Table of Contents

Important Orientation to the Book Series x
How to Extract Best Value from this Book Series?xii
Snapshot of Volume-3xv
Recap of Volume-1 Innovation Purposexvii
Innovator Classification xx
Innovation Purposexxii
Financial Drivexxiii
Technology Push – Industry 4.0xxiv
Social Pull – Society 5.0xxvi
Sustainable Developmentxxvii
Purpose in a Tough Timexxix
Some Examplesxxx
Let's Summarizexxxi
Let's Take a Selfiexxxiii
Recap of Volume-2 Innovation Value Chainxxxvi
Simplified Innovation Value Chainxxxvii
Deep Market Insightxxxix
Structured Ideationxl
Purposeful Qualificationxli
Creative Executionxli
Variation in the Innovation Value Chainxlii
Value Chain in a Tough Timexlii
Let's Summarizexliii
Let's Take a Selfiexliv

1.	Innovation Framework			
	Innovation Profile Characteristics	2		
	Synergistic Tracks	4		
	The +4π Framework	5		
	Other Innovation Frameworks			
	International Standards Organization Guidance	14		
	Let's Summarize			
	Let's Take A Selfie			
2.	Innovation Strategy	19		
	Roadmap			
	Customer Insight for Innovation Strategic Roadmap			
	Competitor Insight for Innovation Strategic Roadmap			
	Market Insight Simulator			
	ISO 56006 Strategic Intelligence Management			
	Risk and Uncertainty Management			
	Dashboard			
	Lessons Learned in Strategic Innovation	53		
	Alignment of Purpose, Roadmap, and Dashboard	60		
	Strategic Readiness			
	Let's Summarize			
	Let's Take A Selfie			

Inspiring Next

3.	Innovation Capital			
	Innovation Capital	66		
	Talent Management for Innovation	71		
	Knowledge Management for Innovation	82		
	ISO 56005 Intellectual Property Management			
	Asset Management for Innovation			
	Sustainable Innovative Organization			
	Sustainable Innovation Partnerships	101		
	Sustainable Innovation Ecosystem	104		
	ISO 56003 Tools & Methods for Innovation Partnership	110		
	Let's Summarize	110		
	Let's Take A Selfie	111		
4.	Innovative Activity	112		
	Managing a Portfolio of Innovative Activities	113		
	New Product Line Readiness	114		
	Execution Models	115		
	Let's Summarize	117		
	Let's Take a Selfie	117		
5.	Lean Innovation	118		
	Process Integrity	120		
	Process Alignment	121		
	Internal Alignment	122		
	External Alignment	126		
	ISO/TR 56004:2019 Innovation Management Assessmen	t 128		
	Innovation Information Management	129		
	ISO 22301 – Security and Resilience	133		
	Let's Summarize	134		
	Let's Take A Selfie	135		

6.	Framework in a Tough Time	137
	Profiles and Tough Times	
	Activity Tracks in Tough Times	
	Framework Application in Tough Times	
	Let's Summarize	
	Let's Take A Selfie	
7.	Time to Reflect	
	Introspection	
	My Going Forward Action Plan	
Wł	nat Next?	146
Su	mmary of Volume-4 Innovation Mindset	i
	Struggle to Innovate	ii
	Unshackle the Past	ii
	Reboot Leadership	iii
	Re-ignite Creativity	iv
	Embrace Exploration and Accept Failures	iv
	Mindset in a Tough Time	vi
	Time to Liberate	vi
	Let's Summarize	vi
	Let's Take a Selfie	vii
Ap	pendix – Perceptions Unfolded	ix
Ap	pendix – Innovation Standards	xiii
	International Standard: ISO 56000	xiii
	Other National Standards on Innovation	xiv
Ab	out the Author	xvi

You Don't Have to Be a Genius or a Visionary or A Graduate You Just Need a Framework and a Dream – Michael Dell

For years, people have been made to believe that innovation is a privilege of the gifted few. Well, the gifted folks may do it naturally, but for the rest of us, it comes with training, ambiance, and some method to the madness. In my early days of innovation coaching practice, I had a matrix of exactly 25 processes and tools to Enable organizations to build a culture of Robust Innovation and Productivity Improvement (my original mission statement in 2014). Like many entrepreneurs, I had ventured into the market with a little market insight and some appreciation of the innovation value chain. At one of the conferences, I bumped into Dr. Gopi Katragadda – a former colleague - who had just taken over as Chief Technology Officer for the Tata Group, a \$110 billion conglomerate. He asked if I could help him use my toolset for his 90 business units that span from Tea to Automobiles. My quick response was "I am a butterfly; I should not go out on a date with an elephant." He laughed out loud and probably thought 'What if the elephant wants to go on a date with the butterfly.' He still left me with an open-ended offer to get back to him if and when I thought I was ready. Although I was convinced the Tata Group should work with McKinsey or Accenture and not Ripi Singh, I got into looking at redefining the matrix, to drive consistency and confidence across diverse business units of a global entity. The $+4\pi$ Innovation Framework was born, for use by any organization. I got back to the Tata group, but it was too late. By then, that elephant had gone on a date with a bumblebee. You see, the beauty in engaging with leaders like Gopi, is they leave you inspired with questions and a confidence that even a butterfly can date an elephant.

Vaibhav Garg from Genus supported by his VP RS Rathore became the first users of the framework. Their early feedback validated the application.

Inspiring Next

Coming back to the evolution of innovation; for the last three centuries, we have seen many entrepreneurs convert their inventions to products of value and change our lifestyles. Nowadays, innovative products are often a result of multidisciplinary engagement, and entrepreneurship requires serious business and marketing skills. Large corporations struggle to innovate faster, cheaper, better. So many books hit the market on the topic, each addressing some elements of value. Still, the leaders struggle. The books provide the ingredients; you need a recipe that helps create a dish to your taste. Where does that come from?

On one side, the business schools will teach you the need for vision, objectives, planning, Intellectual Property (IP) management, knowledge augmentation, strategy, etc., and they all appear to be jumbled up in real life. Management Professors and consultants tout that their tools and approach is the best one, because they believe in them, just like me. On the other hand, every organization leader, chartered to innovate, is driven by his/her competencies and management objectives, essentially their taste preference. That creates a real challenge - '*How to manage innovation for excellence in outcome*?

Innovation Profile Characteristics

The innovation profiles as defined earlier in Volume-1, are

- 1. Aware: Have successfully innovated and know how to.
- 2. Agile Follower: Innovate profitably in response to market demand.
- 3. Smart Forecaster: Innovate in anticipation of market demand.
- 4. *Visionary Trendsetter:* Innovate and **create** a market demand.
- 5. *Robust & Resilient:* Visionary Trendsetters **immune** to market.

This definition is simplistic. It helps create a starting point, but you need a bit more to self-assess and a lot more to improve your profile. Over the years, many more characteristics have emerged that define the profile and organization behavior, or culture, or attitude towards innovation. Here is my list and I am leaving 3 blank rows for you to add your perspective.

Characteristic	Aware	Agile Follower	Smart Forecaster	Visionary Trendsetter	Robust & Resilient
Scope	Offerings	+ Processes	+ Biz models	All facets	Limitless
Triggers	Crisis	Market	Mkt/Calendar	Continuous	
They Ask	-	What now?	What's next?	How about?	Why Not us?
They Know	What	+ How	+ Why		
Mindset	Passive	Reactive	Pro-Active	Directive	
Future	Complacent	Watchful	Predict	Create	Dictate
Competition	Unaware	Price	Performance	Invite	Irrelevant
Customer	Talk to	Listen	Empathize	Educate	Influence
IP	Enjoy	Comply	Patents	Trade secrets	Acquire
Benchmarking	Unaware	Read	Conduct	Are benchmark	
Risk Mgmt	Adhoc	Avoid risks	Manage risks	Take risks	Risk-proof
Employees	Disengaged	Passive	Active	Empower	Inspire
Add your own					

If you do a self-check, (which I suggest you do) you will likely discover that you do not necessarily belong to just one vertical column. Most of the companies are like that. And, you may not always be consistent in your behavior to stay in one column all the time. That is a good thing. It goes to show your capability, which is always higher than your typical performance; and gaps across various rows where you need to change to move the profile. Once you figure out your current innovation profile and your desired state, this book series will help you build the processes (Volume-3) and the mindset (Volume-4).

Synergistic Tracks

To help organizations move through these five profiles, the ' $+4\pi$ Innovation Framework' lays out a set of novel and traditional innovation best practices in a stepwise manner, under four activity tracks.

> Innovation Strategy provides direction. Innovation Capital addresses resources. Innovative Activity for effective execution. Lean Innovation for efficient execution.

Innovation Strategy

This track defines the strategic roadmap – the products and services a company would develop along with a business model and timeline to capture the market share. The set of tools in this track progressively add rigor to the roadmap through deeper customer insight, broader competitive intelligence, dependable forecasting, and the understanding of technology trends, investment management, and uncertainty management.

Innovation Strategy is like the GPS for your car that guides you through the fastest or shortest route to your destination.

Innovation Capital

This track includes developing and managing critical resources (Talent, Knowledge, Assets, and IP) to support the Innovation Strategy and build a competitive advantage in today's knowledge economy. Set of tools guide subject matter expertise & leadership development, high-performance team building, knowledge augmentation, leveraging networks, succession planning; all using novel visual maps.

Innovation Capital is like the power under the hood of your car that will enable you to reach your destination.

Innovative Activity

This track defines the process to systematically develop new products, reducing risk and cost. This guides the team through an innovation value chain which begins with a white space or a market demand and ends with an emotionally engaged customer. Most of it was discussed in Volume-2 of this book.

Innovation Activity is like traveling in your car.

Lean Innovation

This track aligns products, processes, employees, customers, and business metrics, to continuously improve the efficiency and productivity of the innovation. Most of us have lean initiatives and they often stifle creativity. This track is designed to work specifically with the three tracks above to remain creative. This set of tools guides the employee morale and customer engagement from management objectives, providing synergistic benefits making the whole greater than the sum of individual pieces. The cost savings from lean can sponsor the innovative activity, making the initiative cost neutral.

Lean Innovation is like the 4-wheel alignment and balancing to run the car smoothly without serious tire wear and fuel inefficiency.

Synergy

The **Innovation Capital** engages in the **Innovative Activity** to convert the **Innovation Strategy** into reality, with the **Lean Innovation** making it affordable, efficient, and effective.

The +4 π Framework

This Framework brings significant value by sequenced application of processes, managed inter-dependences & company-wide integration. The management practices use the same set of parameters and indicators, for

enterprise excellence through synergies in addition to the best practices, because that is what is generally missing in so many organizations despite their structure and process focus. The benefits will become clear with each of the next 5 chapters.

The Framework looks at innovation from all directions – future and past, top management and employee inclusive, customer, suppliers, and competitors. This holistic perspective gave it the name ' 4π ' which is the solid angle at the center of the sphere, essentially equivalent to 360° in 3D.

If you look closely, you may notice that the 3^{rd} track – *Innovative Activity* only goes up to *Trendsetter* profile. This is because in order to become *Robust and Resilient* you only need a strong strategy and capital. On similar lines, the 4^{th} track of *Lean Innovation* only goes up to *Forecaster*. The premise is that you need to get all your processes aligned and effective by the time you become a *Forecaster* and shouldn't be thinking of efficiencies from alignment while being a *Trendsetter*.

According to this Framework, if your company can reach the level of *Smart Forecaster*, you can claim to have built a culture of innovation. This may be a good position for many; because the risk goes up sharply as you move to be a *Trendsetter*, and everyone does not need to get there.

Having struggled for years to efficiently manage data for effective innovation management across a dozen workgroups and more than a hundred engineers, I realize the need to simplify and automate (as much as possible) the administration, tracking, management and reporting required to abide by any set of policies and procedures, let alone the ISO standard. A significant portion of the $+4\pi$ Framework described in this chapter is available as a cloud-based application *EinFrame*. More details are in chapter 5 on lean innovation.

This Framework is continuously evolving; you can get the latest copy by reaching out to the author. <u>https://www.InspiringNext.com</u>.

