Apply product mindset strategy and team topology to future ready your business

Workshop Facilitators : Pranay K Chanda & VC Saravanan

Workshop Agenda ...

1. Speaker Intro and Topic Background
2. Modern Business need for Product Mindset Strategy
3. Pillars of Product Mindset Strategy
   - Business Strategy Aligned to Customers
   - Software Design and Architecture
   - Organize and execute with team topologies
4. Client Story – Challenges and Outcomes
5. Key Takeaways

Meet your speakers

Drive Digital Transformations and Project to Product mindset to achieve organizational goals & competitive edge using Agile, DevSecOps, SRE/MLOps and enterprise architecture. Ability to set and drive the big picture strategy across the organization and provide mentorship for successful execution.

V C Saravanan

Pranay K Chanda

Transformation consultant with experience in advisory consulting across technology modernization, product strategy + design, Agile organization design + change management and lean portfolio management.

Build guiding coalition with executives around strategy, design and execution to thrive as modern business in this digital age.

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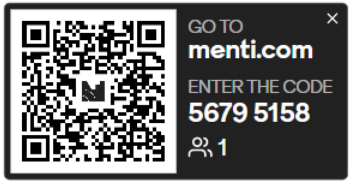
Mentimeter

Quick survey on your organization maturity in product transformation 🎉



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As digital imperatives grow urgent, stubborn obstacles remain

Despite prolonged digital transformation initiatives, most enterprises are still not organized and set up for sustainable success in this new world. Business leaders are often blind to delivery issues like real capacity, dependencies, and risks, while engineering teams often don't have visibility into the big picture, the long-term strategic roadmap, or the business outcomes they are delivering against. This misalignment results in tremendous waste, inefficiency, and frustration.

Key Pain Points

ORGANIZATIONAL SILOS

80% of companies report that they still have organizational silos... » **83%** correlate these silos with reduced customer value and product ROI.

LACK OF VISIBILITY

96% of companies have digital transformation initiatives... » **92%** are still challenged with poor product visibility and delivery inefficiency.

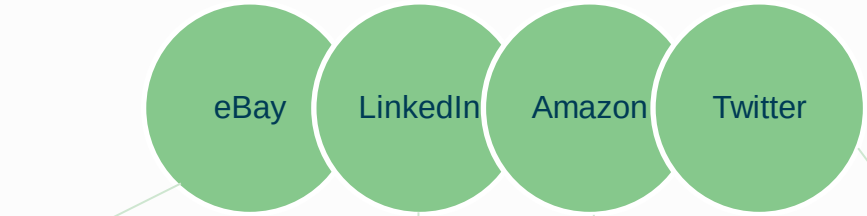
PROJECT-CENTRIC (VS. PRODUCT-CENTRIC) PLANNING

42% of companies believe they currently have 'value streams'... » **99%** state they either benefit or would benefit from VSM capabilities.

Source: *Dimensional Research, Value Streams are Accelerating Digital Transformation: A Global Survey of Executives and IT Leaders*, October 2021

The best way to predict the future is to create it – Peter Drucker

Unicorns that were once brownfield monoliths:



Industry Disruptors are landing on a common Flow Operating Model

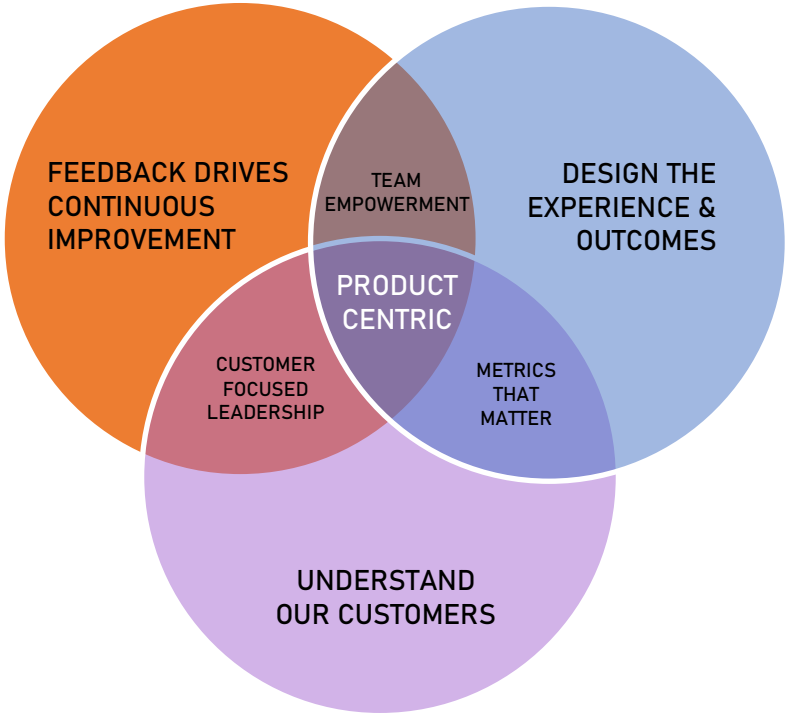
	$166 B Market Cap	→	$634 B Market Cap	TESLA
Walmart	$395 B Market Cap	→	$1.8 T Market Cap	a
AMERICAN EXPRESS	$139 B Market Cap	→	$353 B Market Cap	PayPal

Product Mindset Strategy for Modern Business

Product mindset is crucial for firm’s business strategy to succeed, sustain and flourish in this digital age

What is Product Centricity ?

Organizations adopting product-centric delivery achieve business value faster and can course correct, when necessary, further amplifying innovation



Product-centric delivery is less about product lines and products and more about the value that is delivered.

Business outcomes are measured by objectives and key results (OKRs), which help track value flow, create alignment, and encourage engagement around measurable goals

Understanding the customers needs and **continuously integrating their feedback** into the design ensures alignment to customer's needs and satisfaction

The **adaptive and iterative** - ability for **early course correction** and provide the ability to deliver business value faster

Product Centric organization leaders break matrixes and **realign with Customer value** and empowers the teams

Empowered **teams are adaptive and innovative** which enables them to make the right decisions at the lowest level possible

Let us define product mindset ..

Effective?

Building the right thing

Is it end customer focused?

Is this prioritized by business with tangible measurable metrics?

Have we defined MVP that the end customer will be constantly test and feedback?

Define the Why?

We sell vaccines

Vs

We want to eradicate COVID completely from the face of the earth as we did for Polio

Efficient?

Building the thing right

How fast can we adapt and deliver?

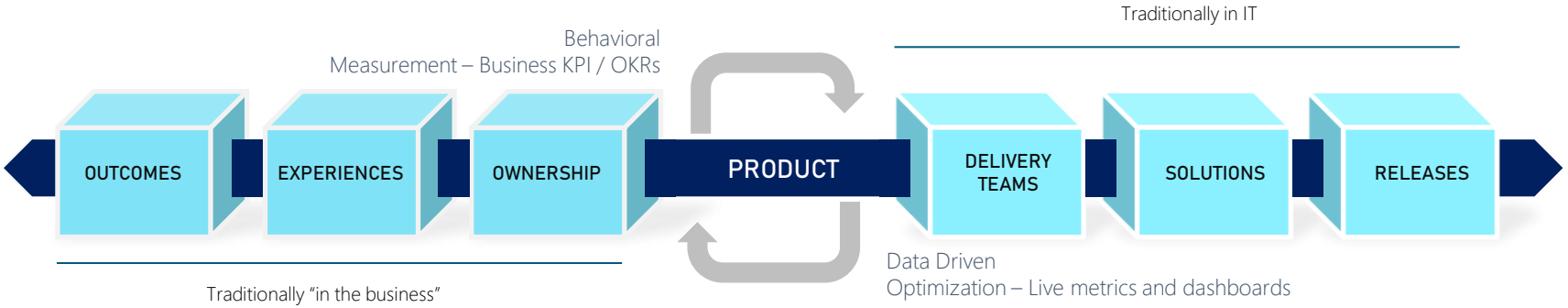
How are we balancing features, defects, debt, and risk ?

Are we managing Cycle time, throughput, and WIP to ensure continuous flow?

Efficiency paves way for innovation

What is a Product and What is a Product Team ?

Product **is the mechanism to organize around the customer.** ***Product teams*** **bring together human factors, business objectives and solution development**



Moving to a product-centric operating model is a major shift from traditional IT delivery

FROM PROJECTS TO PRODUCTS

Technology is managed as a long-term asset that will continue to develop and evolve over time.

Teams remain allocated to products allowing for delivery maturity, continuity and user understanding.

BUSINESS AND IT FUSION

Transactional hand-offs are avoided by forming cross-functional teams from all areas of product delivery.

Product teams are empowered to deliver on business objectives with a one-team mindset.

HUMAN CENTERED

Solutions are shaped from the perspective of the user experience, challenging internal constraints.

Data feedback on solution effectiveness is collected from users at all stages and drives product direction.

PURPOSEFUL

Teams work to optimize business outcome objectives, that aggregate to the business purpose and mission.

Connection to purpose drives meaning and engagement for teams.

VALUE SEEKING

Delivery is directed towards the creation of long-term value for all stakeholders.

Whilst cost efficiency is still an important factor, it is considered within the context of return on investment.

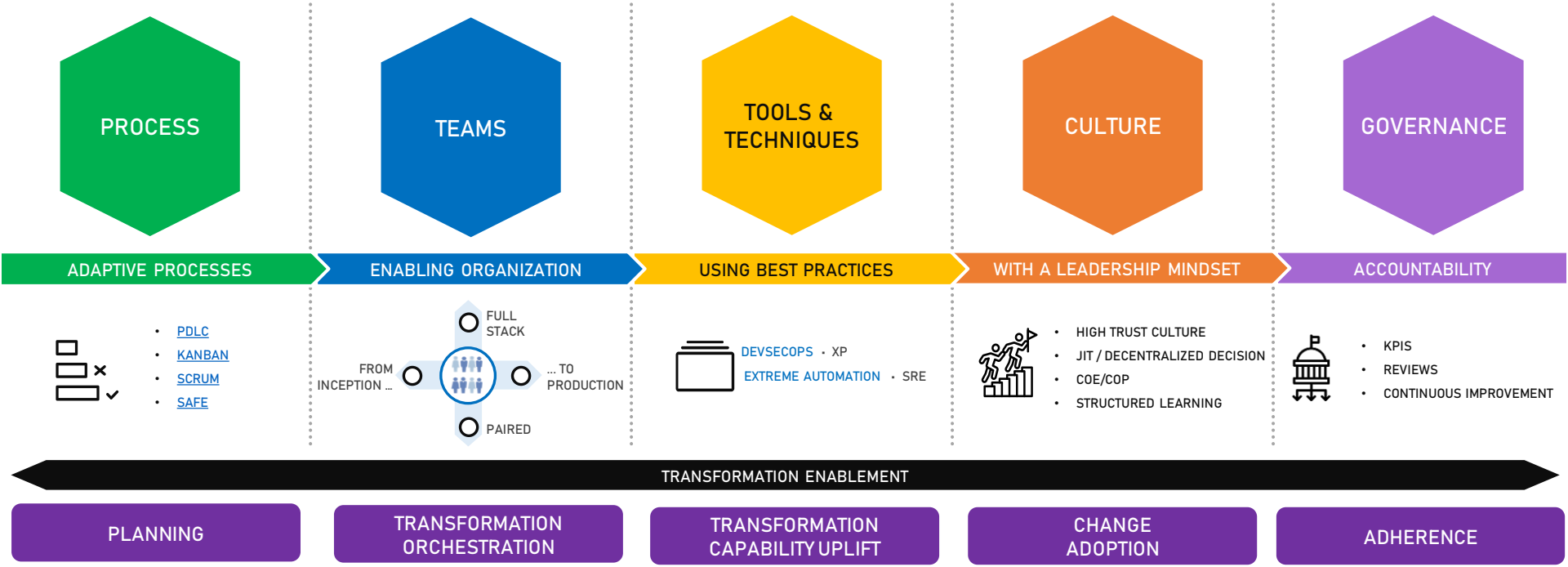
EXPLORATORY

Teams are curious and constantly working to identify better solutions.

The end-product is typically far away from initial concepts and teams may pivot to emerging opportunities

What are the Product Centric Transformation Dimensions ?

The holistic transformation journey should start small, build confidence and scale pragmatically for a new enterprise-wide modern agile team (Business/IT/Ops)



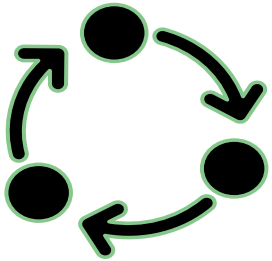
What are Product Mindset Strategy's Pillars?

Understand the pillars for an organization to establish, nurture and scale product mindset culture and behavior change?

Three Pillars of Product Mindset Implementation Strategy

1. Business Strategy aligned to end customers

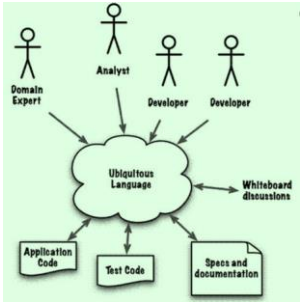
Operational value stream



3. Organize Product Teams

DDD / Team Topologies

2. Software Design & Architecture

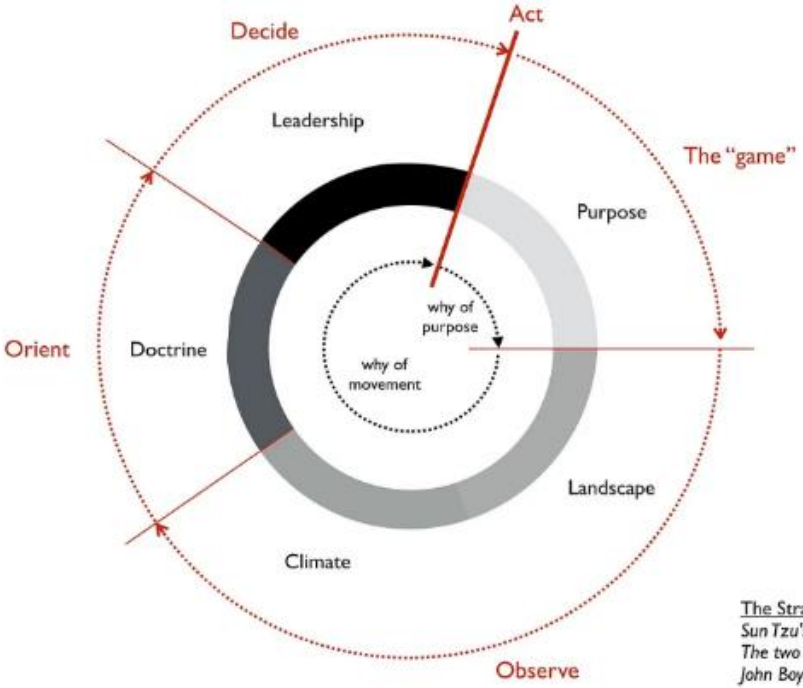


Rapid Delivery / JIT Architecture

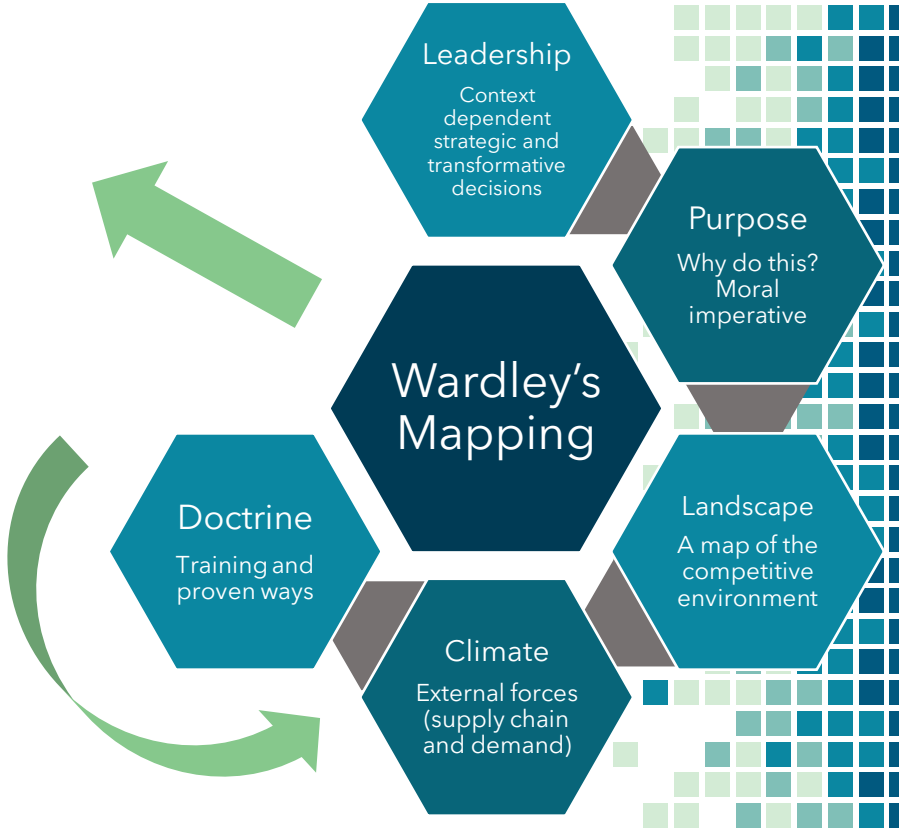
Pillar 1: Define business strategy to operational value streams

Articulate the business strategy formulation focused on customer centricity and identify potential revenue value streams

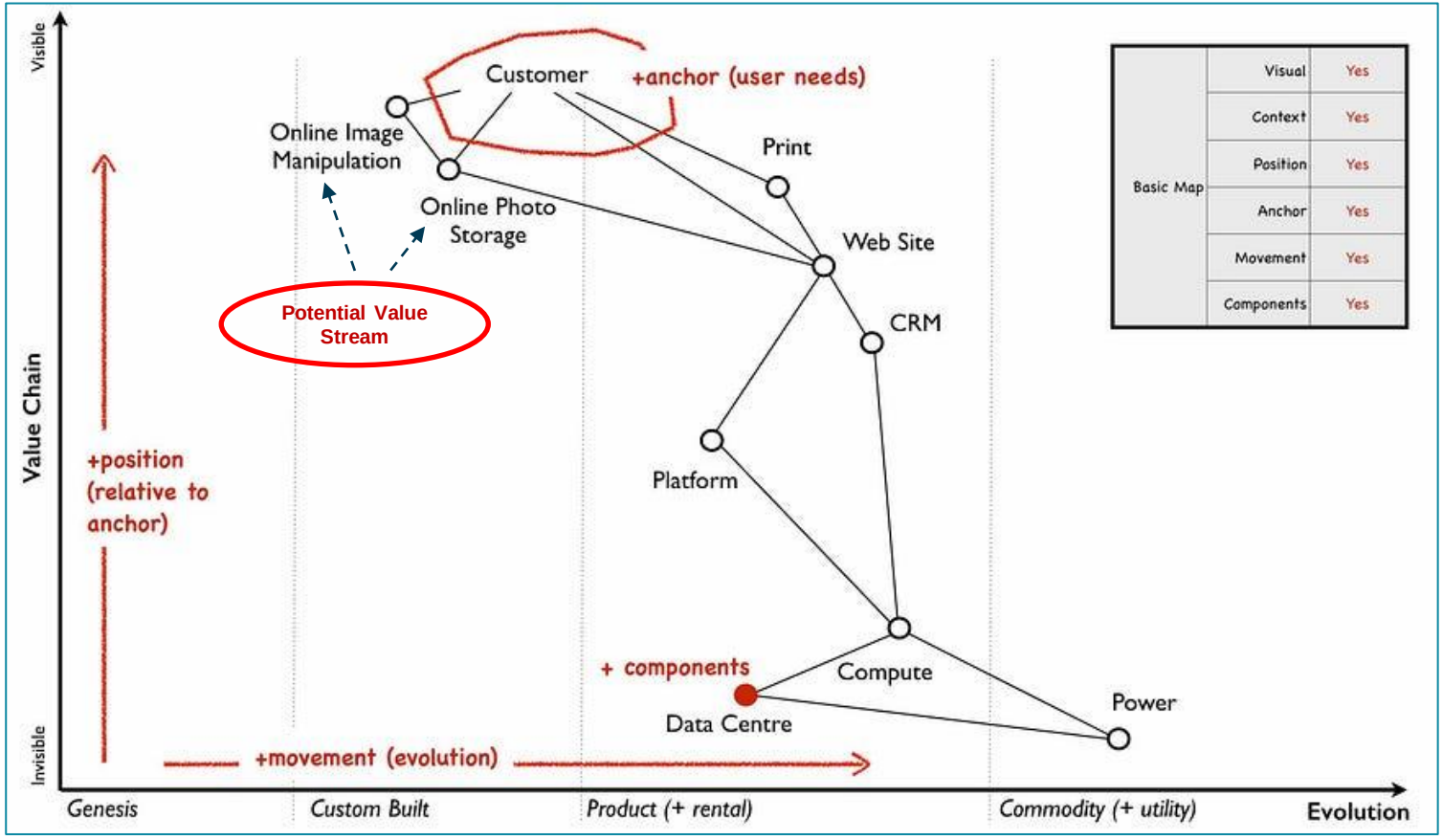
Define Business Strategy with Wardley's Mapping



The Strategy Cycle
Sun Tzu's five factors
The two types of why
John Boyd's OODA loop



Wardley's Mapping of Online Photo Storage Business



Group Activity 1 : Build wardley map for medical tourism for a healthcare insurance provider

Key Pointers

- Use the handouts at your table, build a business strategy for medical tourism using the Wardley's maps
- Apply the Wardley's map to capture and articulate your business strategy using the 1-4 steps in the handout
- Identify the customers, capabilities, relationship with needs, stage of evolution cycle for each component
- Show and Tell with workshop audience (2 min)

Time box : 10 min

Pillar 2 : Software Design and Architecture

Create a JIT architecture to implement with software architecture patterns for rapid delivery

CONTINUOUS DELIVERY

Continuous Delivery is the ability to get changes of all types—including new features, configuration changes, bug fixes and experiments—into production, or into the hands of users, *safely* and *quickly* in a *sustainable* way.

Increase Throughput with CI/CD Automation

Continuous Development - an iterative approach to software application development in which updates are released in small, ongoing batches

Continuous Integration – Integrate code changes from multiple contributors into a single project

Continuous Testing – Incorporate frequent automated feedback as an integral part of the software delivery pipeline through Automated testing

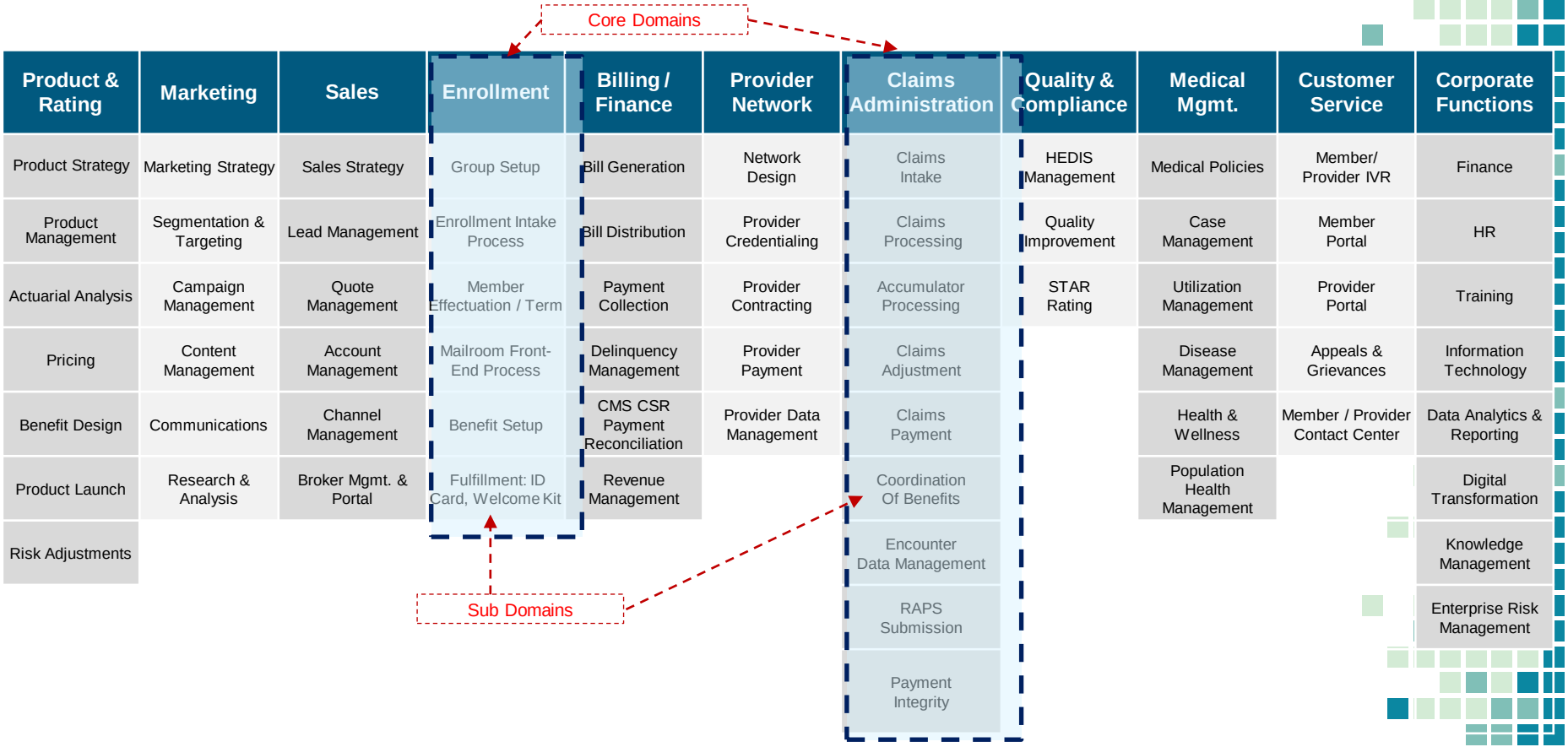
Continuous Deployment – Release the incremental software functionality automatically through testing and into production.

Continuous Monitoring – constantly monitor IT systems and networks to detect security threats, performance issues, or non-compliance problems in an automated manner

Continuous Feedback – Improve Operational, security and business performance by gaining insights via continuous monitoring

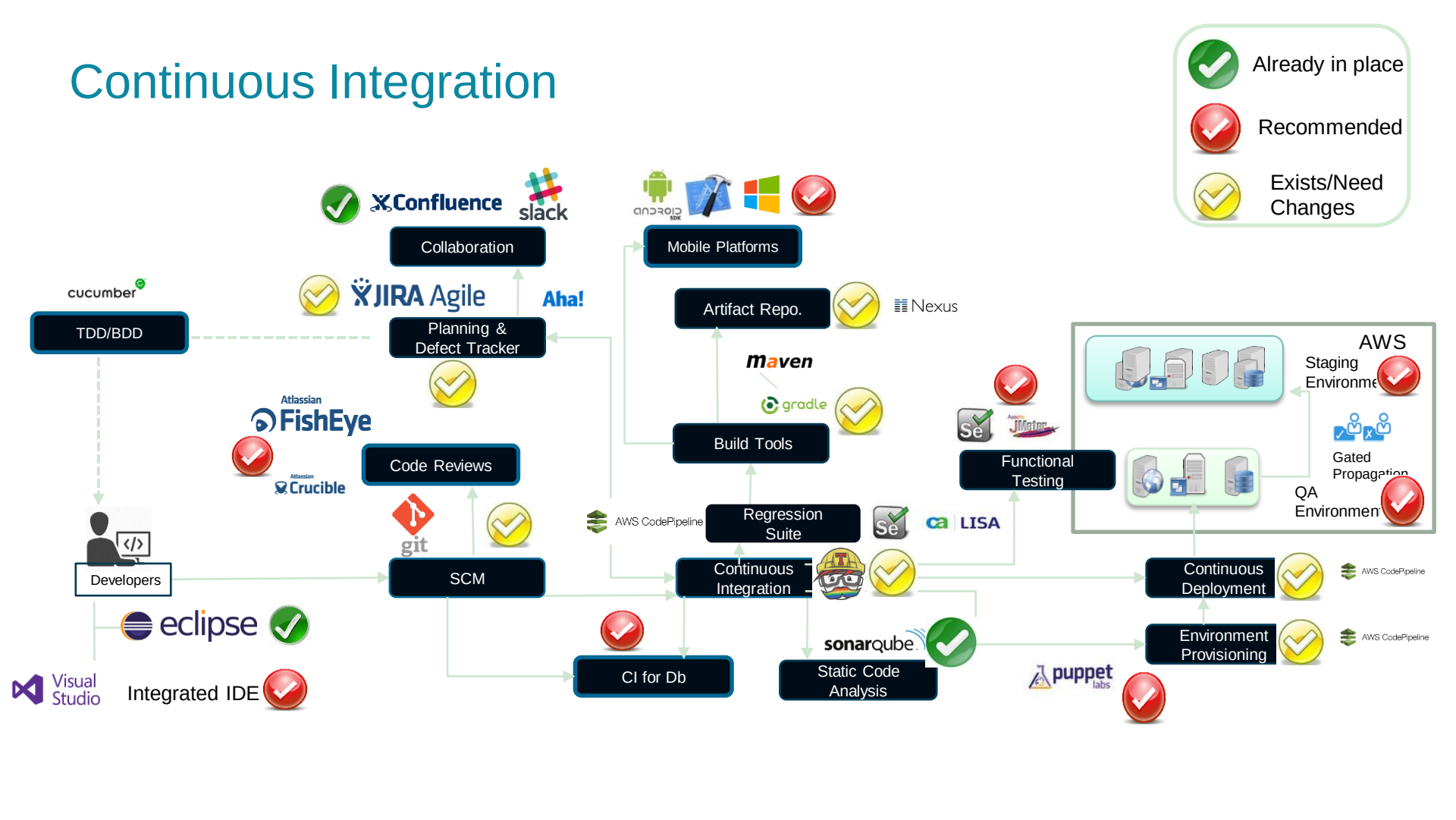
- **Low risk releases**.
- **Faster time to market**
- **Higher quality**.
- **Lower costs**.
- **Better products**.
- **Happier teams**.

Business Domain Driven Design applied to healthcare payer value chain



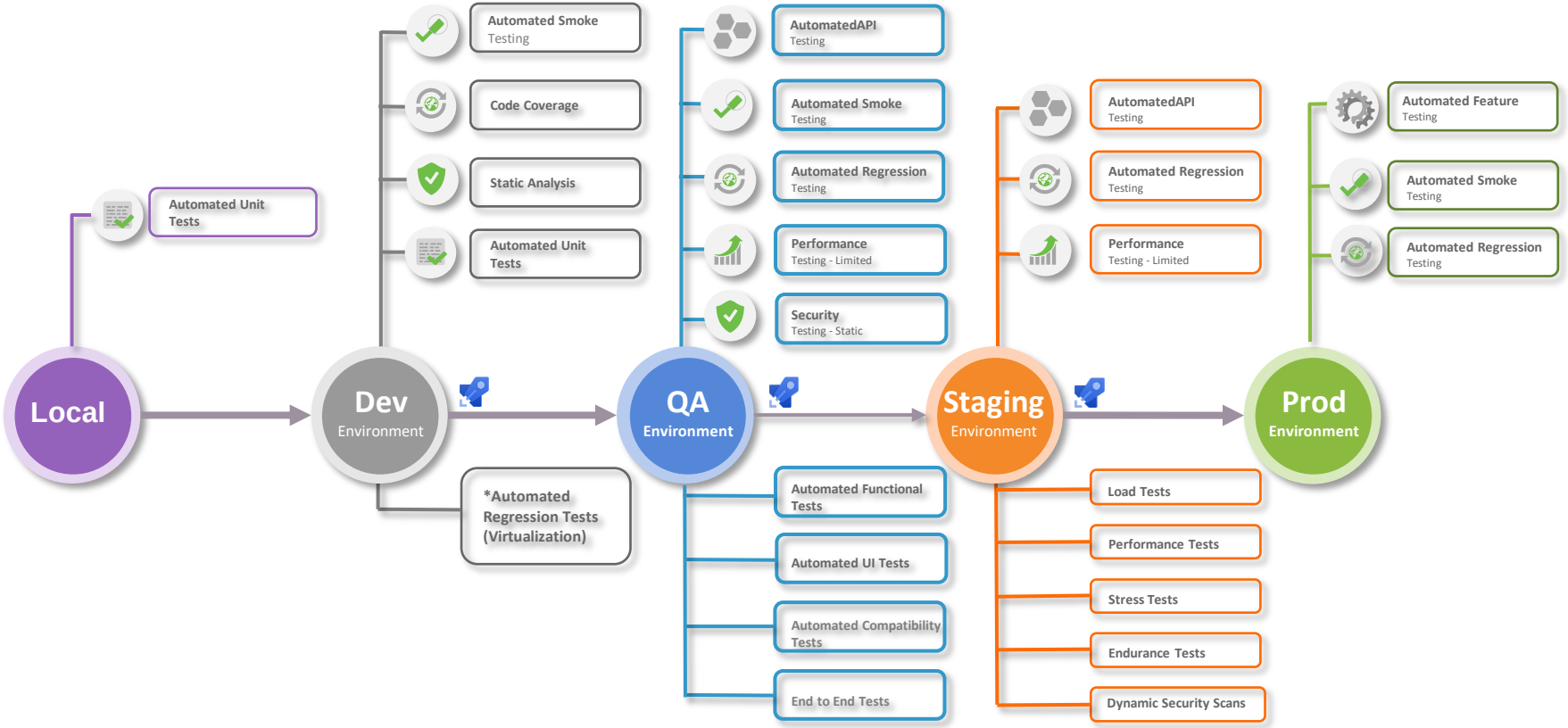
Technologies: AWS, Jenkins, Microservices, SonarQube, SonarLint, Confluence, FishEye, Crucible, Slack….

Continuous Integration



CONTINUOUS TESTING

Continuous Testing is a critical driver behind the effectiveness of DevSecOps by providing quality feedback continuously through every step of the SDLC to enable the team mitigate as many risks as possible early in the delivery cycle.

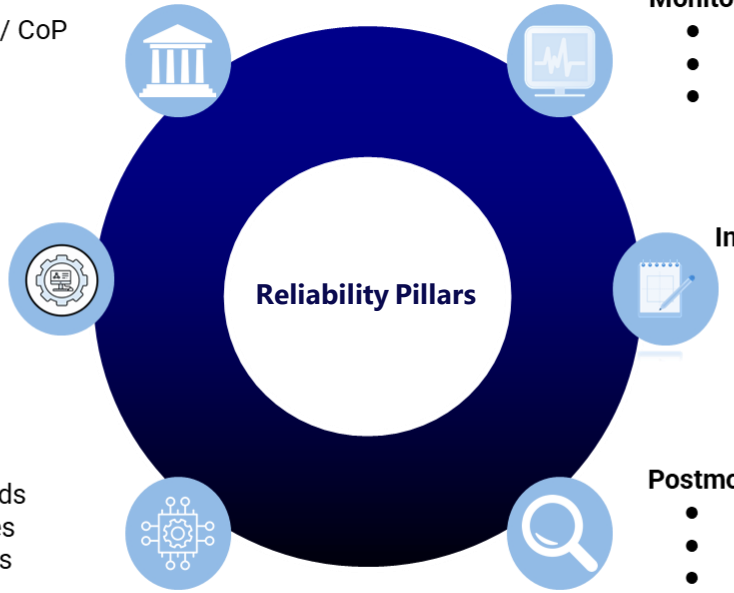


SITE RELIABILITY ENGINEERING

Site Reliability Engineering is the practice of applying Software Engineering principles to automate operations and infrastructure processes to create highly reliable and scalable systems by making them observable. Observability is key to being able to fix potential problems proactively. This increases the stability and quality of service that a solution provides end users

Governance
- Governance committee / CoP
- RE team models
- Outreach & education

Monitoring
- Tooling
- SLO Concepts
- SLO Adoption



Reliability-Focused Teams
- End-to-end ownership
- Prioritizing toil and technical debt

Incident Response
- Ingest and Escalation paths
- Alert quality and quantity
- Responder know-how

Architecture & Automation
- Architecture standards
- Application templates
- Reusable frameworks
- AI/ML
- Self-healing
- Disaster Recovery

Postmortem process
- Root cause analysis
- Follow-up identification
- Follow-up tracking
- Sharing learnings

Pillar 3: Organize into product teams and apply team topology

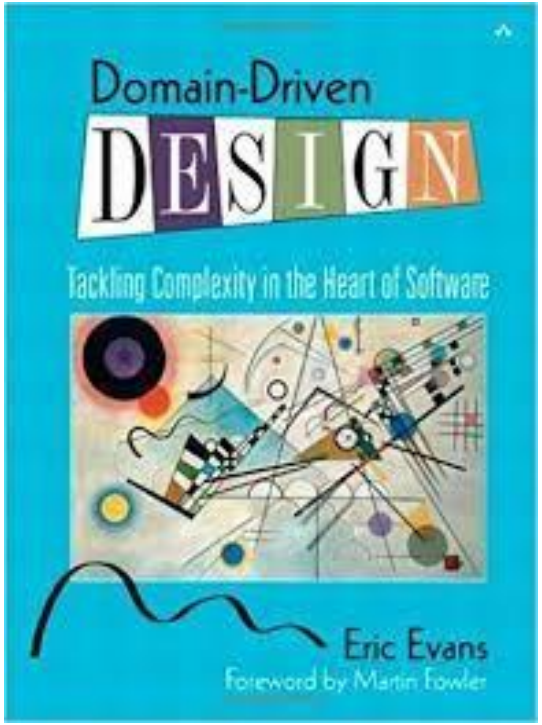
Apply team topology to a product team design, identify and launch programs of teams driven by domain driven design boundaries

Definition

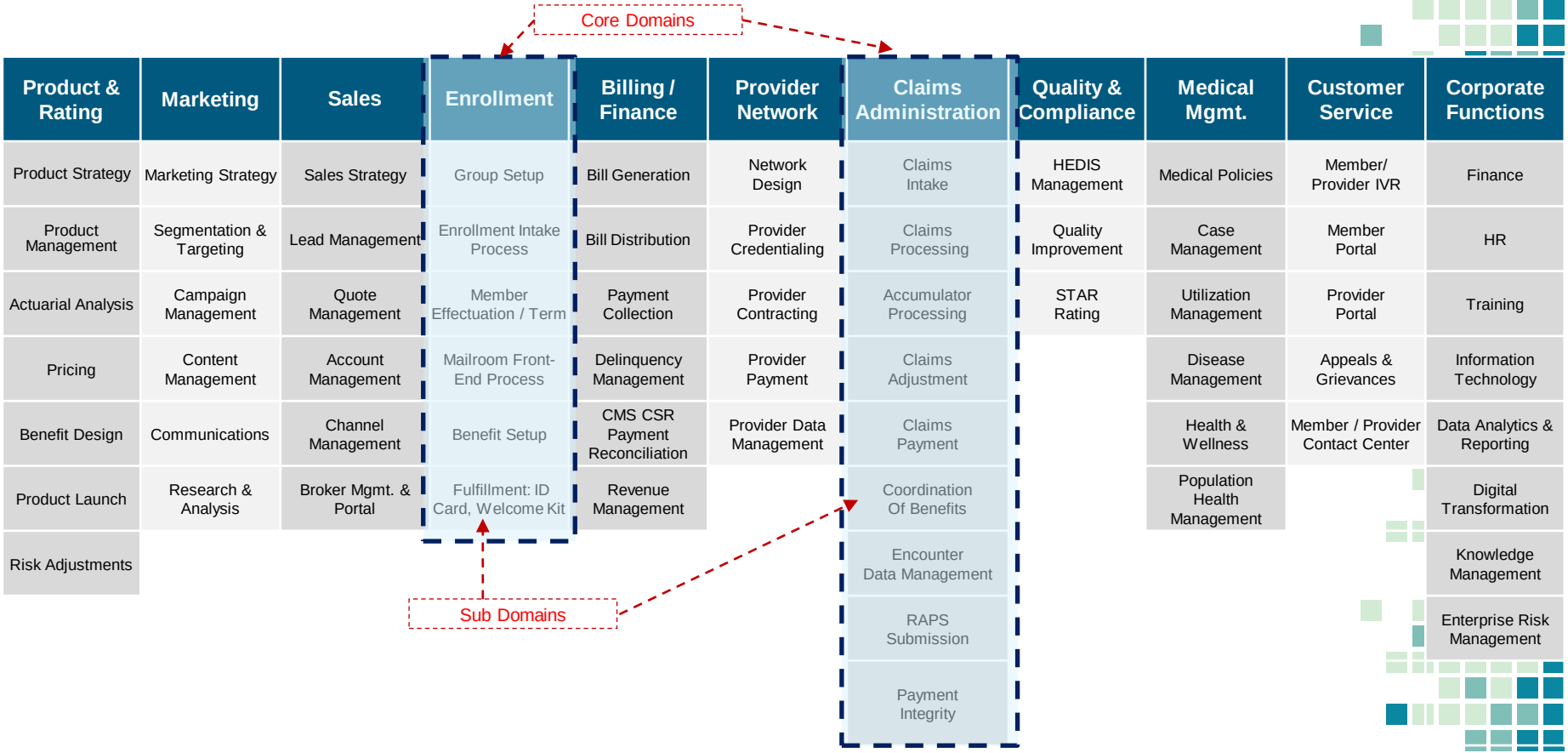
"...the real breakthrough of object design comes when the code expresses the concepts of a model."

"Anyone responsible for changing code must learn to express a model through the code. Every developer must be involved in some level of discussion about the model and have contact with **domain experts**."

- Eric Evans, Domain-Driven Design



Business Domain Driven Design applied to healthcare payer value chain



Product & Rating	Marketing	Sales	Enrollment	Billing / Finance	Provider Network	Claims Administration	Quality & Compliance	Medical Mgmt.	Customer Service	Corporate Functions
Product Strategy	Marketing Strategy	Sales Strategy	Group Setup	Bill Generation	Network Design	Claims Intake	HEDIS Management	Medical Policies	Member/ Provider IVR	Finance
Product Management	Segmentation & Targeting	Lead Management	Enrollment Intake Process	Bill Distribution	Provider Credentialing	Claims Processing	Quality Improvement	Case Management	Member Portal	HR
Actuarial Analysis	Campaign Management	Quote Management	Member Effectuation / Term	Payment Collection	Provider Contracting	Accumulator Processing	STAR Rating	Utilization Management	Provider Portal	Training
Pricing	Content Management	Account Management	Mailroom Front-End Process	Delinquency Management	Provider Payment	Claims Adjustment		Disease Management	Appeals & Grievances	Information Technology
Benefit Design	Communications	Channel Management	Benefit Setup	CMS CSR Payment Reconciliation	Provider Data Management	Claims Payment		Health & Wellness	Member / Provider Contact Center	Data Analytics & Reporting
Product Launch	Research & Analysis	Broker Mgmt. & Portal	Fulfillment: ID Card, Welcome Kit	Revenue Management		Coordination Of Benefits		Population Health Management		Digital Transformation
Risk Adjustments						Encounter Data Management				Knowledge Management
						RAPS Submission				Enterprise Risk Management
						Payment Integrity				

Potential high level organization structure applying core and sub domains

Product or Core Domain Area

Solution Manager

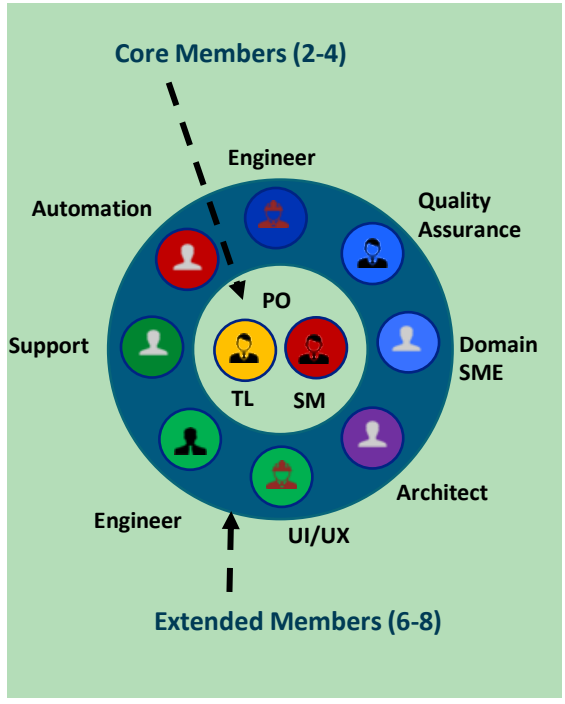
Claim Administration — Product Manager

- Product /Sub Domain Team 1
- Product Team 2
- Product Team 3
- Product Team 4
- Product Team 5
- Product Team 6

Enrollment — Product Manager

- Product Team 1
- Product Team X

Product Team

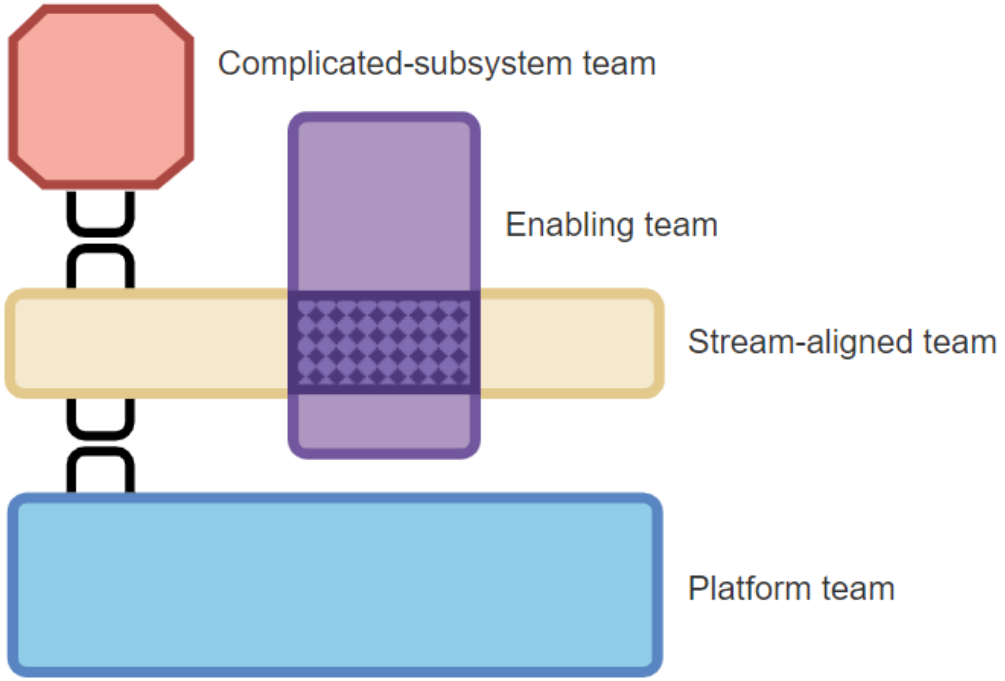


Benefits

- Faster time to value through velocity stabilization and engineering excellence
- Self-organize around creative and production goals
- Continuously innovate @ scale through podination (pollination of teams)
- Increase employee retention and experience

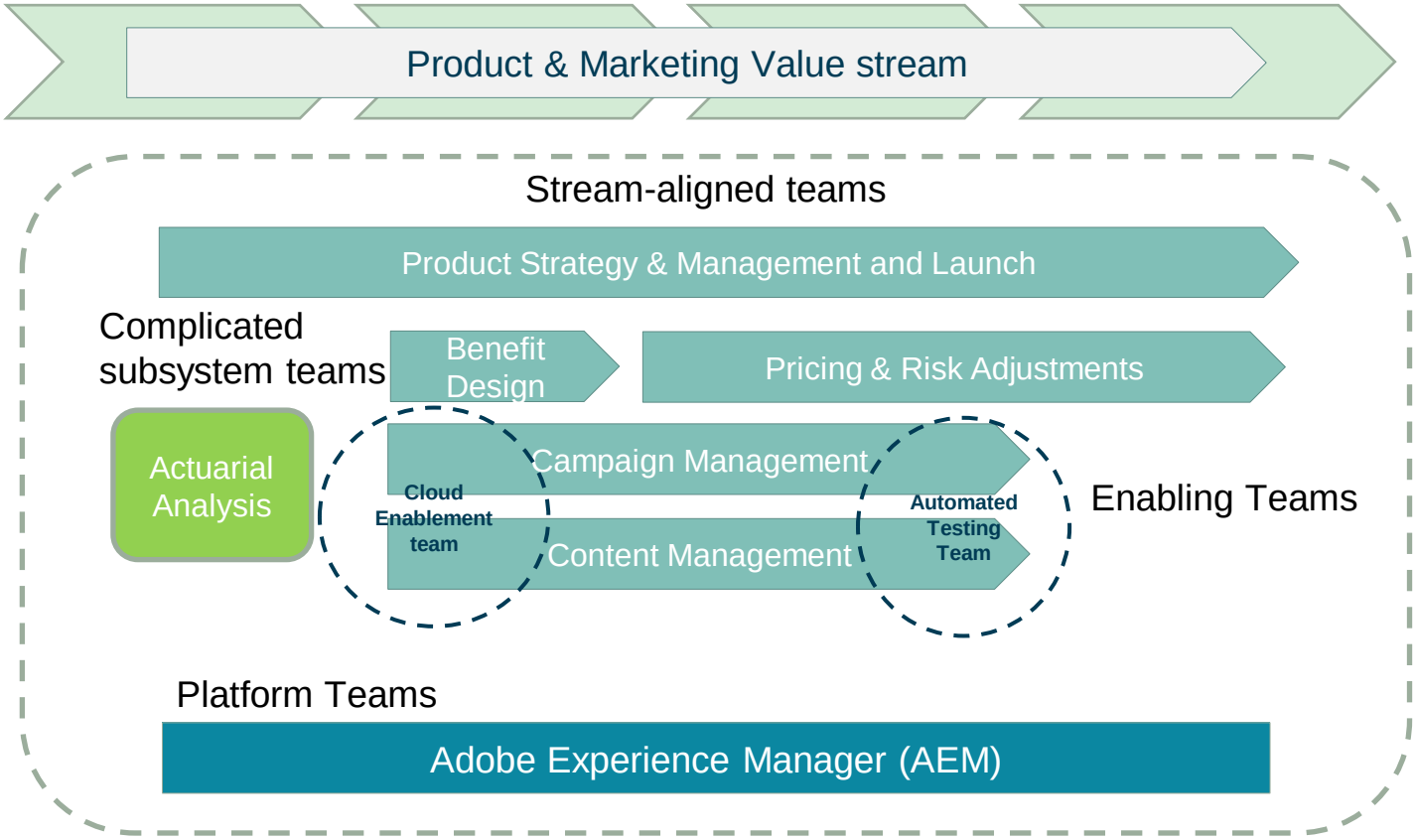
What are team topologies ?

- **Stream-aligned team** – organized around the flow of work and can deliver value directly to the customer or end user.
- **Complicated subsystem team** - organized around specific subsystems requiring deep specialist skills and expertise.
- **Platform team** – organized around developing and supporting platforms that provide services to other teams.
- **Enabling team** – organized to assist other groups with specialized capabilities and help them become proficient in new technologies



© Matthew Skelton and Manuel Pais from *Team Topologies*

Let us apply team topologies to Product and Marketing Core Domains (from earlier example)



Group Activity 2 : Apply team topology for product teams within Claim Administration Domain

Key Pointers

- Please use the provided handouts in your table to finalize the product teams for claim administration
- Apply team topologies to each product team and complete the team design
- Show and Tell with workshop audience (2 min)

Time box : 10 min

Client Story – Outcomes and Challenges

Large healthcare insurance payer business outcomes from product mindset and team topology applied

Designed to follow the science of digital transformation …

From

1. Misaligned Roadmaps across groups
2. No data or metrics
3. Siloed teams with multiple touchpoints
4. Waterfall / Basic Agile (no tools)
5. Low business value throughput
6. High defect density
7. Increasing tech debt
8. Complex CAB Process and no dependency / risk management
9. Migration to Cloud with no plan
10. No definition of CI/CD Pipeline
11. Monolith and manual deployments
12. Low confidence on releases

Transform While Performing Approach

Defect density reduction from 55% to 20%

Cost of quality improved from 50% to 23%

Partial work/ gold plating reduced to almost 2% from 25%+

Working the Transformation Backlog

Align to Value Streams and restructure based on Team Topology

Inflection Point: Measure what matters

Extreme Automation

Inflection Point: Prioritize what is valuable to customers

Discovery & Benchmark

Organizational Change
Business alignment with Dev value stream (Tools/Tech, People and Process)

Coaching & Upskilling

Client

Cognizant Consulting

To

1. Cross-functional teams aligned to Business (Support, Dev, SRE, Ops, PO and UI/UX)
2. SAFe implementation and FTE training (onboarded dependent teams and vendors)
3. Transformation team to guide delivery and accelerate adoption across process, technology and culture while addressing bottlenecks from VSM with closed feedback loop
4. Architecture : Data First + API First strategy
5. Single source of truth – Integration between SNOW and JIRA (Execution) aligned to JIRA Align (Strategy)
6. Coaching and upskilling– enabling a culture of continuous learning
7. Transparent and live metrics (Hygeia, JIRA, JIRA Align – custom dashboards)
8. Powerful execution model to integrate business to delivery and bridge the gaps between BIO, business, architecture, dev, QA, front end and backend teams
9. Interop - Nextgen solution

Instrumentation

From Excel to Jira Align Enterprise, Integrated JIRA, Agility Health Radar, TaskTop (Future state), Jenkins, Hygeia, developer productivity tools and plug-ins, cloud / microservice design patterns, SmartBear , Selenium, Jmeter , Fortio , ServiceMesh, Google Analytics

Key Takeaways ...

Define your target state – achieve goals in increment, measure with business outcome

Culture is the key – lead and live it every moment

Change is a journey and not a destination – have patience

Key Principles – adopt and ensure consistency in practices

Flow, Feedback and Experiment

Learn from others and avoid waste

THANKS!

Any questions?

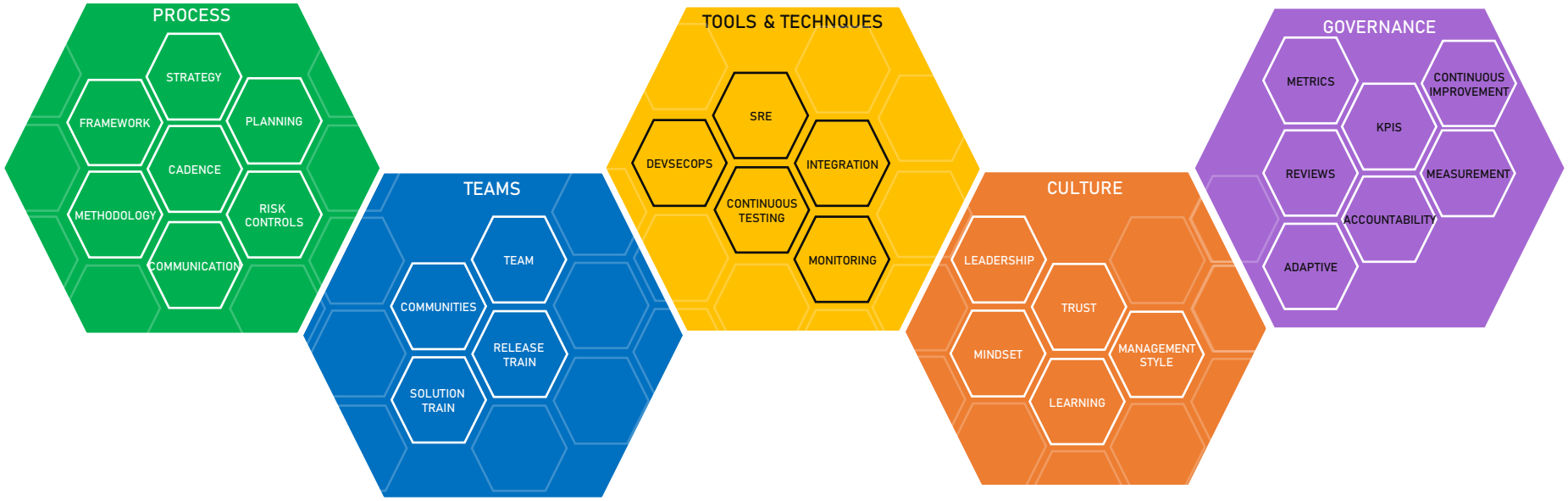
You can find us at:

Pranay.chanda@cognizant.com

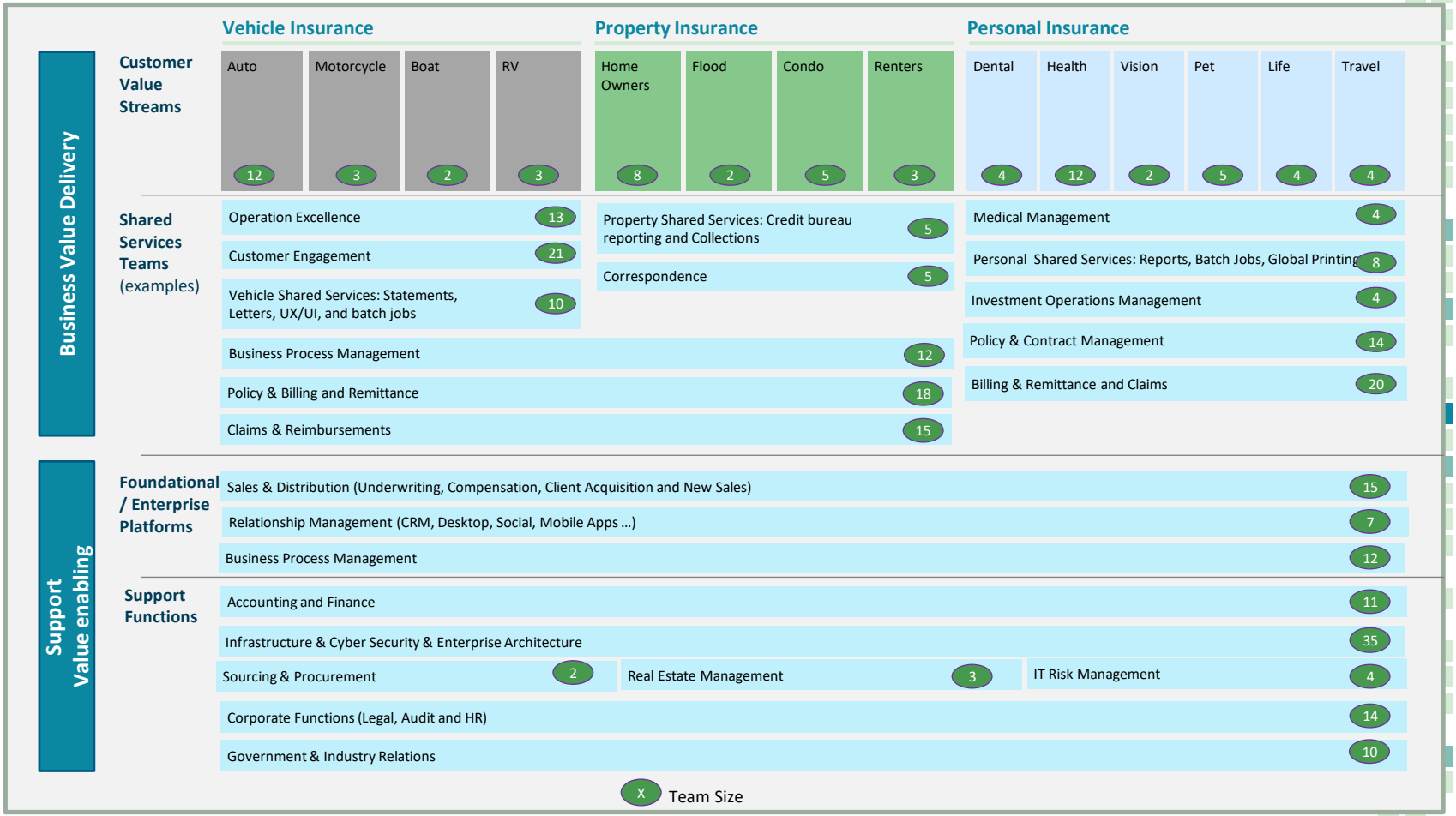
VC.Saravanan@cognizant.com

Appendix

ASPECTS OF PRODUCT CENTRIC DIMENSIONS



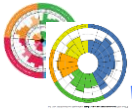
Insurance operational value streams driven by domain driven design principles ....



Once we have organized product teams, how do we launch them ?

Define the MVP

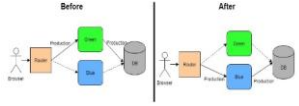
Identify and select MVP candidates, VSM Analysis, Assess DevOps 24 capability AgilityHealth/DORA Enterprise DevOps assessment/Recommendations provided. Workshops Current/Future, MVP Walkthrough



We are here

First Business Backlog Stories

TDD/BDD led stories, CD delivery to production, 12 factoring, Day 2 Ops toolchain, Pair Programming stories



MVP in Production

First full cloud native app in production produced by CD pipeline, practicing DevOps/Cloud Native PCF Team

Kick-off

Week 0-?

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

Week 10

Final Readout & Next MVP

Pre-flight checklist completion

Recommendations regarding improvement opportunities and key priorities presented

Dojo Start – Product Team Readiness

Occupy dojo venue, workshops: PCF, TDD/BDD/CD, 12 factor, and DevOps Practices, baseline backlogs, refactor vs replatform on PCF, MVP teams learn to create CD pipelines, PCF deployment, DevOps toolchain, updated backlog, AC: skeletal CD pipeline

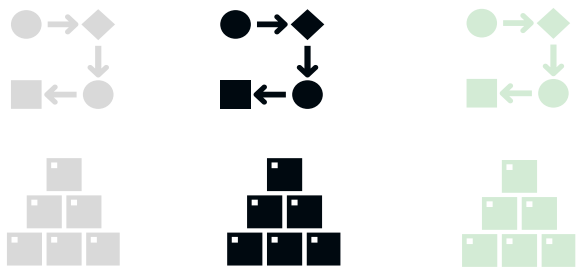
Canary Release to Production

Showcase, Product release through CD pipeline with high quality/confidence, MTTR <1hr, Full CD replacement of legacy SDLC, Blue/green deployment

Challenges of healthcare organization with project mindset …

Implemented using a project mindset

Example - Exchange expansion to new states



Project mindset overview:

- The initial foundation is developed for North Carolina, which is the first state for Exchange expansion
- For the next set of states, a completely new plan-build-run lifecycle is identified with funding separately for each project
- When NC was first implemented, there was no vision to think of Exchange as a product and identify possible extensibilities to new states

Key challenges with project mindset

Lacks customer centricity	Starts with only the project scope in mind as compared to establishing a long-term vision, strategy, and product roadmap
Lacks agility	Similar for each state/group; minimal time to market efficiencies achieved for new product releases
Lacks economies of scope	Minimal; Similar for each state/group; no cost efficiencies for new product releases

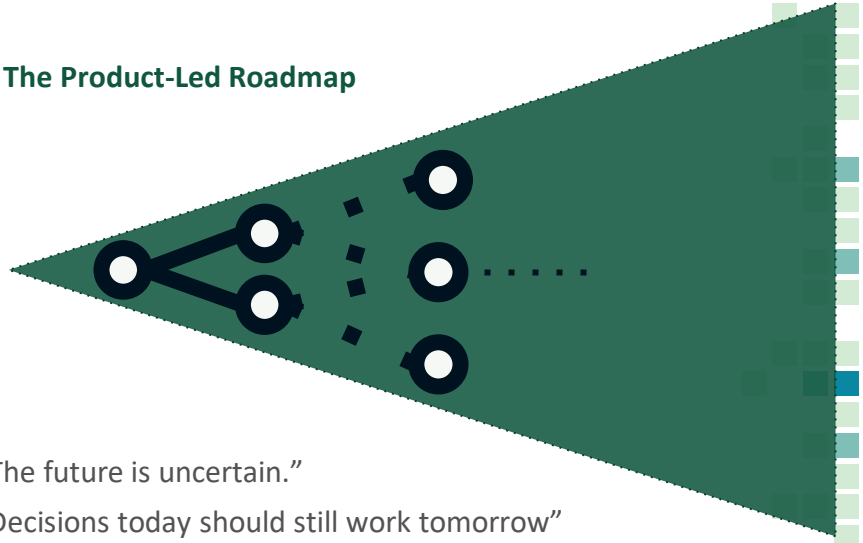
Product Mindset Led Roadmap

Transitioning from a project to product-driven culture – adaptable, data driven, outcome focused

The Project-Led Roadmap

- "The roadmap is perfect."
- "We'll hit business goals if we follow it."
- "The future is another team's problem."
- "Just point technologists in the right direction, check in when completed."

The Product-Led Roadmap



- "The future is uncertain."
- "Decisions today should still work tomorrow"
- "Target business results, not specific features"
- "Data drives better predictions."
- "Short term outcomes *and* long-term outcomes."