

Creating a Healthy Product Development System

Using foundational principles of LPPD to solve problems, overcome obstacles, and supercharge your Product Development Process

an interactive workshop

LPPDE Virtual Summit

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Development and Technology Innovation



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LPPD Strategy, Leader and Coach, Process Optimization

Your workshop leaders



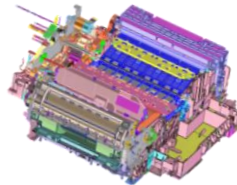
Dan Caputo

35+ years developing and bringing new technology/products to market
Strategist, Systems Thinker, Program Excellence and Innovation Champion



San Diego
California

Technology Strategy Executive
R&D Design and Program Management
Industrial Design Management
Mfg Engineering Management
Procurement Engineering



San Jose
California

Manufacturing Engineering and
Automation



Carolyn Carter

Education:

- BSME

Places Lived/worked



New England
Georgia
Texas
Wisconsin

Work Travel:
Across US
UK
Argentina
Mexico

Research/Production Engineering
Analytical Instrumentation



Consumer Products Manufacturing/
Product Development



Lean Consulting



Kimberly-Clark

The LEAN MACHINE | ARGO EFESO
MANAGEMENT CONSULTANTS

THE SCIENCE OF
IMPROVING INNOVATION

Career Coaching

Leadership, Manufacturing, Product Development, Lean Consulting - Coach, Change agent, Continuous Improvement

1

How much does your organization agree with these statements?

(on a scale of 1 – 10)

- Innovation is vital to your company's success. If you don't innovate, your company will die.
 - *"Innovation is the fuel for growth. When a company runs out of innovation, it runs out of growth."* --Gary Hamel
 - *"Innovation is the only way to win."* --Steve Jobs
 - *"Great companies are built on great products."* --Elon Musk
- To create innovative products well, the two things you need are good ideas and a "can do" attitude.
 - *"Get a good idea, and stay with it. Dog it, and work at it until it's done, and done right."* --Walt Disney
 - *"Never tell people how to do things. Tell them what to do and they will surprise you with their ingenuity."* --General George Patton

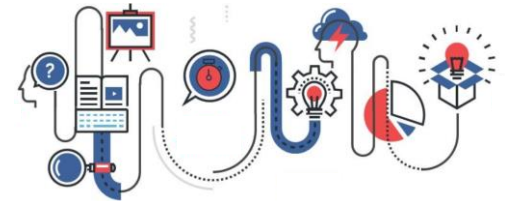


2

How much does your organization agree with these statements?

(on a scale of 1 – 10)

- Adherence to processes is a barrier to innovation.
 - *“More process, less innovation. More operations, less innovation. More management, less innovation. More entrepreneurs, more innovation.” --Seth Godin*
 - *“Process is just another way for you to tell me what I can’t have.” --HP Executive*
- Product Development/Innovation without a guiding process results in ad hoc, uncoordinated, ineffective activity.
 - *“The purpose of Innovation Management is not to promote innovation, but to manage innovation as a process.” --Pearl Zhu*
 - *“Managing innovation will increasingly become a challenge to management, and especially to top management, and a touchstone of its competence.” --Peter Drucker*



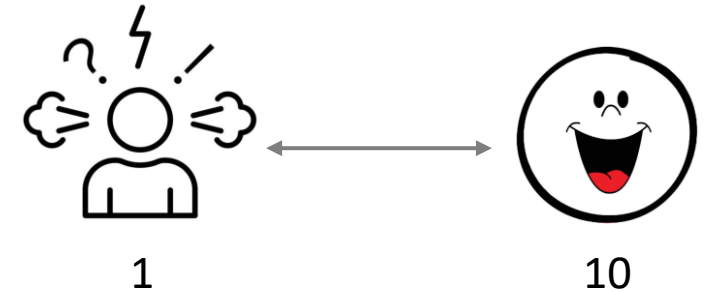
A guiding process/operational framework is essential to sustaining an innovation stream via new product introductions to the market

3

How much do you agree with these statements?

(on a scale of 1 – 10)

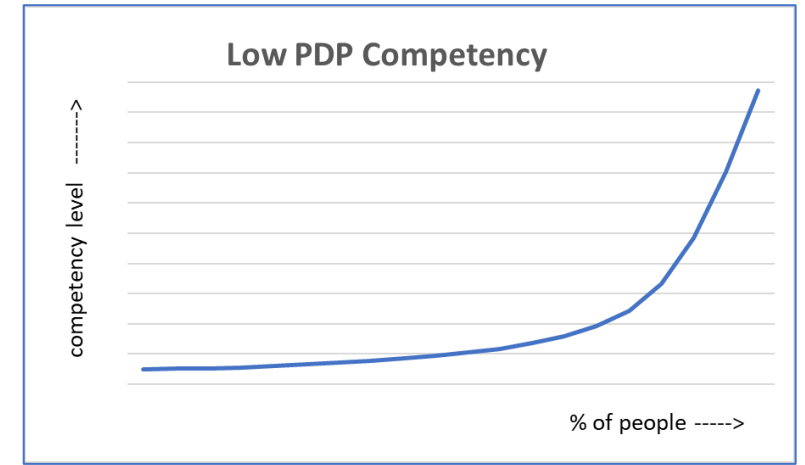
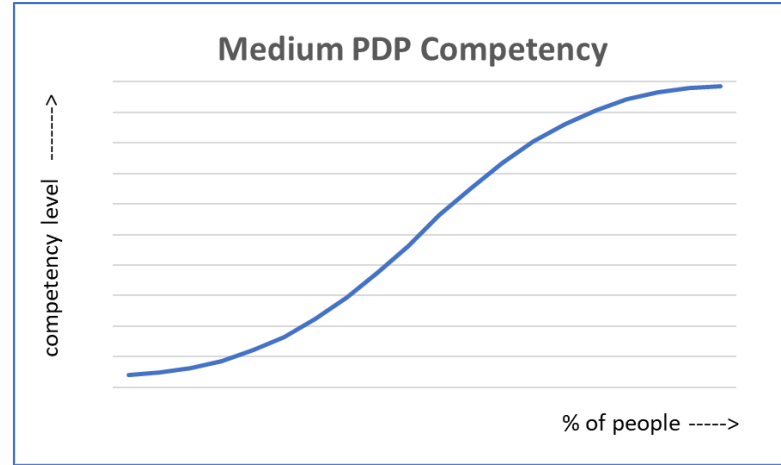
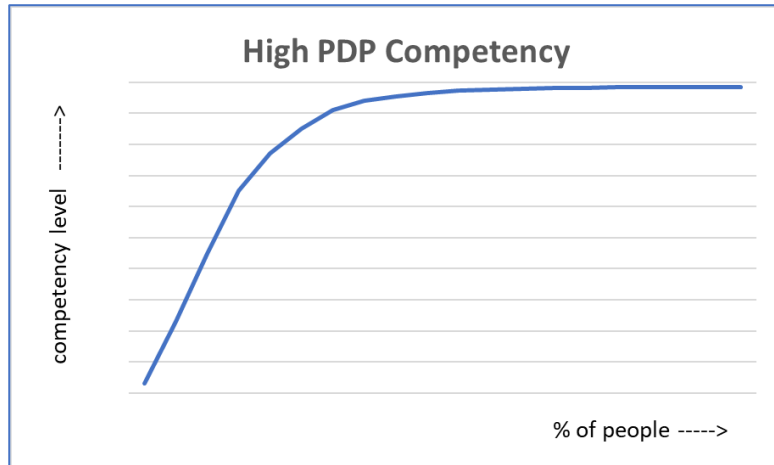
- Words I use to describe my company's product development process:
 - 1 = *stifling, obstructing, discouraging, numbing, frustrating, fatiguing*
 - OR
 - 10 = *energizing, enabling, activating, sustainable, repeatable, flexible*
- Most Senior Leaders at my company fully understand the product development process end-to-end and their role in its success.
- Most of the workers I work with at my company fully understand the product development process end-to-end and their role in its success.
- I fully understand the product development process end-to-end and my role in its success.



The product development process needs to be fully understood, and intentionally fed and cared for, no matter where you are in the market lifecycle

To excel, PDP competency is an imperative

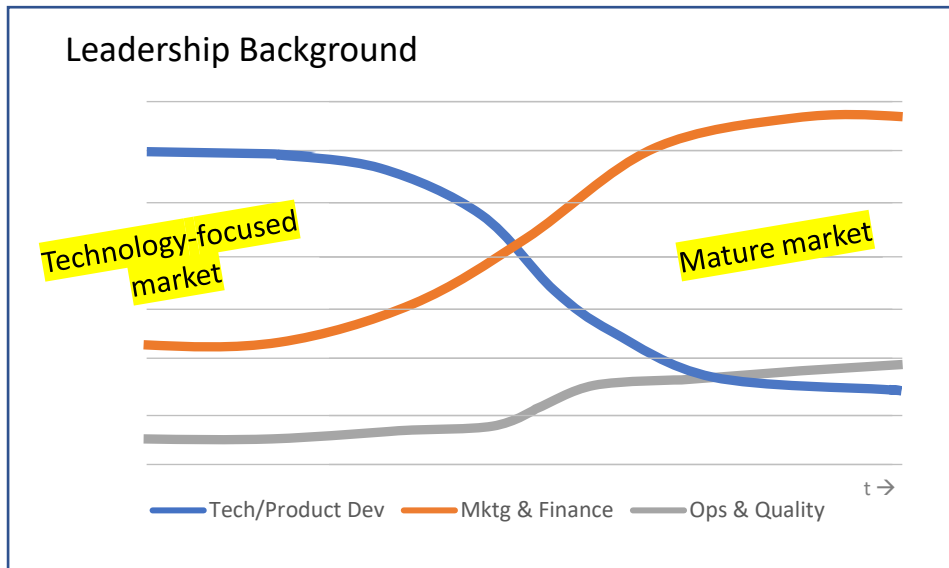
Where is your organization?



PDP competency can vary over time

Where is your organization?

Typical technology company
– an illustrative scenario



From early years through the tornado¹

- Heavy technology invention, fierce competition, and rapid technical advancement

As the market matures

- Innovation vectors change over time¹, often causing shifts in leadership focus and organizational emphasis.

Mature market

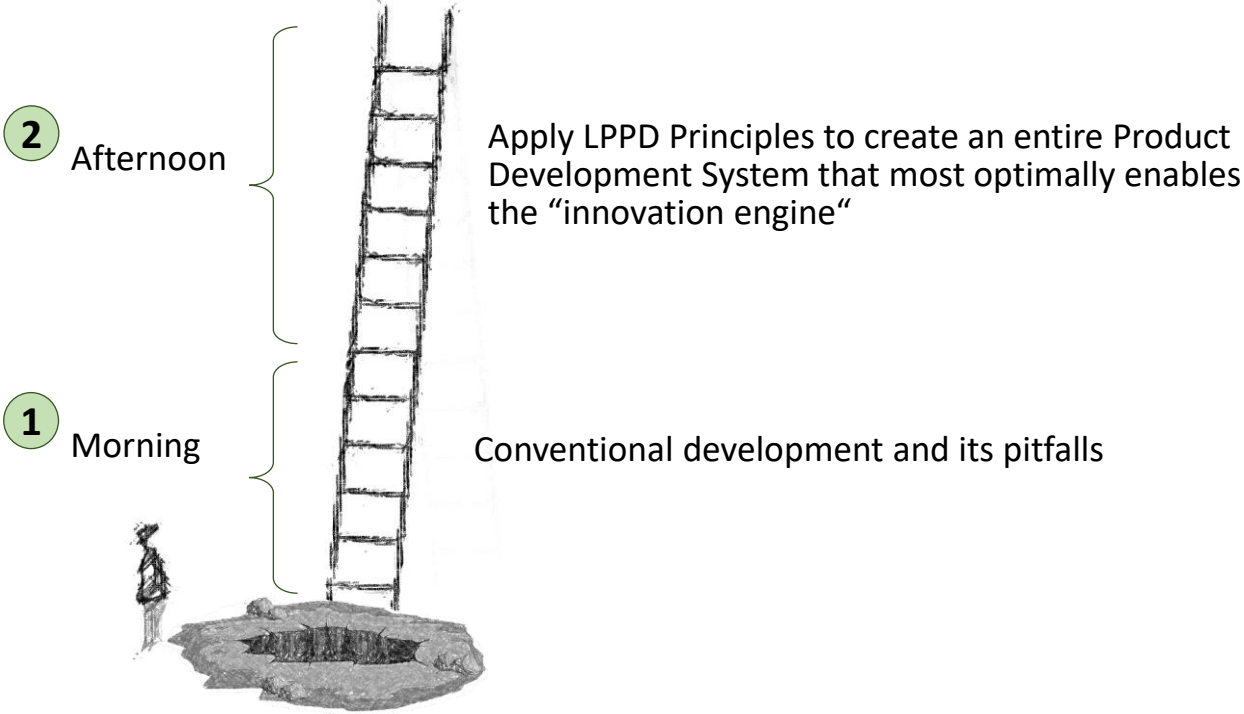
- New technology no longer core differentiator... but still required to support innovation vectors
- Leadership continues its changeover
- High changeover in people across the board in all functions; experience drain

Innovation is crucial in all stages; it is essential to understand and intentionally feed and care for the PDP through each stage!

¹ From Geoffrey Moore's "Market Development Life Cycle"

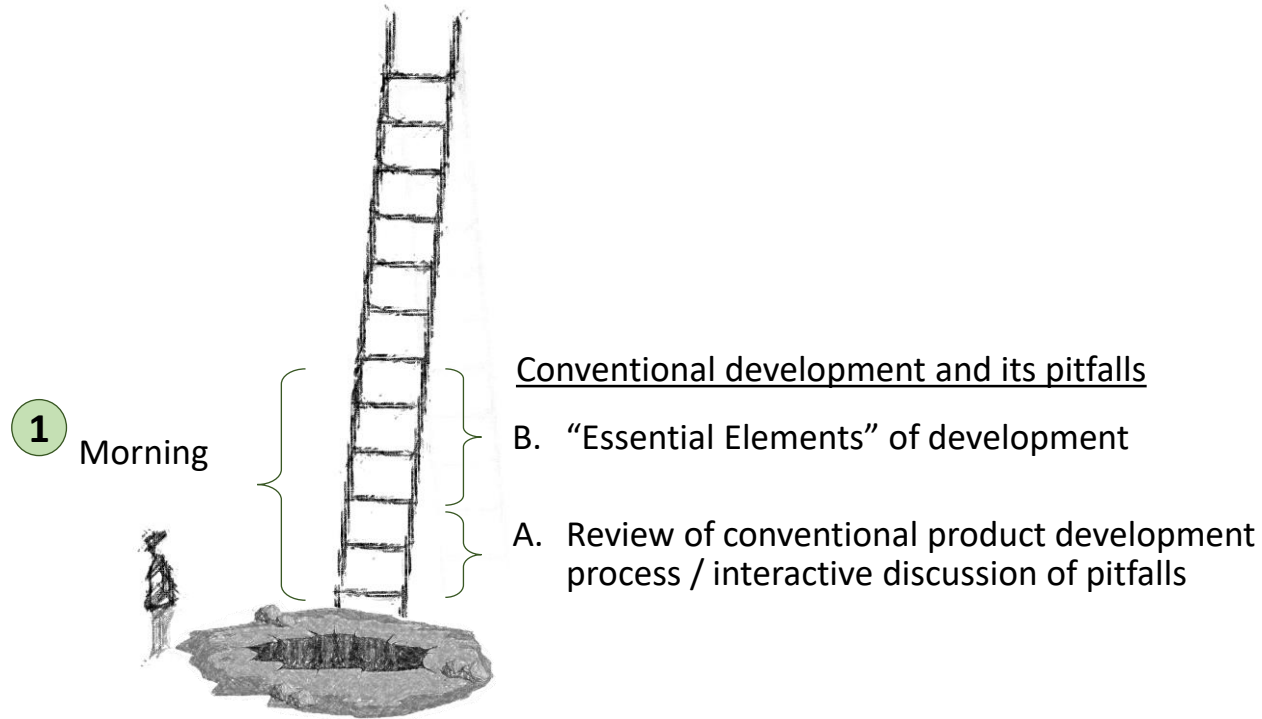
Workshop – Creating a Healthy PD System

Climbing the rungs of Product Development Process competence



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Climbing the rungs of Product Development Process competence



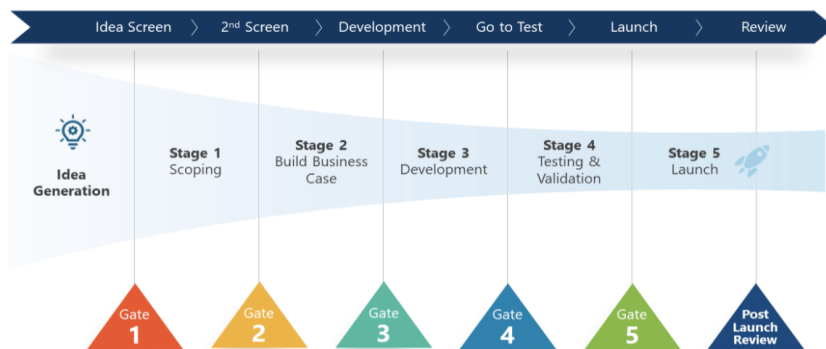
Part A: Conventional approach to development and its pitfalls



Cross-functional
Program Team



A typical Phase-Gate process



Agenda

- Exercise: identify the end-to-end steps to develop and commercialize a complex product
- Overview of Program Teams and explore typical Phase Gate process and benefits
- Identify problems and pitfalls

Intent

- Build understanding of end-to-end deliverables for a complex product development project
- Ground everyone in clear understanding of the conventional approach
- Participants start identifying their key problems

Part B: “Essential Elements” of development

Essential development elements

- Program Flow
 - Understand required flow via Value Streams
- Knowledge
 - Systems view: Functional Block Diagram
 - Learning Plans and Integration Map
- Synchronization
 - Using phase gates as convergence points
 - Synchronizing technology and product development

Agenda

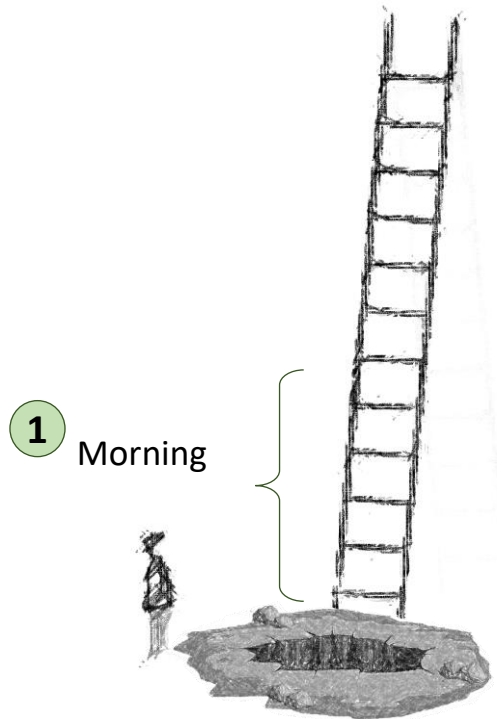
- Exercise: group main deliverables into value streams
- Understand systems mapping (functional block diagram) and its benefits
- Discuss Learning Plans and how a tool such as an Integration Map leads to a more planful approach
- Explore options to synchronize technology and product development

Intent

- Build-up PDP understanding – see how “essential elements” result in a more effective project
- Deeper assessment of participants’ key problems to solve in afternoon session

Workshop – Coming Out of the Morning...

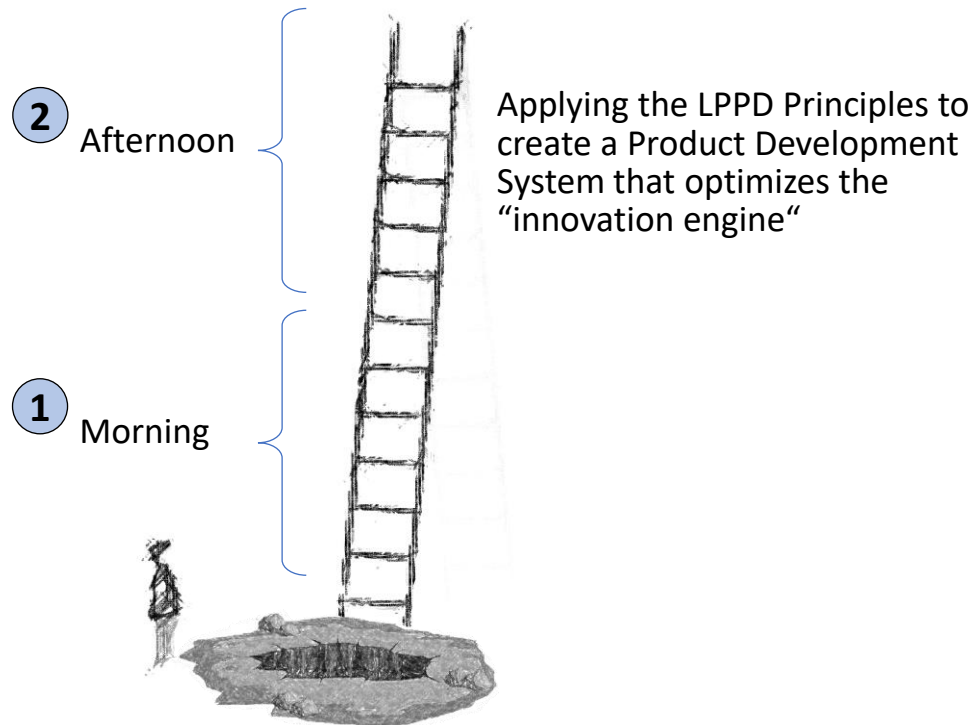
Climbing the rungs of Product Development Process competence



- Alignment on the conventional Product Development Process
- Understanding of the fundamental principles enabling a healthy development process:
 - Flow, Knowledge, and Synchronicity
- Summary of the top pitfalls of conventional Product Development
- Each attendee should have calibration to where the current state is of their own organizations

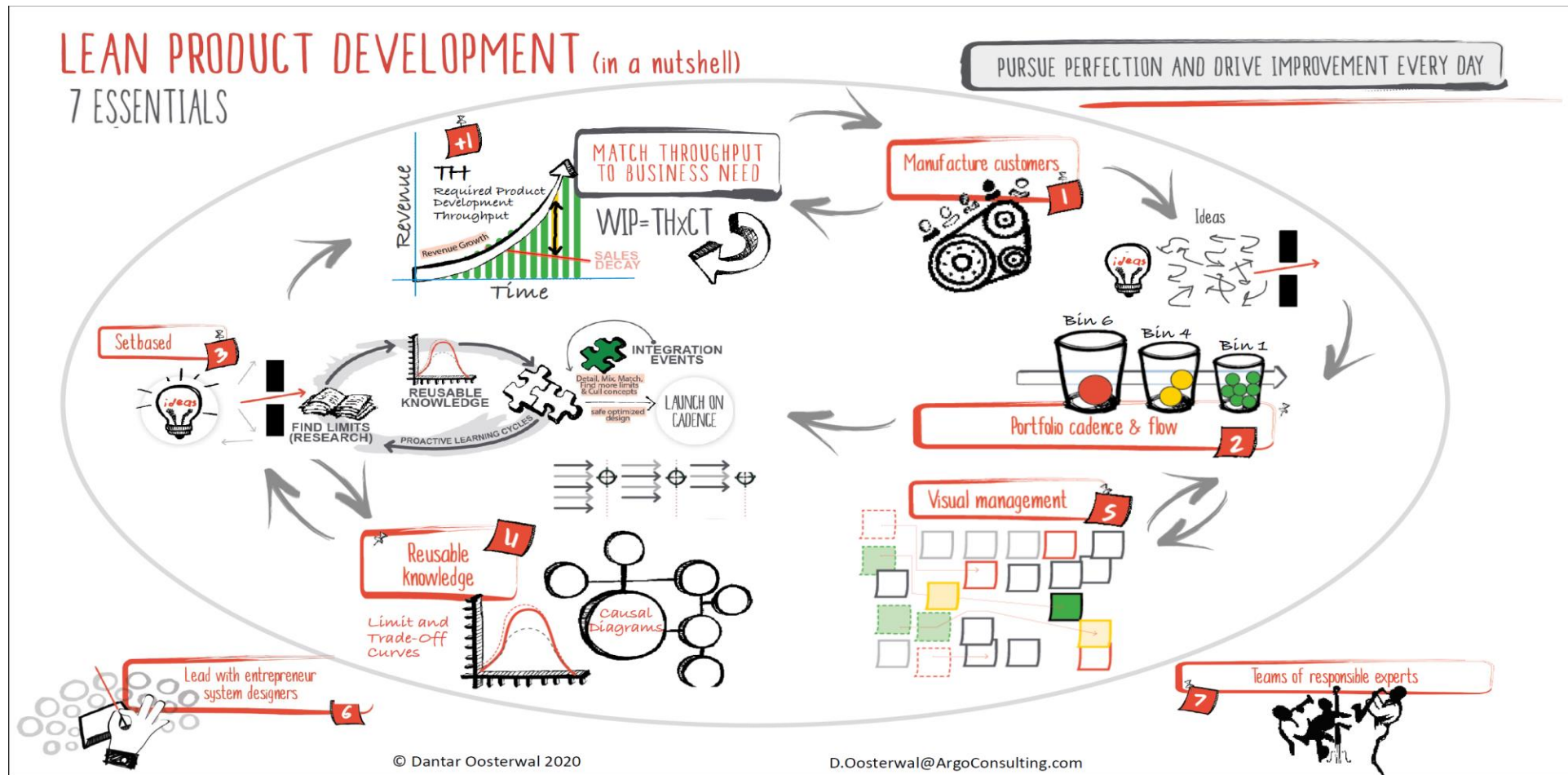
What is LPPD, and What is its Impact?

Climbing the rungs of Product Development System competence



- Understand the LPPD 7+1 Model
- How the LPPD principles solve development pitfalls
- How the LPPD principles apply to the entire Enterprise to create a repeatable and sustainable system

LPPD 7+1 System Components



How Does LPPD Address Conventional Product Development Pitfalls?

- We will review the summary of Top Issues in Conventional Development
- Discuss how the LPPD 7+1 Model addresses them
- Summarize how LPPD 7+1 improves Development and enables sustainability for:
 - Efficiency: Throughput, Speed, Resource Optimization
 - Effectiveness: Lift in the Market
 - Predictability: Impact on forecasted Business Performance

Please Join Us!!!



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Questions and Discussion