Why am I (Ripi Singh) doing this?

A question, I am frequently asked by executives “How can I build and sustain a culture that helps us capture market share, reduce development risk & cost, and make our enterprise profitable, a culture that continuously stimulates growth?” I can understand their struggle, having lived their life in Fortune 500 business, and a growing small business.

Accenture’s research in 2008 summarized the status of corporate innovation around the world. Overall, the research revealed that innovation is a top priority for companies seeking to increase their revenues, but they usually get a poor return on their investment because of flaws in managing it, such as not having a single executive in charge. We believe those poor returns can be turned into profitable, sustainable growth if innovation is systematically managed with the same rigor and discipline as other business processes.

Various turnaround and startup situations, gave me an opportunity to create and prove new ways of addressing these challenges - the performance challenges of an enterprise developing new technologies, products and services. After years of hands-on engagement, association with successful business leaders, and business schools, I now bring to you a holistic approach to concurrently manage Innovation, productivity and quality and help you get where you want to go.

- Dr. Ripi Singh

This is an introduction to 3 day workshop, which helps companies
• Create a common language for widespread transition
• Learn what is possible and appropriate in managing new product development
• Discover areas for improvement in your personal and organization performance
• Use it as a Reference Handbook in near future
• Mentor emerging managers

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Case in Point – Innovation at 3M

- 2000: New CEO, James McNerney from GE, Forced 6σ
  - Op Margin grew 17% (2001) to 23% (2005)
- 2005: George Buckley, new CEO took 6σ out of research

"You can't put in place a Six Sigma process and say: 'I'm going to schedule myself for three good ideas on Wednesday and two on Friday.' That's not how creativity works"

Sir George Buckley
Former CEO, 3M

Case in point – innovation at 3M

Revered for decades as one of the world’s most innovative companies, 3M lost its innovative mojo when it began using Six Sigma to try to improve its operational efficiency. James McNerney, the CEO named in 2000, was a Jack Welch protégé from GE. He introduced the Six Sigma discipline as soon as he took the helm of the firm, streamlining work processes, eliminating 10% of the workforce, and earning praise (initially) from Wall Street, as operating margins grew from 17% in 2001 to 23% by 2005.

But when McNerney tried to apply the Six Sigma discipline to 3M’s research and development processes it led to a dramatic fall-off in the number of innovative products developed by them during those years. And 3M had been famous for its innovations, in a wide variety of areas, from Scotch tape to Post-it Notes.

Many breakthrough innovations come by happy, unanticipated accident rather than by plan, but Six Sigma is all about planning, predicting, documenting, adjusting, and improving. Applied to R&D, Six Sigma attempts to turn the innovation process into a repeatable routine, which ends up favoring incremental improvements over disruptive innovations and breakthroughs.

Many of the researchers and scientists at 3M bridled at the requirement to fill out constant reports and justifications for doing the kind of "tinkering around with things" that usually led to the more important creative ideas. According to one participant in the process, after a briefing on how the Six Sigma program was to be applied to R&D, "we all came to the conclusion that there was no way in the world that anything like a Post-it note would ever emerge from this new system.

Introducing our holistic approach +4π

The 4π Innovation Framework provides a disciplined approach to building culture of innovation. It is intended to fill the innovation void in traditional corporate initiatives on quality and productivity. It addresses the gaps in enterprise processes and leadership competencies that hold a business from reaching its full potential.

Initiatives such as six-sigma which add value to manufacturing department, but are not particularly suited for new product development phase, or continuous engineering/business process improvement. Lean helps with productivity. 4π adds many forward looking tools, that enable innovation & sustained growth.

4π doctrine asserts:
1. Continuous efforts to align business and customer vision with knowledge, talent, and innovation
   Value chain are of vital importance to business sustainment
2. Innovation can be much more affordable and accelerated through disciplined approach
3. Innovation is possible and appropriate in all aspects of business operations in addition to offerings in the market place

The methodology also integrates strategic thinking and tactical execution under one framework, while traditional practices are primarily tactical.

Discovery Question(s)
1. Have you tried Six sigma for innovation? What did you learn?

Improvement Action(s)
1. Share your innovation story with the author – Ripi Singh Ripi@InspiringNext.com
Evolution of “Inspiring Next”

In 2014, Dr. Ripi Singh launched a small business “Plus4Pi LLC” in CT, USA to bring the $+4\pi$ framework to industry. In 2016, it opened two divisions for specific services.

**InspiringNext** for Coaching [www.InspiringNext.com](http://www.InspiringNext.com)
**EinFrame** for Software as a Service [www.einframe.com](http://www.einframe.com)

**Mission Statement**
“Inspiring Innovation for Eco-system Growth; through leadership coaching and enterprise excellence”

**Vision Statement**
“Create a Global Standard in Managing Innovation”

**3 Core Values**
- Customer Success, Not just customer satisfaction
- Professional Integrity, Not just transparency
- Service Quality, Of course with a touch of innovation in everything we do

**Social Payback**
Ripi Singh donates 10% of his time to those who need him and can’t afford to pay for the services. Then he donates 10% of his profits to charity.
Better solutions that meet new requirements, unarticulated needs, or existing market needs

Accomplished through new ideas, more effective products, processes, services, technologies, or business models that are readily available to markets, govt., and society

While a novel device is often described as an innovation, in economics, management science, and other fields of practice and analysis, innovation is generally considered to be the result of a process that brings together various novel ideas in a way that they have an impact on society

- Ref Wikipedia for simplicity

**Innovation** - “Anything new that has impact”

There are number of definitions in books and online. One picked from Wikipedia is mentioned above.

*Julia Fischer Baumgartner:* Radical innovation is a new product, process, or system that replaces its accepted predecessor and renders it obsolete.
*Harry Vardis:* Ideas that pass through the business model and meet with acceptance by the end users.
*Barry Bassnett:* Innovation is what happens when creativity has a bottom line.
*Edson Menezes:* Innovation can be a thin line connecting the intuitive, the rational and the market.
*Lars Christensen:* Innovation is to dare to challenge mainstream thinking and behavior pattern.
*Robert Jacobson:* Innovation is seeing things differently.
*Mike Dalton:* The organization-wide process of finding and profitably serving unmet market needs.
*A Michele Davies:* The creation of new products or services which provide value to the marketplace in one form or another, and which use existing resources.
*Hutch Carpenter:* A change in a product offering, service, business model or operations which meaningfully improves the experience of a large number of stakeholders.

**Discovery Question(s)**
1. From the list in the chart above, Tick mark the ones you can see happening around you, frequently.

**Improvement Action(s)**
1. Underline three items from the list above that you would want more of, from your team.
2. Fill in the list above with 3 things of your interest.
Does it feel like you are running on a treadmill?

You can see above, some of the symptoms if you are running on a treadmill.

This is when you need to innovate; innovate at a certain pace to sustain; innovate at a faster rate to grow. You need to innovate products/services offerings to increase sales. You need to innovate processes to increase profits. You might even want to innovate your business models for customer experience & business differentiation, for same product to the same customer.

**Discovery Question(s)**
What are the top three reasons, you are reading this eBook or attending the coaching session?
1. 
2. 
3. 

**Improvement Action(s)**
1. We will come to these throughout the eBook.
Innovation – Scope, Spectrum, and Impact

In any organization, innovation is happening in all departments, at all levels, most of the time. **Maintain**: Actually zero innovation, just fix it approach. **Innovation for Work-life Balance**: Most individuals are continuously improving personal effectiveness. You can call it workbench innovation, broadly speaking Point of Action innovation. However, building a culture of innovation involves, conscious effort towards developing Innovative Processes and Innovative Offerings. **Innovative Processes for Bottom line**: Innovations in tools and methods used to design, develop, and produce a product within the company, focused to reduce risk, cost, and improve quality and turn time. This helps improve organization productivity and net profits. Market may not see much benefit, other than a possible price drop. This helps improve employee engagement. **Innovative Offerings for Top line**: These are innovations in product performance, which create a market differentiator and impact net sales. This helps improve customer engagement. **Disruptive Innovation**: is when a fundamental breakthrough leads to change in lifestyle, impacting humanity. It usually involves a new business model, not always.

This workbook focuses on Innovation in processes, products, and business models, engaging employees, suppliers and customers. If you can achieve that, then it is only a question of CEO and funding commitment to reach the highest level of impact.

**Discovery Question(s)**
1. In the chart above, please indicate your level of effort in %age at each of the 5 categories.

**Improvement Action(s)**
1. What are the two things you will do to help build a culture of innovation?
How Innovative are You?

Where do YOU stand, today?  Sure?
Where do YOU want to be NEXT?
How do you transition?

Innovation Robustness Model

Allow me to define 5 levels of enterprise innovation robustness. Think of it like the CMMI in software industry, or a Movie rating, or Hotel ratings in terms of 5-Stars.

* AWARE – Knowing how to innovate, and perhaps having done it once, AFFORDABLY
** AGILE FOLLOWER – Innovating in response to market need, PROFITABLY
*** SMART FORECASTER – Innovating in anticipation of market need, CONSISTENTLY
**** VISIONARY TRENDSETTER – Innovating and Creating the need, NATURALLY
***** ROBUST ICON – Enabling profitable innovation in the face of uncertainty, SUSTAINABLY

Examples - Author took a stab at placing a few companies on this scale, without an in depth analysis, with an objective to demonstrate the concept.

Discovery Question(s)
1. Where do YOU stand, today?  Sure?
2. Where do YOU want to be NEXT?
3. How do you transition?

Improvement Action(s)
1. Read through the rest of this e-Book for a initial awareness.
## Typical Innovation Characteristics at each Level

<table>
<thead>
<tr>
<th></th>
<th>Aware</th>
<th>Agile Follower</th>
<th>Smart Forecaster</th>
<th>Visionary Trendsetter</th>
<th>Robust Icon</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mindset</strong></td>
<td>Passive</td>
<td>Reactive</td>
<td>Pro-Active</td>
<td>Directive</td>
<td>...same</td>
</tr>
<tr>
<td><strong>Future</strong></td>
<td>Complacent</td>
<td>Awaiting</td>
<td>Predicting &amp; positioning</td>
<td>Creating</td>
<td>...same</td>
</tr>
<tr>
<td><strong>Competition</strong></td>
<td>Not watching</td>
<td>Compete on Cost</td>
<td>Compete on Performance</td>
<td>Make competition irrelevant</td>
<td>Watchful</td>
</tr>
<tr>
<td><strong>Mkt Research</strong></td>
<td>Reading</td>
<td>Conducting</td>
<td>Ignore</td>
<td>...same</td>
<td></td>
</tr>
<tr>
<td><strong>Customer Engagement</strong></td>
<td>Not listening</td>
<td>Actively listening</td>
<td>Empathic</td>
<td>Educating</td>
<td>...same</td>
</tr>
<tr>
<td><strong>Employees participating</strong></td>
<td>Same...</td>
<td>Top-down, assigned selection</td>
<td>Strategy driven, everyone</td>
<td>Open innovation (external inputs)</td>
<td>...same</td>
</tr>
<tr>
<td><strong>Risk Mgmt.</strong></td>
<td>Can’t assess</td>
<td>Avoid risks</td>
<td>Manage risks</td>
<td>Take risks</td>
<td>Risk-proof</td>
</tr>
<tr>
<td><strong>Scope</strong></td>
<td>Offerings</td>
<td>Offerings, process</td>
<td>Offerings, process, business model</td>
<td>All facets of business</td>
<td>...same</td>
</tr>
<tr>
<td><strong>Triggers</strong></td>
<td>Crisis</td>
<td>Market</td>
<td>Market/Calendar</td>
<td>Continuous</td>
<td>...same</td>
</tr>
</tbody>
</table>

### Typical innovation characteristics

The table is fairly self-explanatory. If you read it slowly, one row at a time, you should be able to understand the transition from Aware to Robust. “...same” under the robust column implies that Trendsetter characteristic continues.

### Discovery Question(s)

1. Now, can you relate your current status, with a bit more confidence. It is OK to be confused or scattered across the matrix.

2. Think about what level comes naturally to your leadership style, and corporate strategy.
Benchmarking outcome of Innovation Robustness Model – Ref BCG, PwC

This is based on a personal assessment from products/services viewed as a customer. The BCG and PwC Data on 2016 top 10 is from their published websites. These correlate well. 8 of them are common. So you see only 12 circles in the above chart.

Agile Follower (**) is a crowded space and hence we have not put many logos here. Some companies are the cusp. Either I am not sure or they have multiple divisions spanning across the line.

Companies like GE are hard to place. They are so diverse that different divisions could be all across the spectrum.

Discovery Question(s)
1. Who can you associate with? Who do you wish to associate with?

Improvement Action(s)
1. Keep going with this workbook for now.
Building an innovation culture

To build or change a culture, the two fundamental things are “Willingness” and “Capability”. **Willingness** comes from inspiration (a clearly articulated vision, a shared purpose, leading to defined set of objectives that people can understand and follow), and some form of reward and recognition on delivery. We address this with strategic roadmap and of course the rewards and recognition program. **Capability** comes from tools, processes, and associated coaching that enables people to achieve the defined objectives. We address this through building expertise, establishing processes for innovative development, and improving productivity.

The cultural transition requires the continuous sequence of defining inspiring objectives, providing enabling tools and coaching people, and rewarding the accomplishments. This sets us up for 4 major activities – (1) Strategic Roadmap, (2) Expertise Building, (3) Innovative Development (4) Productivity Improvement.

**Discovery Question(s)**
1. How good are you in each of these 4 pieces?
   - Inspiring... Weak Acceptable Strong
   - Enabling ... Weak Acceptable Strong
   - Coaching ... Weak Acceptable Strong
   - Rewarding ... Weak Acceptable Strong

**Improvement Action(s)**
No actions at this point. After finishing this work book, you should list actions under each category: (a) Building Willingness, and (b) Building Capability
Innovation Framework

Once you figure out, where you stand and where would you like to be, the question is how do you get there? The +4π Framework lays out a set of novel and traditional management tools in a stepwise manner for the companies to progressively build enterprise excellence. The four major tracks are:

1. **Strategic Roadmap**: Defines what products and services would a company develop with timeline to capture the market share. Set of tools progressively add rigor to the roadmap through Benchmarking, Portfolio balancing, Project prioritization, Competitive intelligence, Smart forecasting, and Scenario based planning. This is like the GPS for your car that guides you through the fastest route to your destination.

2. **Expertise Building**: Defines what Talent, Knowledge, Assets and IP, are required when to support the strategic roadmap. Set of tools guide subject matter expertise & leadership development, High performance team building, Knowledge augmentation, Leveraging networks, Succession planning; all using novel visual maps. This is like the power under the hood of your car that will enable you to reach your destination.

3. **Innovative Development**: Defines the process to systematically develop new products, reducing risk and cost. The Basis is DRIVE-Define-Research-Ideate-V(systems)-Engage. This guides the team through an innovation value chain which begins with white space or a market demand, & ends with an emotionally engaged customer. This is actual driving of the car.

4. **Productivity Improvement**: Aligns products, processes, employees, customers, and business metrics, to continuously improve the efficiency and capacity of the enterprise. This set of tools guide the employee morale and customer engagement from management objectives, providing synergy benefits making the whole greater than sum of individual pieces. This is like 4-wheel alignment and balancing to run the car smoothly without serious wear and fuel inefficiency.
**Benchmarking Innovation Framework**

**Reference Booz and Co.**

Booz and Co published 3 innovation strategies, with a combination of distinct characteristics and some common ones, as depicted in the graphic above.

*The three distinct strategies line up with three of our five levels.*

Market Readers are similar to our **Agile Followers** and eco-adaptive innovation. Need Seekers are somewhat similar to **Smart Forecasters** addressing emerging needs. Technology Drivers are similar to **Visionary Trendsetters**, leveraging talent and knowledge in pushing advanced technology products.

**Reference John Hopkins APL Framework**

Applied Physics Labs of John’s Hopkins has published an innovation framework that works for their fundamental research, as depicted in the graphic above.

Their business is actually around our **Visionary Trendsetter**, innovating and creating a need. *The three distinct Phases line up with three of our four Activities*

Research and Technology Base is similar to Expertise Building activity. Challenges and Resources is similar to our Strategic Roadmap activity. Concept exploration and Development is similar to our Innovative Development activity. Our Productivity Improvement activity is weaved under all three sections in some sense, hopefully.

There are striking similarities between the two frameworks at detail level. Fundamentally our framework has industry perspective with primary focus on new product development for induction into market. Strategy drives expertise building. Whereas, APL framework is focused on sponsored fundamental research with heavy focus on building talent, knowledge, and IP assets. Expertise drives strategic customer relationship; which in our case would happen for Trendsetters. This may be preferred model for innovation strategy at a university technology center serving multiple industries.
**The stack up of the Strategic Roadmap tools**

In this graphic, we have classified the primary tools by domain (customer, competitor, industry) and timeline (now or in future).

The color coding relates to the level:
- * Gray – Aware / Basic
- ** Red – Follower
- *** Yellow – Forecaster
- **** Green – Trendsetter
- ***** Blue – Robust

**Discovery Question(s)**
1. Which of these have you been using consistently?

**Improvement Action(s)**
1. ID what you must adapt and prioritize.
Evolutionary Innovation Strategy

It is very possible to visualize and create an evolving product well beyond the near-term customer requirements/expectations as well as vision. One way to do is to deconstruct the product technology and characteristics into various elements, extrapolate the trends in each one of these, and then put them together to reliably forecast a future product scenario.

For an aero-engine these would include trends in (a) Engine parameters, such as Thrust/Weight, Fuel burn, Operating Pressure Ratio, Bypass Ratio, Turbine Inlet Temperature; (b) Customer expectations on Cost, Noise, Speed; (c) Government regulations on Noise, emissions; (d) Materials, fuel, and lubricants; and (e) Electronic and Mechanical systems technologies. An integration of well thought out extrapolation can help visualize a product well into the future (Few years).

Validation: Experts, who have seen many years of development can actually conduct a gut-feel or sanity check. Once a forecast is accepted, technology requirements can be identified, and road mapped for series of product releases, targeted for a 2X-3X speed up. This has the potential to provide significant leap in product offerings, and at times a comeback into the market lost to competition.

Trendsetting Innovation Strategy

Products don’t necessarily evolve linearly. Disruptions in other industries have an efect. So, in addition to simple forecasting, we need to consider possible interference of the PESTEL – Political, economic, social, technological, environmental, and legal trends. Within Technology look for big three – artificial intelligence, 3D printing, and internet of things.

Discovery Question(s)
1. Leaders, Which two major disruptions in other industries will impact your portfolio?

Improvement Action(s)
1. List at least two projects that will help you re-define the future product based on smart forecasting.
The stack up of the Expertise Building tools

In this graphic, we have classified the primary tools under talent, knowledge, and assets: focused internally or externally.

The color coding relates to the level.

** Red – Follower.
*** Yellow – Forecaster.
**** Green – Trendsetter.
***** Blue – Robust.

Discovery Question(s)
1. Which of these have you been using consistently?

Improvement Action(s)
1. ID what you must adapt and prioritize.
The stack up of the “Innovative Development” tools

In this graphic, we have classified the primary tools under innovative development along the development time line. The color coding relates to the level.

** Red – Follower.
*** Yellow – Forecaster.
**** Green – Trendsetter.

Discovery Question(s)
1. Which of these have you been using consistently?

Improvement Action(s)
1. ID what you must adapt and prioritize.
The stack up of the Productivity Improvement tools

In this graphic, we have classified the primary connections amongst 4 entities – Leadership, employees, customers, and suppliers. The color coding relates to the level.

** Red – Follower.
*** Yellow – Forecaster.

Discovery Question(s)
1. Which of these have you been using consistently?

Improvement Action(s)
1. ID what you must adapt and prioritize.
Characteristics of innovation initiative

There is no single validated strategy to build a culture of innovation or to just innovate successfully and consistently. The path is not straight line. Host of things have to come together to make a team succeed at creating a new product, process, successful business, ... Strong and persistent enablers are a must though. There is no rigid sequence in which various management practices need to be executed. There is a general outline which positions you for success with no guarantee. Path may have repetitive loops, overlaps, and even opportunity to skip. Which means, being adaptive is an important leadership ingredient. Adapt your team, capability, culture as context changes. Just like traditional leadership, derive value from synergy.

Do not forget to look for opportunity everywhere along the business value stream.

Discovery Question(s)
1. Leaders, Do you think you have that silver bullet that lets you innovate consistently?
2. Managers, Are you alert enough to spot opportunities, and then agile enough to adapt?

Improvement Action(s)
1. Identify couple of innovation leaders as your role models and study them.
Innovation mindset – Leadership

According to Linda Hill, innovation leadership is about creating a space, where people are willing and able to work hard, share and combine talent and passion to innovatively solve a problem.

Discovery Question(s)
1. Leaders, which of these attributes, do you need to work on?
2. Managers, which of these attributes, do you need to work on?

Improvement Action(s)
1. Identify one person in your peer group who has most of these attributes and view him/her as your mentor.
Basic physics in organizational behavior

Organizations behave like matter and many physics principles are visible here.

**Friction**: You try to push something, there will be a resistance to motion, a force in opposite direction.

**Inertia**: You want to move a large mass, you need a much larger force to move it.

**Gravity**: You leave something, it is going to fall down.

**Energy**: If you can bring that in, it will start to overcome inertia and friction.

**Momentum**: Once you build it, it will take an effort to stop the change.

Focus on building momentum for continuous improvement.

**Discovery Question(s)**
1. Do you recognize the power of each?
2. Are you able to leverage it to your advantage?

**Improvement Action(s)**
1. Identify people who will help you build a momentum.

**Why encourage widespread workbench innovation?**

One empirical finding from Heinrich’s 1931 book became known as Heinrich’s Law: that in a workplace, for every accident that causes a major injury, there are 29 accidents that cause minor injuries and 300 accidents that cause no injuries. Because many accidents share common root causes, addressing more commonplace accidents that cause no injuries can prevent accidents that cause injuries. I personally believe the same is true with innovation. For us to get one disruptive innovation, we need to get a few trendsetters, many evolutionary, and a continuous improvement in business processes, all supported by a widespread, (everyday, everybody) workbench innovation. In some sense, companies like 3M, Google, are where they are because of this very fundamental cultural aspect.
How to build momentum?

We have talked about 4 tracks. Execute them now and repeat over.

0. Start by defining Business success metrics at the top in form of a dashboard.
1. Create a strategic roadmap, Communicate across the enterprise and track the progress.
2. Build the expertise, Maintain a plan, and invest in developing talent, knowledge, and assets.
3. Inspire the expertise to develop innovative offerings, in line with the roadmap.
4. Align employees and offerings to market needs and roadmap, for Productivity improvement.
5. Recognize teams, and reward the people for performance, and
0. Revisit your dashboard, regularly.

Start rotating the WHEEL and build a momentum that would be hard to stop.
The upper half builds willingness to innovate.
The lower half builds capability to innovate.
The two build the culture of innovation, when leadership is committed, SIMPLE.
If you focus on CI of expertise, others will follow. Talent is at the core of this.

Discovery Question(s)
1. Leaders, Do you have a culture of continuous improvement?
2. Leaders, Do you know where to focus your improvement investment?
3. Managers, How do you track continuous improvement?
4. Managers, Do you reward those who are helping improve processes and products?
5. Engineers, Do you know how to express your ideas for improvement?
6. Engineers, Are you able to see the positive impact of your actions?

Improvement Action(s)
1. Please list a few high level actions you will take to build willingness and capability to innovate in your enterprise.
2. Please share your experience with the author. This is a difficult subject and together we can learn.
EinFrame – Software as a Service

The Innovation Framework described in here is available through a cloud based application. EinFrame makes it easy to continuously gather and organize data required for building corporate strategy. It then enables managers to track the execution of that strategy as well. Modules are structured as:

- **Dashboards for Executives** – Balanced Score card, Strategic Roadmap, and Growth Strategy.
- **Reports for Managers** – Action Items, Talent, Knowledge, Assets, Competitive Analysis, Risk Mgmt..
- **Project Management** – Progress tracking, Phase gates, EVMS, Time sheets, … etc.
- **Incident Management for all** – to track quality incidents, and other lessons learned.
- **Data Capture for all** – under the four activities – Roadmap, expertise, innovation, and productivity
- **Survey Central** – for feedback from Employees and Customers.
- **Framework** – one time setup of Internal organization structure, Business KPIs, Projects/tasks structure; External competitive forces, Product domains & KPIs, Customers; Talent, knowledge & asset Capabilities.

**Which enterprise need are we addressing?**

Looking at the value stream from right to left: CRM systems enable efficiency and effectiveness in engaging with market and tracking customers; ERP systems and 6σ tools enable efficiency and effectiveness in production, delivery, and financial tracking; PLM systems and lean product development enable efficiency and effectiveness in design and development of new complex products and managing technical data starting from a state where product specifications are known.

There is no known enterprise wide system that enables gathering of information for building & executing a strategy. **The +4π Innovation Framework and corresponding EinFrame platform addresses this white space. The endeavor of this methodology is to provide a platform for creating a strategy and executing it effectively.**
Meet Dr. Ripi Singh – Innovator & Strategist

About

Meet the Chief Coach - Dr. Ripi Singh, innovator and strategist

- Member CT Academy of Science and Engineering
- 25 years in Product Development, team, project, program, and department Leadership & Teaching
- Aerospace & defense, Energy & power, Medical devices & healthcare, Manufacturing, commodities, IT, ...
- Strategist, Inventor, Author, Speaker, ...
- Individual and Enterprise Advisor, Team Builder, ...
- Globally Astute – worked in USA, Europe, & Asia
- PhD Engineering, MS Management/Strategy
- Founder +4π (Innovation & Productivity Framework)

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