Pioneering a Process Improvement Team for Continuous Innovation

Foster innovation within your organizations

BY: Banu Raghuraman, CBAP, CSSBB, CSM, CSPO, P.Eng.

Process Improvement more important in the AI era

What is different now

1

AI adoption is mainstream

78% of organizations used AI in at least one business function in 2025, and 71% reported regular use of generative AI in at least one function, which means AI is no longer an edge case in business operations.

2

Opportunities are large but outcomes are uneven

AI could unlock $4.4 trillion in productivity potential from corporate use cases, yet by the end of 2025, almost nine in ten companies had deployed AI in at least one function while 94% still were not seeing significant value from those investments.

3

Speed without redesign does not create sustainable benefits

Many current AI uses accelerate existing work but preserve underlying workflows, while the real value comes from reshaping offerings, workflows, and operating models.

Why is process improvement more relevant now

1

AI amplifies +'s and -'s

If the current process has unclear handoffs, weak controls, redundant approvals, or poor data quality, AI can scale those problems faster unless the process is redesigned first.

2

Continuous Innovation is a non-negotiable

Organizations gaining more from AI pair technology with experimentation, learning, and cross-functional collaboration rather than treating AI as a one-time tool deployment.

3

Humans are needed for judgment and orchestration

High-performing AI-enabled teams report stronger gains in efficiency, problem-solving, and collaboration, which reinforces the need for BAs, PMs, and product leaders to continuously improve how work is framed, governed, and learned from.

- McKinsey, *AI in the workplace: A report for 2025*: https://www.mckinsey.com/capabilities/tech-and-ai/our-insights/superagency-in-the-workplace-empowering-people-to-unlock-ais-full-potential-at-work
- McKinsey, *Where AI will create value—and where it won't*: https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/where-ai-will-create-value-and-where-it-wont
- Deloitte, *How AI can accelerate physical product innovation*: https://www.deloitte.com/us/en/insights/topics/emerging-technologies/gen-ai-industry-product-innovation.html
- Deloitte, *Human Skills Drive High-Performing Teams in the AI Era*: https://www.deloitte.com/us/en/about/press-room/high-performing-teams.html
- Example BA-in-AI transformation article: https://hochsolutions.com/2025/10/08/the-role-of-business-analysis-in-ai-success/

Understanding Continuous Innovation & Six Sigma

1

Continuous Innovation Defined

Ongoing, incremental, and sustainable enhancements to products, services, or processes that create measurable business value.

Innovation Rate: Percentage of revenue generated from new vs. existing products/services.

2

Six Sigma Framework

DMAIC (Define, Measure, Analyze, Improve, Control) forms the backbone of structured process improvement.

Primary focus: Defect elimination, operational efficiency, and constant evolution of business processes.

3

Innovation Sourcing Techniques

Leverages proven methodologies including:

- Comprehensive process mapping
- Root cause analysis
- Kaizen events (rapid improvement)
- Lean thinking principles

Lean / Six Sigma	Principle One: Directly observe work as activators, connections and Flow	Principle Two: Systematic waste elimination	Principle Three: Establish High Agreement	Principle Four: Systematic Problem Solving	Principle Five: Create a Learning Organization
Define (D)	Process Flow	SIPOC, VOC	Project Charter, VOC, Pareto	Multi Level Pareto	Business Process Management Tollgates, Project Reviews, Forums Learn, Apply, Reflect
Measure (M)	Process Map, Operational Definitions	Process Map, 5 Ways, Value Added Assessment	Cause & Effect	MSA, Process Capability	
Analyze (A)	Data Integrity, Multi-Variation	Hypothesis Testing	Cause & Effect/Stability	FMEA, Regression	
Improve (I)	Updated Process Map	Solution Selection	Solution Selection	DOE, TRIZ/ASIT	
Control (C)	Pilot Solution	Control Chart Action Plan	Control Plan	Solution Sustain	

https://www.youtube.com/watch?v=A2x8N4DjxnE (I love Lucy)

Change Management: The Human Side of Innovation

People-Centered Strategies

Sustainable change requires balancing short-term gains with long-term vision:

- Communicate a compelling vision that resonates emotionally
- Identify and reward early adopters as visible champions
- Celebrate small wins to build momentum
- Leverage social proof through success stories

Data-Driven Narratives

Measure what matters to tell your innovation story:

- **Input metrics:** R&D spend, idea generation rates
- **Process metrics:** Cycle times, project velocity
- **Output metrics:** % revenue from new products, DIB (Degree of Innovation Breakthrough)
- **Impact metrics:** Defect rates, customer satisfaction

IBM Innovation Man Yelling

The Neuroscience of Innovation

Neuroplasticity

Our capacity for learning and adaptation never ceases, regardless of age or experience level. This biological reality supports continuous improvement initiatives.

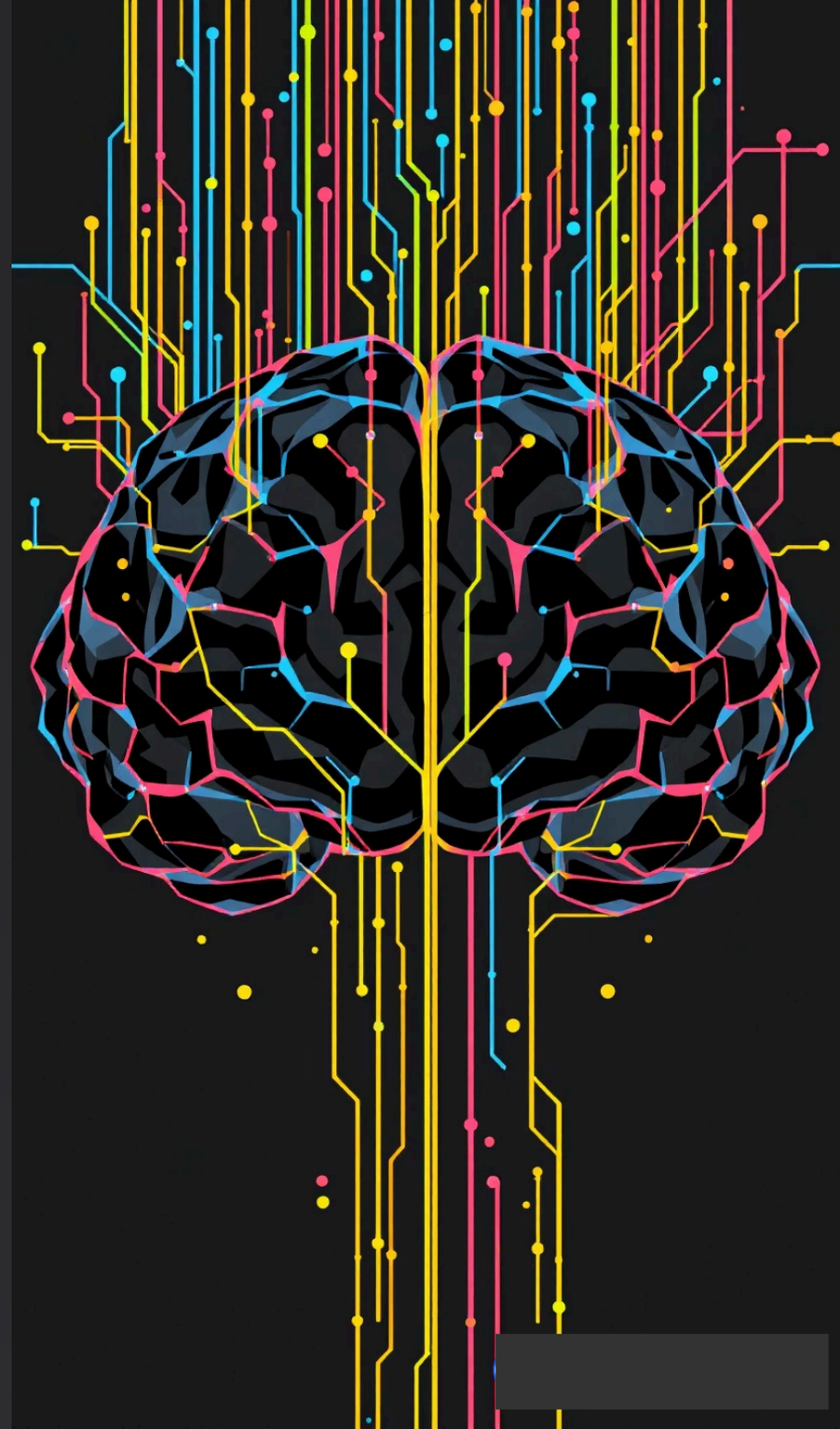
Cognitive Biases

Recognize decision pitfalls like status quo bias and confirmation bias. Leverage emotional triggers that foster creativity and open-mindedness.

Brain-Friendly Change

Emphasize rewards over threats, provide tools for emotional regulation, and ensure clarity in leadership communications to reduce resistance.

Companies implementing neuroscience-based leadership report 30% improved team performance, 25% higher engagement, and 40% more successful product launches.



Accelerating Innovation with AI & Automation

Transformative Capabilities

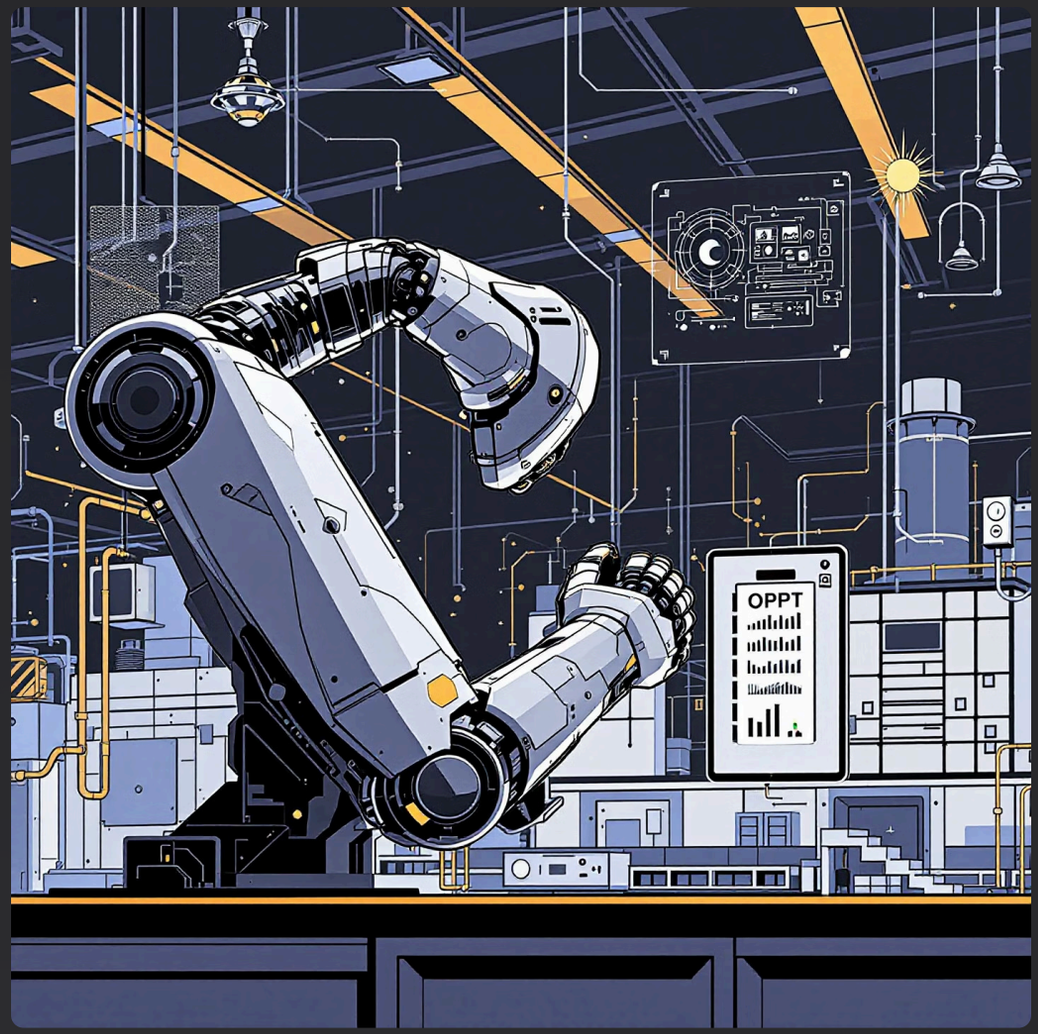
Modern AI and automation tools enable process teams to:

- Automate routine, repetitive tasks
- Optimize complex workflows
- Make data-driven decisions with greater confidence
- Implement real-time analytics for immediate adjustments
- Predict and prevent issues before they occur

Proven Business Impact

Organizations implementing AI in process improvement see:

- Cycle times reduced by 30-50%
- Process accuracy improved by 35%
- Maintenance cost savings up to 20%



Example tools: Otter.ai (meetings), Jira AI (project risk), IBM Watson (supply chain), RPA solutions (manual tasks)

Case Studies: Innovation Through Process Improvement

Toyota

Pioneered Lean Manufacturing and Just-In-Time delivery systems, transforming global manufacturing standards and creating a culture where every employee contributes improvement ideas.

Amazon

Revolutionized logistics with advanced robotics and AI-driven warehouse management, cutting fulfillment times by 50% while handling exponentially more SKUs.

General Electric

Implemented Six Sigma across all business units, generating over $10 billion in savings while developing a deep bench of process improvement experts.

Starbucks

Created sophisticated customer feedback loops and analytics-driven change management systems to rapidly test and iterate store concepts and product offerings.

Cultural variations exist: Japan (Kaizen philosophy), Germany (Industry 4.0), Switzerland (Roche's structured innovation mechanisms), and the US tech sector (agile methodologies).

When to Pilot a Process Improvement Team

Good Candidates

- High volume/repetition processes with observable defects
- Cross-functional projects with clear ownership
- Areas with reliable data and stakeholder buy-in
- New product development in competitive markets

Not Good Candidates

- Ad hoc, infrequent, or purely creative tasks
- Projects lacking management support
- Processes without measurable KPIs
- Highly stressed or change-resistant organizations

The ideal pilot balances technical improvement opportunity with organizational readiness for change.

https://youtu.be/dDRS1RXbJ-0?si=YYpbMWw0WUO83Gs3

Pilot Roadmap: 7 Steps to Success

Define Objectives

Set clear operational and innovation goals with executive sponsorship

Select Team

Build cross-functional team with appropriate representation

Set Metrics

Establish balanced scorecard of input, process, and output measures

Apply Frameworks

Implement DMAIC methodology with change management overlay

Use Neuroscience

Train on brain-friendly change methods to reduce resistance

Leverage AI

Automate data collection and analysis for continuous measurement

Celebrate & Iterate

Recognize quick wins and apply lessons learned to future cycles

A successful pilot creates momentum through visible results and builds organizational capability for ongoing innovation.

Key Takeaways & Resources

Core Principles

- Process improvement teams are engines for sustainable innovation when properly structured
- Success requires integrating technical frameworks with human-centered approaches
- Measurement is critical—what gets measured gets improved
- Adapt your approach to organizational culture and domain-specific needs

Recommended Resources

- **Books:** "The Lean Startup" (Ries), "Change by Design" (Brown), "Six Thinking Hats" (de Bono)
- **Certifications:** Lean Six Sigma, Change Management, Design Thinking
- **Communities:** ASQ, Process Excellence Network, Innovation Leaders Forum

THANK YOU!

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