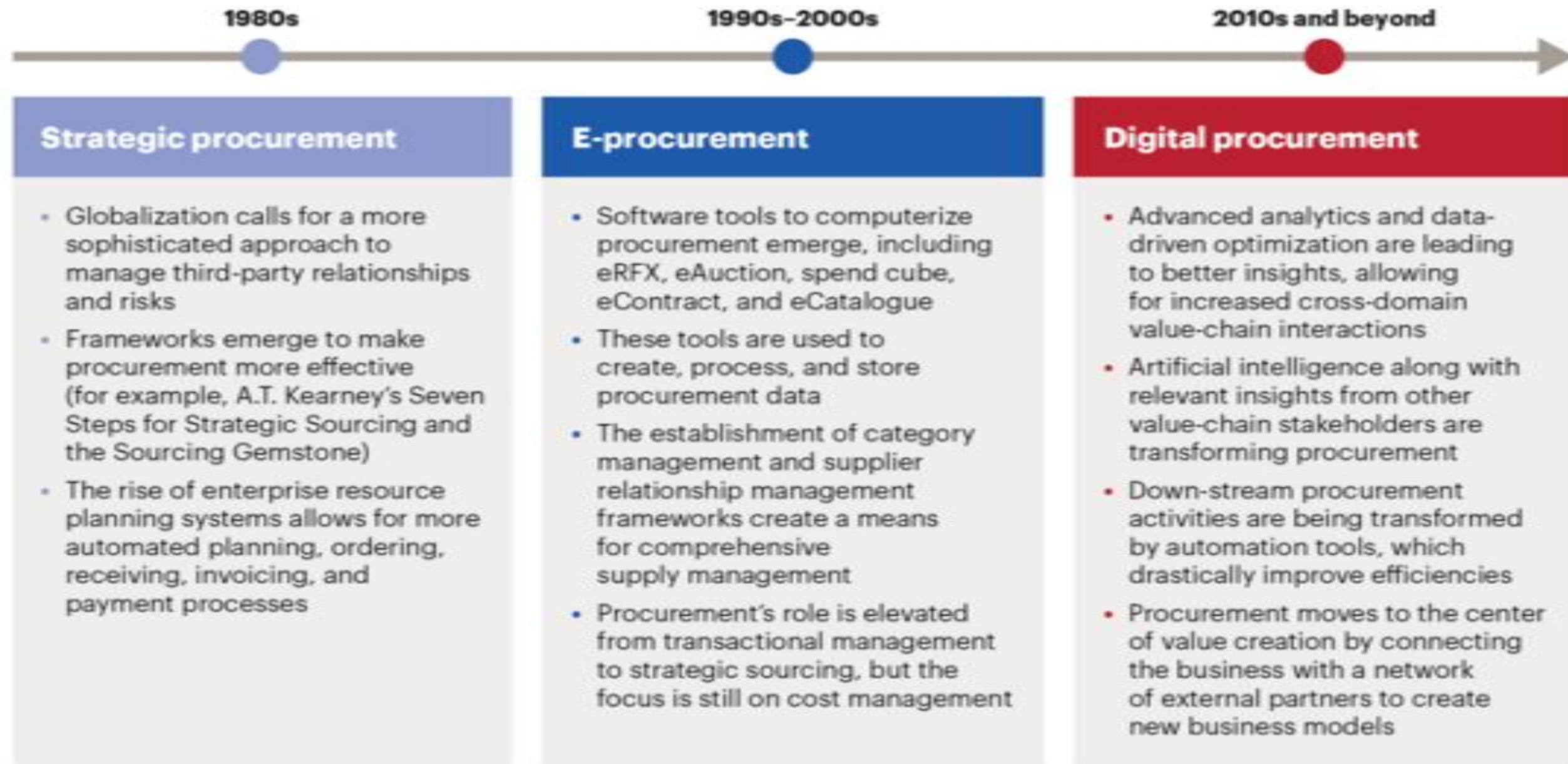
**E-Procurement Solutions:** These are creating a more efficient approach to strategic sourcing. It calls for using cloud based e-tools.

**Digital Era:** Digital technologies **are poised to transform how the procurement** function delivers value.

- ❖ Strategic sourcing is becoming **more predictive**, transactional procurement is **becoming automated**, and **Supplier Management is becoming more proactive**



# The Relentless Rise of Digital



# PROCUREMENT 4.0



Procurement 4.0 should be viewed as something of a paradigm shift. While the procurement process has almost always been about reducing costs for the larger enterprise, it can instead be a profit centre of its own.

## PROCUREMENT 4.0: THE BENEFITS



LOWER COSTS



BETTER RISK MANAGEMENT



IMPROVED VISIBILITY

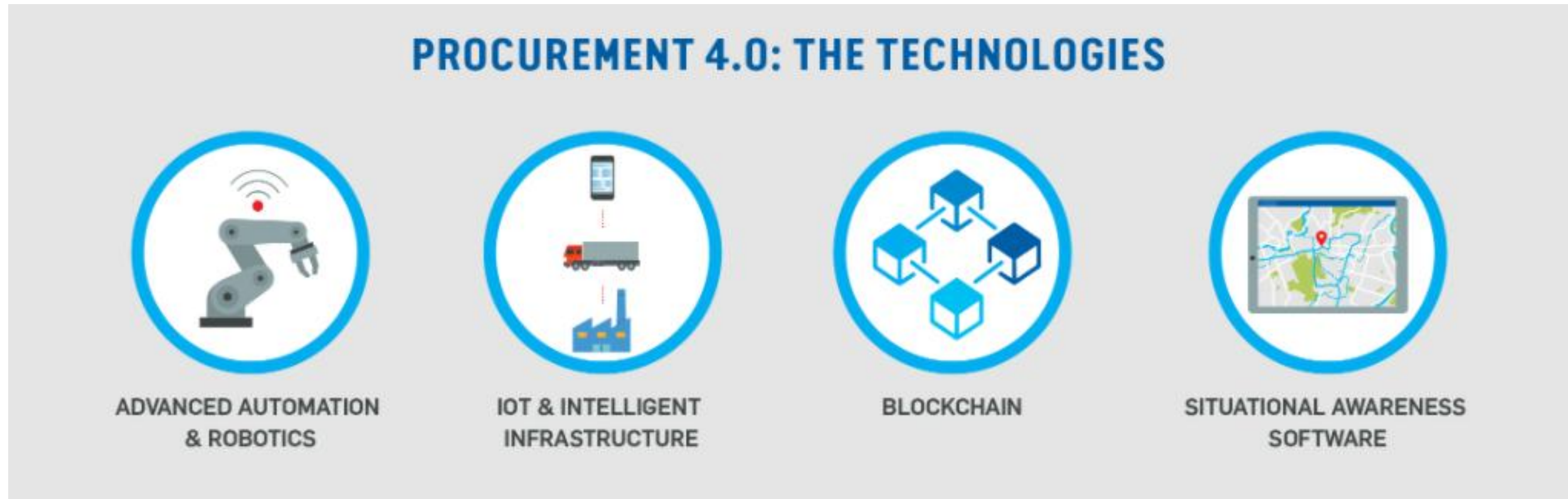


TIGHTER COMPLIANCE



# Digital Technologies

Procurement 4.0 will likely have a transformative impact on next-generation supply chains. This will transform Procurement from Cost Management to a Real Profit Centre.

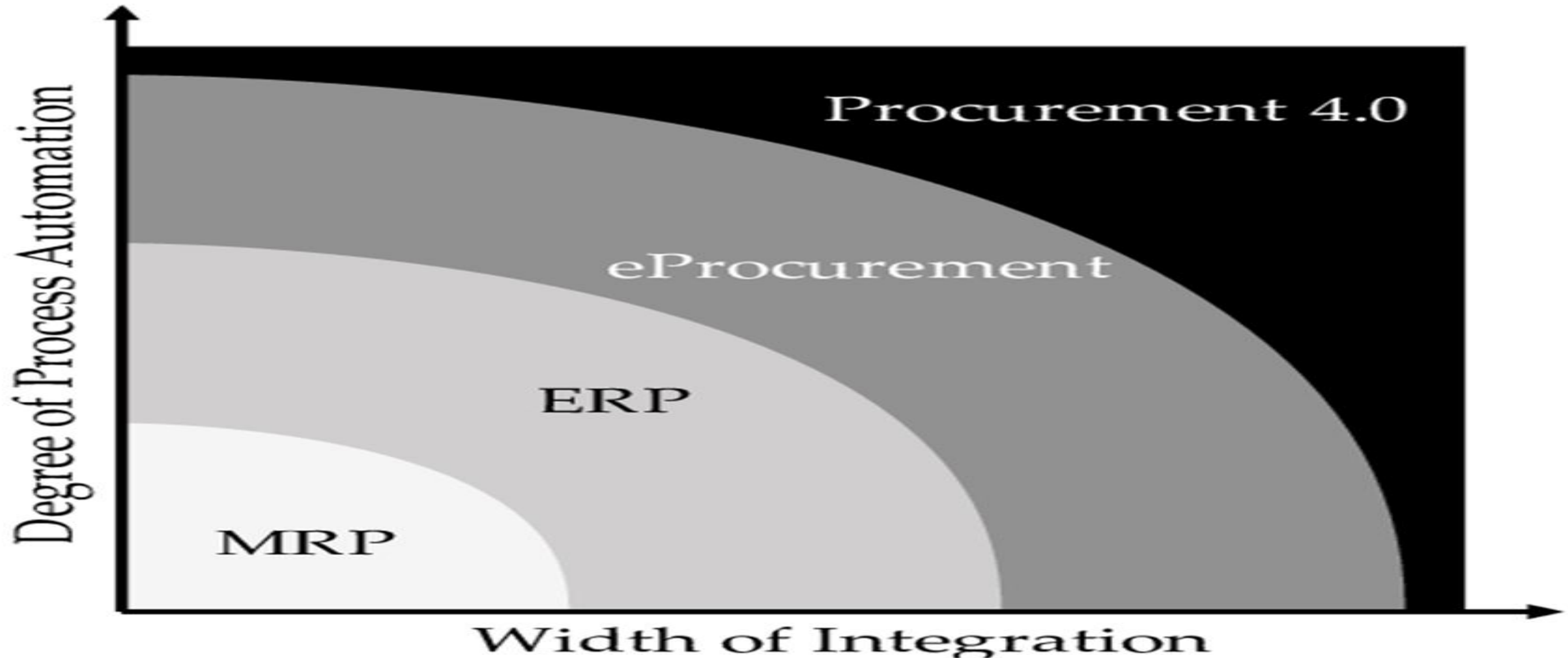




# Evolution of Procurement Chain

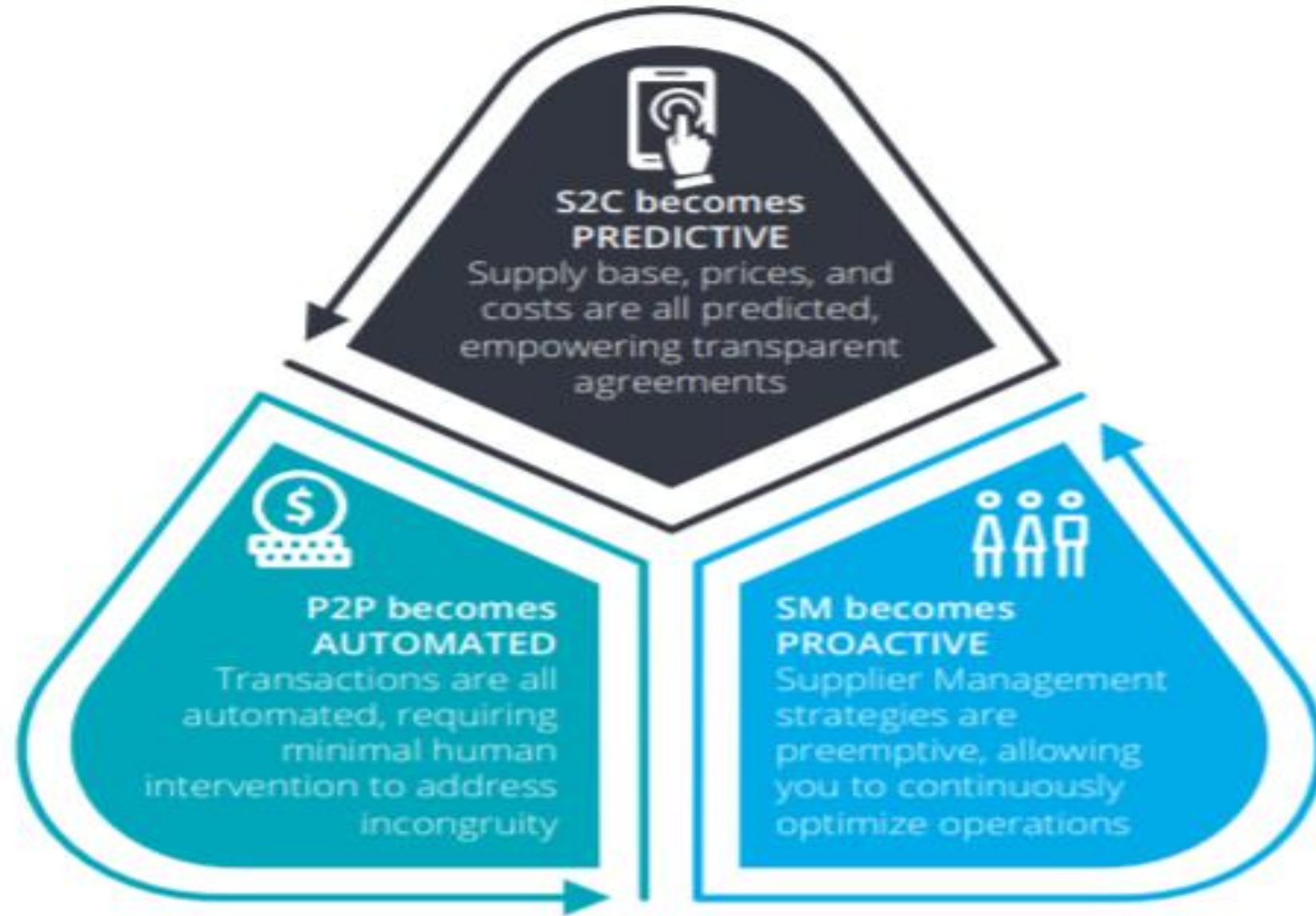


# Procurement 4.0 Technologies





# Digital Procurement



# Typical Predictive Process in Digital Age



In the digital age, S2C becomes predictive, with supply bases, prices, and costs all visible, empowering professionals to reach transparent agreements with high value suppliers. It calls for following steps.

- ❖ Categorize and manage spend in real time, leveraging machine learning
- ❖ Predict demand with artificial intelligence
- ❖ Know landed cost for any commodity for all alternate countries of origin
- ❖ Predict future sources of supply.
- ❖ Act on timely alerts from all negotiated agreements (e.g., indexed pricing, penalties, renewals) through smart contracts

# Typical Automated Process



**P2P becomes automated in the digital world. Transactions (processing purchase orders, requisitioning goods and services, validating reception of materials, paying invoices, etc.) become routinized and require minimal human intervention.**

- ❖ Automatically sense material demand and requisition replenishment deliveries from suppliers .
- ❖ Eliminate repetitive processing through RPA.
- ❖ Trigger payments utilizing real-time signals of material delivery.
- ❖ Execute automated secure payments .
- ❖ Exchange goods through validated and trusted decentralized ledgers.

# Proactive Process: Supplier Management



SM becomes proactive, as supplier performance and risk mitigation is now pre-emptive, allowing professionals to focus on continuously optimizing operations, as opposed of conducting damage control.

- ❖ Monitor potential supplier risks in real-time through the aggregation and visualization of third-party data feeds
- ❖ Conduct supplier visits from their own office utilizing augmented reality
- ❖ Enhance supplier audits through crowdsourcing
- ❖ Collaborate through supplier networks



# Understanding Digital Procurement

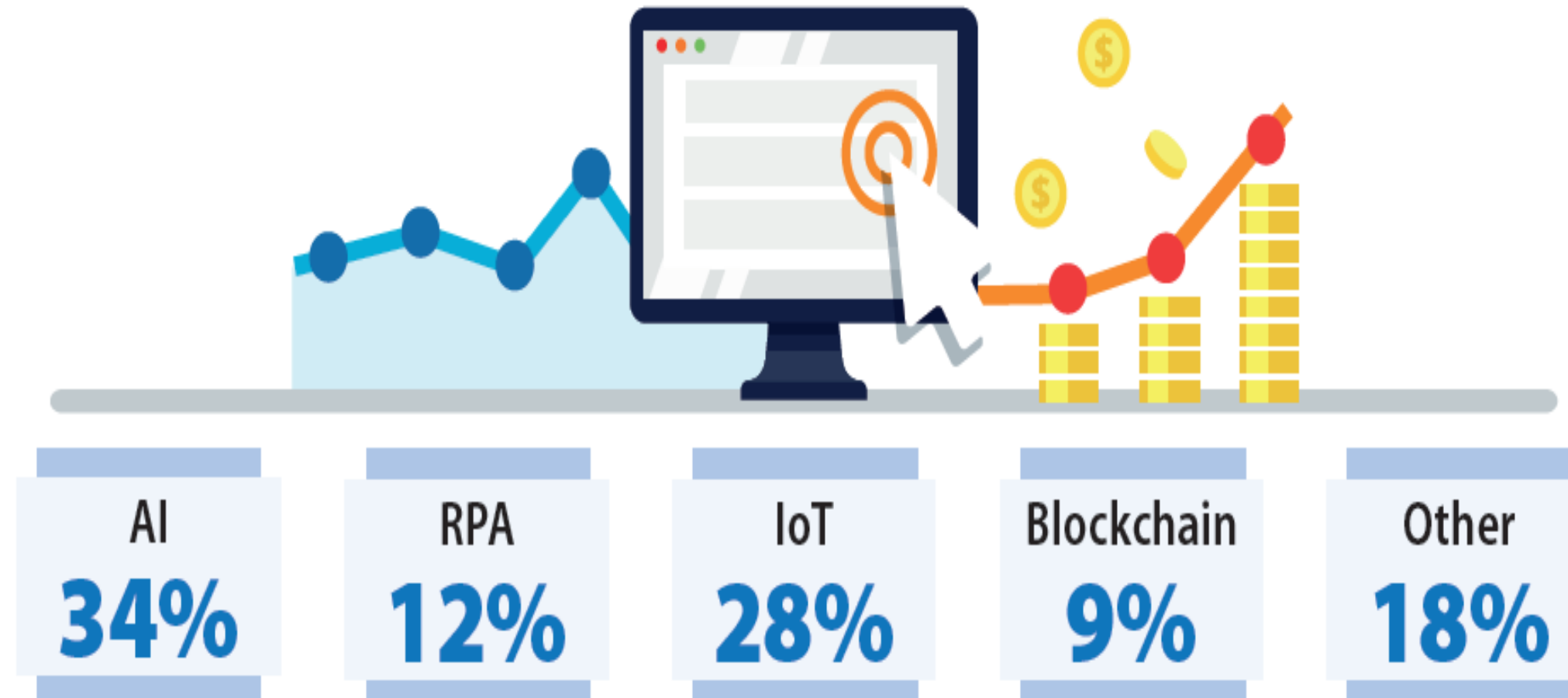


- ❖ Digital procurement is **the application of disruptive technologies.**
- ❖ **These will enable Strategic Sourcing (S2C) to become predictive, Transactional Procurement (P2P) to become automated, and Supplier Risk Management (SRM) to become proactive.**

# Disruptive Technologies



Which of these disruptive technologies is currently yielding the best ROI for your organization?



# Overview of AI



- ❖ To put simply, an AI can learn from data and become better with time.
- ❖ RPA will remain the same.
- ❖ You will probably rely on some Machine learning models. It uses statistical analysis to “learn” from reams of data to make highly accurate predictions
- ❖ Artificial intelligence allows software to learn and interpret information, such as text through natural language processing, so that an application can communicate with and act in place of the user.
- ❖ **INTELLIGENCE IN NON-HUMAN ENTITY**

# Robotic Process Automation



- Helps in minimizing manual intervention by automating the entire process
- Helps in processes where there is a need for human intelligence to take decisions
- Helps in developing a strong audit trail for future
- Helps in reducing human efforts and enabling them to focus on other strategic initiatives
- **RPA** is not a cognitive computing solution.

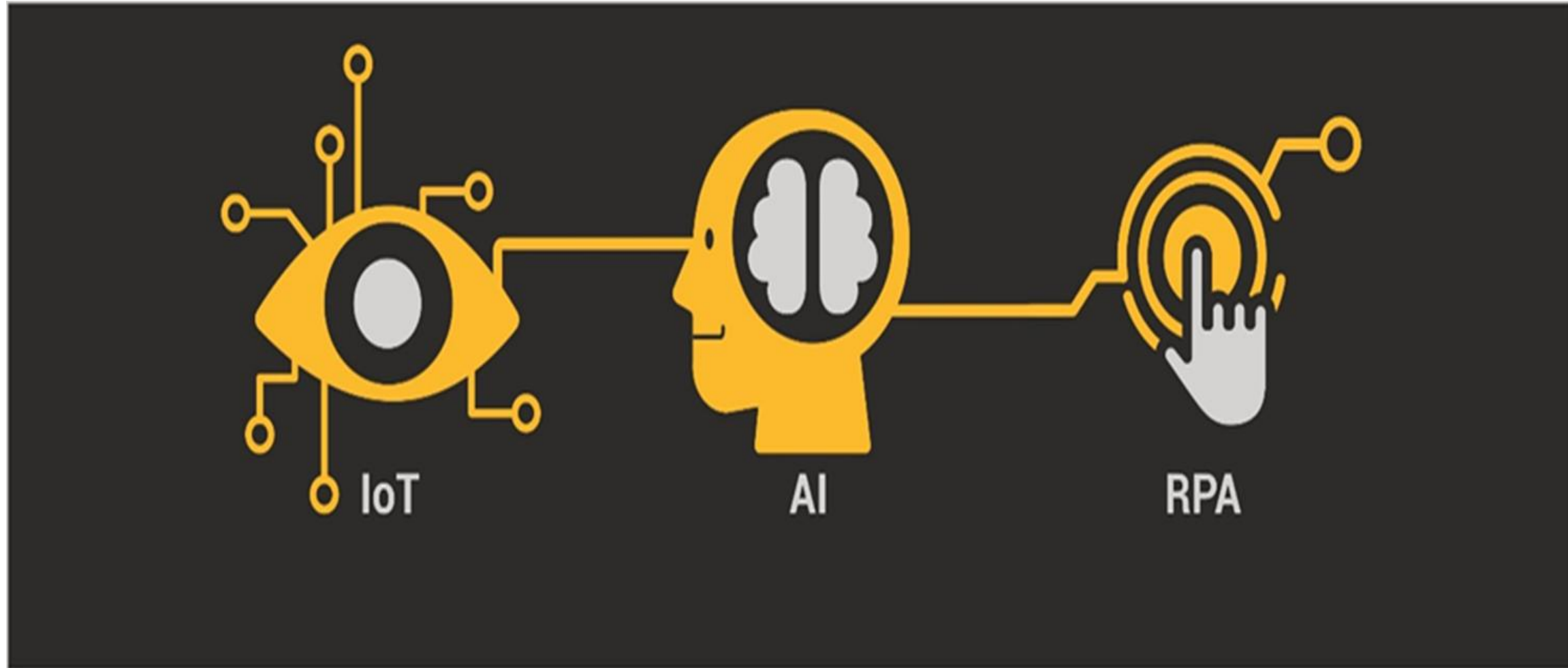
*“One of the major concerns of an organization is that the procurement team spends most of their time on administrative tasks.”*





# KEY TECHNOLOGIES

IoT + AI + RPA = The Future of Digital Logistics



# USE OF IOT



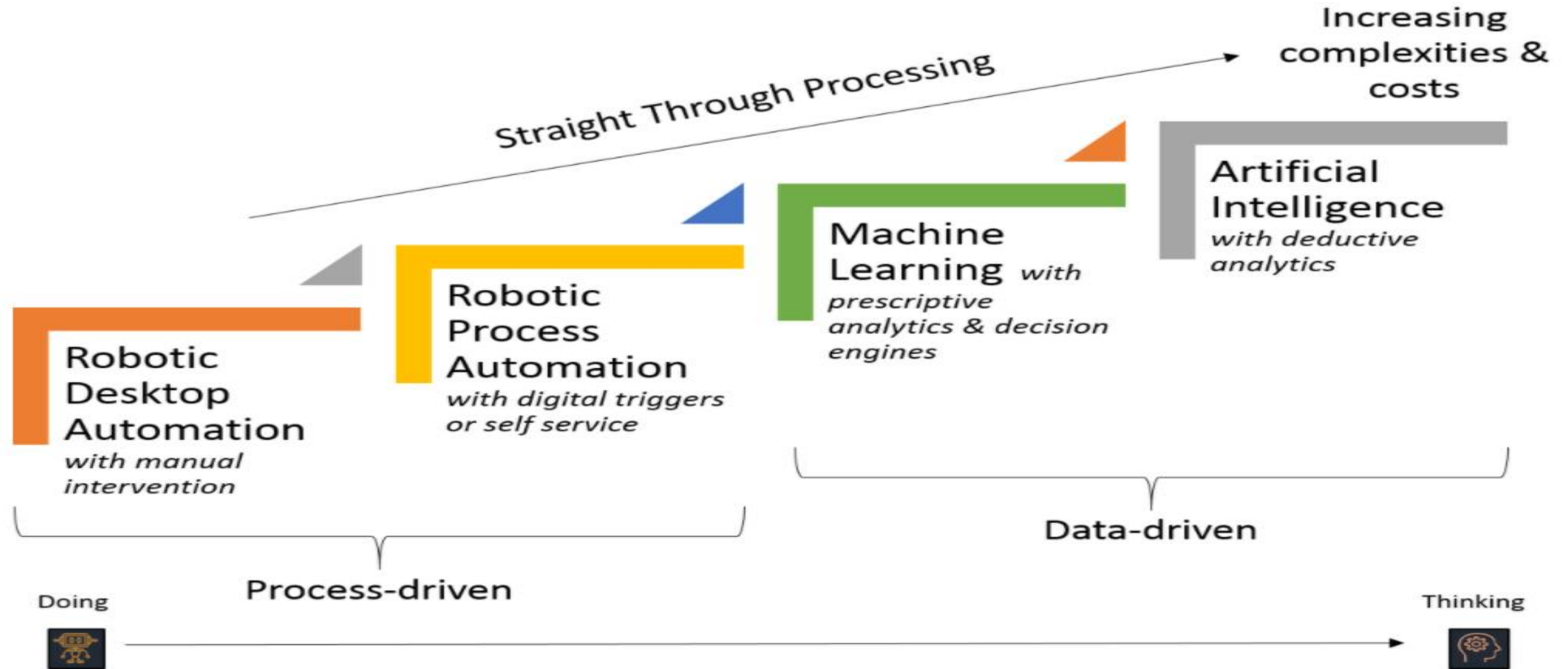


# Understanding RPA

- ❖ The Internet of Things (IoT) is the eyes and ears of your supply chain!
- ❖ In technical terms, its nothing but real-time data collection and display.
- ❖ IoT technologies enable the collection of data in an automated or partially automated manner.
- ❖ Solutions like barcodes and hand-held RFID are examples of partial automation in data collection.



# RPA vs. AI





# Digital Era...



- ❖ In the new era, Procurement function is evolving rapidly.
- ❖ Tactical team focused on cost reduction has been recast as a strategic entity driving enterprise-wide value.
- ❖ Enterprises worldwide are asking their procurement teams **to play a larger and more strategic part in overall** corporate growth and deliver sustainable business results.
- ❖ To meet these new expectations, procurement organizations must **transform their legacy processes**, practices and structures, and align them with the current needs of the enterprise.
- ❖ As with any **transformation program**, the real **challenge** is in the implementation.

*“ STAND APART FROM COMPETITORS ”*

# Tomorrow's Procurement



We need speed, transparency & quickness to take decision. Procurement moves to centre of value creation



# What Organizations Need Now



Pyramidal orgs were never built to handle the situation they face today



## What typical pyramidal organizations are good at

Topic expertise and pattern recognition  
("do a few things, but do them well")

Fact-based decision-making. Leaders that can drive action based on well-tested sets of facts promoted

Commitment to a path forward based on consensus from a large swathe of leaders

Self-selecting organization based on a specific world-view



**VS.**

## What orgs need now

Generalized problem solving across a wide array of topics

Hypothesis-based decision-making  
("By the time the facts are available, it is too late to respond")

Speed of action at a higher premium over consensus about the action

Multiple world views that provide constructive, purposeful conflict

# Procurement Landscape



- ❖ We are maturing every year, but relationship with internal stakeholders are still stuck in perceptions of the past.
- ❖ People don't regard Procurement as a true partner
- ❖ It is seen as Tactical execution Team
- ❖ Must be overcome over the journey from Tactical to Strategic.
- ❖ During COVID 19 the role of Procurement has gained lot of importance.
- ❖ Digitalisation of procurement promises to create an interconnected and transparent ecosystem amongst firms, suppliers and customers.



# Digital Transformation Pyramid



**Digitization** refers to creating a digital representation of physical objects or attributes. **Digitalization** refers to enabling or improving processes by leveraging digital technologies and digitized data. **Digital Transformation** is really business transformation enabled by digitalization. **Industry 4.0** is combination of Digital Transformation and Digitalization.





# Digital Transformation

It calls for *designing new ways of doing things that generate new sources of value*. It is more related to effectiveness. Additionally, it encompasses the **entire enterprise**, not just a particular process or function.



# Evolution of Procurement Chain



## TODAY

## TOMORROW

Manual Data Gathering across Systems/Roles



Real-time Connections

Manual Collaboration



Digitize Collaboration & Scenarios

Manual "what-if" Scenario Creation



Automatic Simulation

Cadence-based Planning and Decision-making



Continuous Event-driven Planning and Decision-making





# Digital Enablers (Future Procurement)

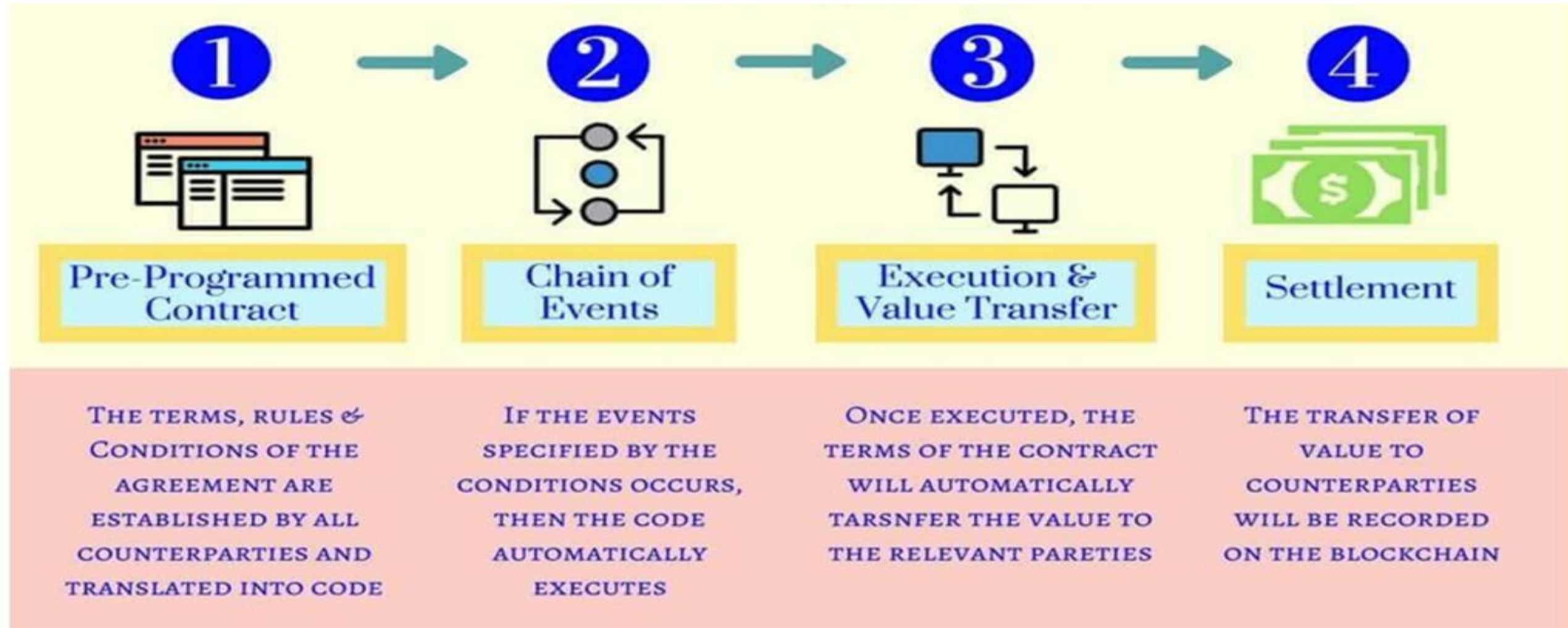






# Smart Contract: How It Works?

Self-automated computer programs that can carry out the terms of any contract



# Evolution of Contract



## *Traditional contracts*

	1-3 Days
	Manual remittance
	Escrow necessary
	Expensive
	Physical presence (wet signature)

## *Smart contracts*

	Minutes
	Automatic remittance
	Escrow may not be necessary
	Fraction of the cost
	Virtual presence (digital signature)



# Digital Procurement Framework (It Encompasses following Six Levers)

1. New procurement value proposition
2. Digital category and service procurement
3. Digital supply chain and supplier management
4. Innovative procurement data utilization
5. Digital processes and tools
6. Organization and capabilities

*“Above requires Reshaping Procurement”.*



# Future Profile of PSM Professionals







## Which Function to Digitize First?

- ❖ The old advice of **“Walk before you run”** rings true no matter where you apply it.
- ❖ I would advise companies to first **sit down and spend time mapping** their procurement process.
- ❖ Who are the **people that would be touched** by this **digitization process? Customers, vendors, management, employees, etc.**
- ❖ Pick a function that **touches the least amount of people and is least expensive to automate.**

# Final Thoughts



- ❖ **Ultimately, procurement is about more than** procuring goods and services from outside sources.
- ❖ It relies on **strategic planning and careful observation** to meet cost targets, deadlines and quality standards.
- ❖ It's a **vital part of the business for any company** that wants to grow fast and stand the test of time.
- ❖ At the end of the day, it does not matter which industry you are in. **Digital transformations are sweeping over all sectors of the economy.**
- ❖ Companies that want **to remain competitive and grow** their revenues should make digital transformation initiatives a **core part of their future business strategy.**



# THANK YOU!



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