GROUP 008

AGILE PROJECT MANAGEMENT

Sebastian & Serigne

Project Management & Outsourcing in an Era of Digitalization 2022

TOPICS

- What is 'Agile' or 'Agile Management'?
- What is 'Agile Project Management'?
- Agile Project Management vs. Traditional Project Management
- Agile in a broader perspective
- Links to other course topics

WHAT IS AGILE OR AGILE MANAGEMENT?

WHAT IS AGILE?

"Its blanket term, referring to any kind of approach, technique, framework, method or practice that fulfills the values and principles of the Agile Manifesto."
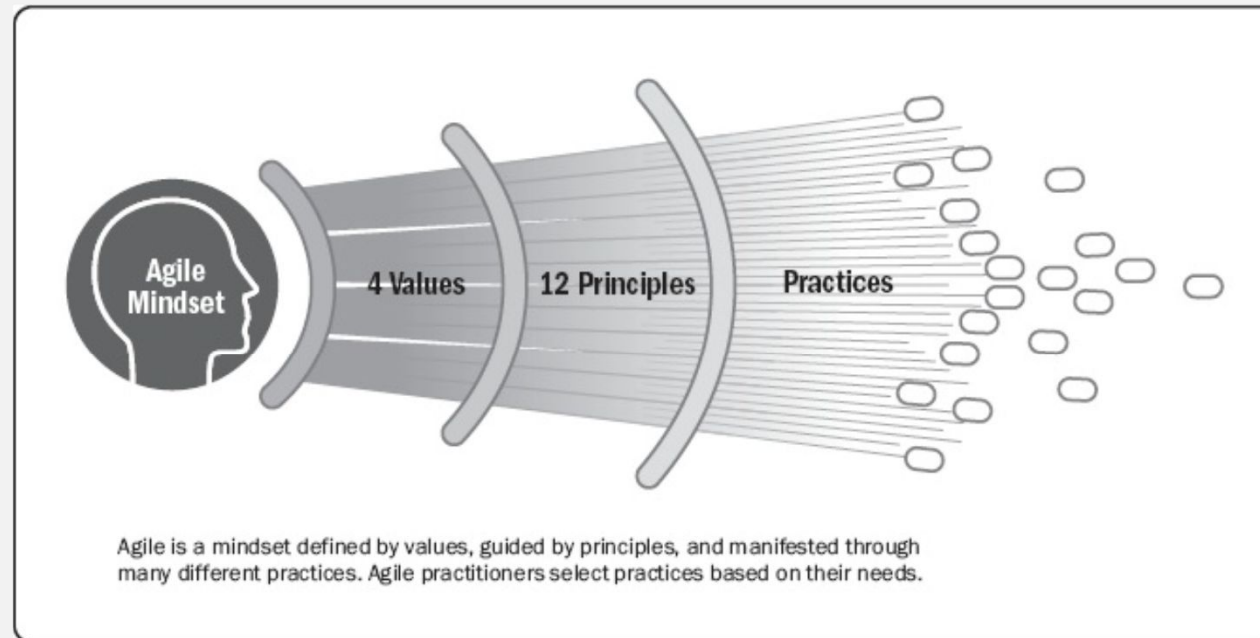
- Agile in general is a mindset

Agile is a mindset defined by values, guided by principles, and manifested through many different practices. Agile practitioners select practices based on their needs.

Figure 2-3. The Relationship Between the Agile Manifesto Values, Principles, and Common Practices

AGILE MANAGEMENT

Applying agile principles through their practices to:

- Bring valuable innovation to the market faster
- Lower risk
- Improve team engagement customer satisfaction

How does it work?

- The **lead** identifies and sequences opportunities for agile innovation
- **Executives** assemble small, multidisciplinary, self-governing teams to address the opportunities
- **Initiative owner** works with the team to
  - Establish vision
  - Develop and prioritize list of more detailed opportunities
  - Ensures results
- **Multidisciplinary team** creates roadmap, break complex problems in manageable tasks and focuses on most important opportunities, create working prototypes and works in short, iterative cycles
- **Customers** collaborate closely test and provide clear and rapid feedback
- **Team** identifies opportunities for improvement

AGILE PROJECT MANAGEMENT

WHAT'S AGILE PROJECT MANAGEMENT ?

Agile project management is a collaborative, iterative project management approach that incorporates continuous testing and responsiveness to change.

What is expected from agility?

- Ensures feedback can be acted on quickly

- Flexibility in decision making

- Responsive technique of process management

- More adaptable reaction to changing business sector

- Greater customer satisfaction

- Happy teams

MAIN AGILE FRAMEWORKS

Which are the main frameworks?

- Enterprise Kanban, aka Portfolio Kanban

- Disciplined Agile (DA)

- Nexus

- Large Scale Scrum (LeSS)

- Scrum@Scale (SaS)

- SAFe and Kanban

- Scrum of Scrums (SoS)
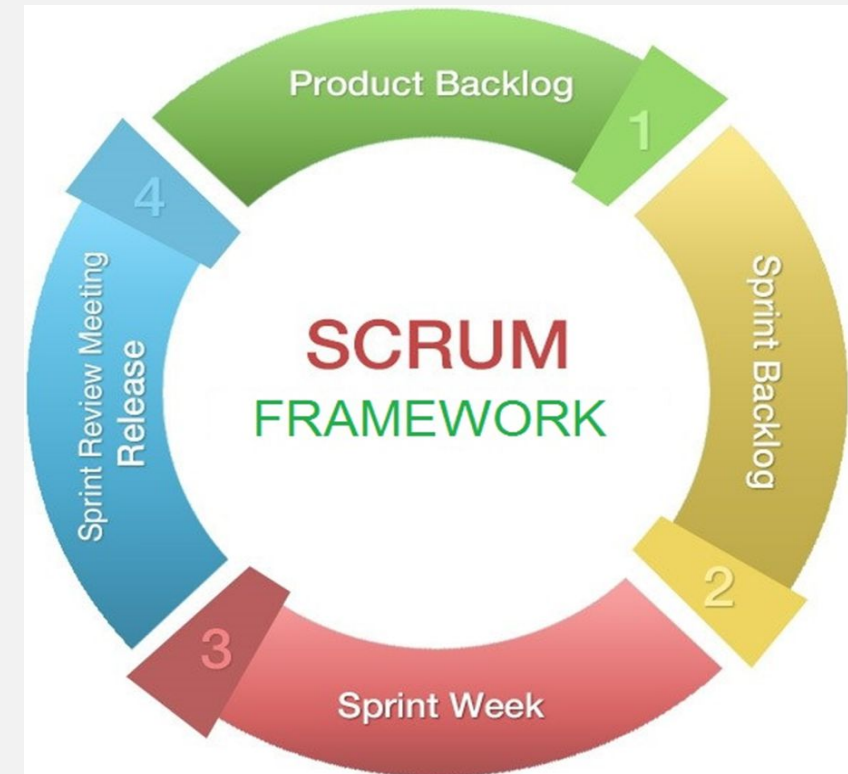
SCRUM CHARACTERISTICS

Scrum is one of the agile approaches designed to guide
teams in the iterative and incremental delivery of a product.
Often referred to as "an agile project management framework
that supports agility"

- Product backlog

- Sprint backlog

- Sprint week

- Sprint Review meeting release

- Retrospective and the next sprint planning
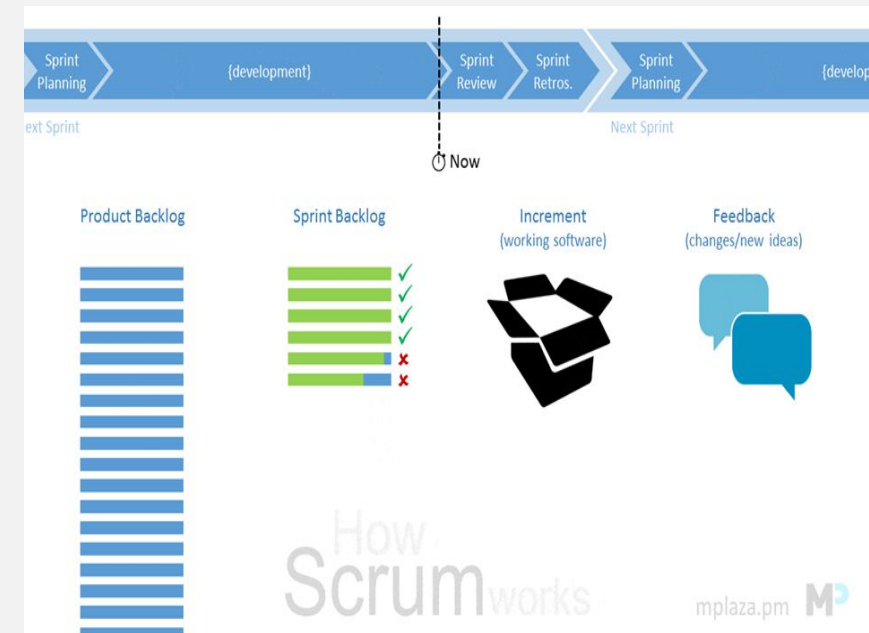
SAME FRAMEWORK FOR ALL PROJECTS?

Agile frameworks are more suitable for :

- IT project especially in software development

- projects you can test and get feedback relatively quickly

Not very efficient for :

- High-level planning as a kind of superstructure or construction

- In projects where predictability, planning, and control are more important than creativity and innovation

- The cost and timeline to implement the plan are clearly known and predictable.

- When the team developing whatever is only 1 or 2 people

AGILE VS. TRADITIONAL

DIFFERENCES
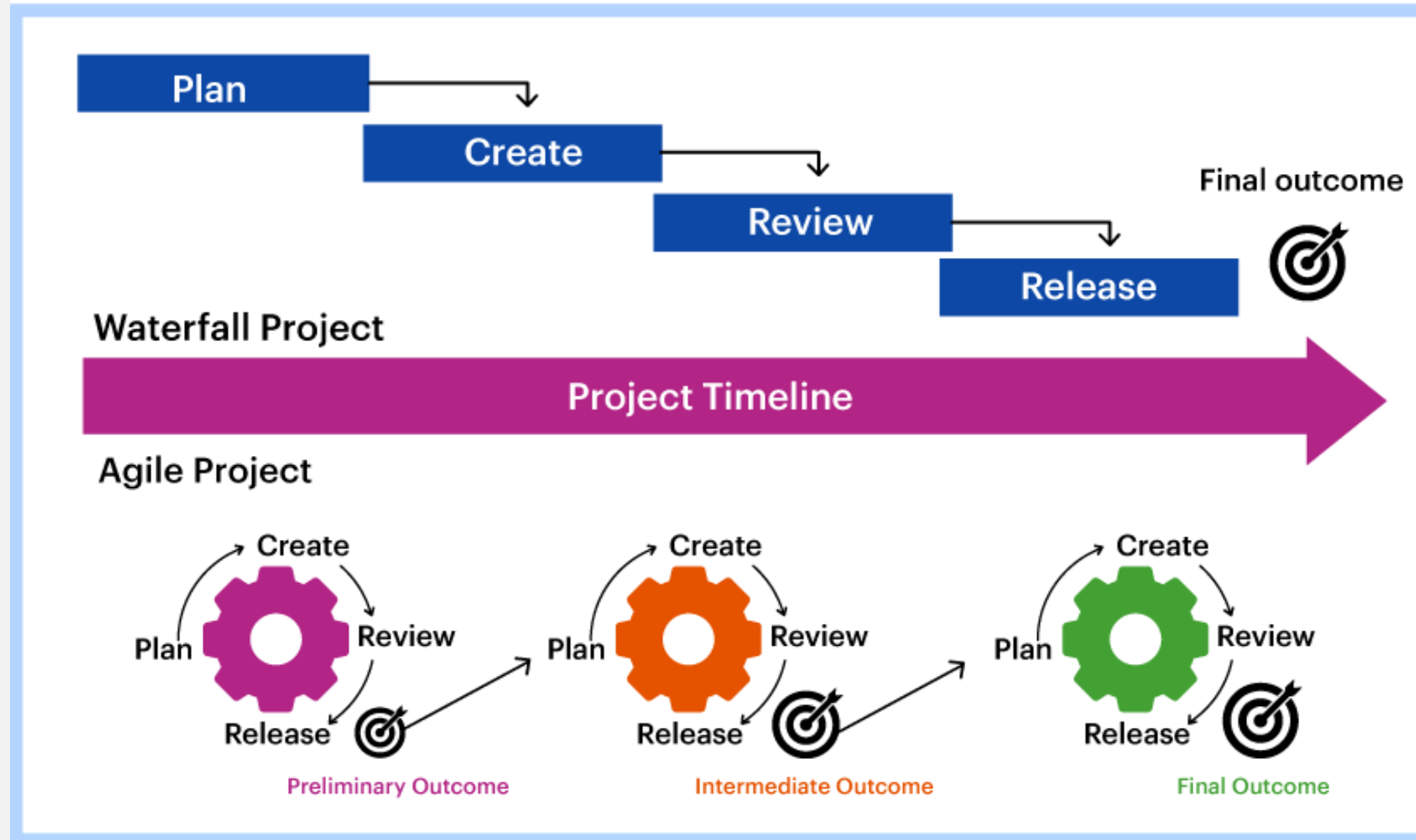
DIFFERENCES

Planning Horizon	Long-term planning focused on the entire project life cycle
Project Planning	Sophisticated planning for the entire project life cycle
Activities Details	Predictable, linear, and measurable and sophisticated, formal documentation
Project Scope	Based on the detailed specification of what will be built.
Scope Conformance	Deviations are identified and activities adjusted to maintain planning
Control and Monitoring	Carried out via performance indicators, timelines, formal documentation, performance reviews, and audits, with extensive and infrequent team meetings
Management Style	Mechanic, formal, and bureaucratic. Strong presence of the project manager. Highly specialized, working with specialized teams

Planning Horizon	Short-term planning focused on iteration objectives
Project Planning	Lean planning for the cycle of iterations with constant re-evaluations/refinements
Activities Details	Unpredictable, nonlinear, incremental and constant deliveries, lean/informal documentation
Project Scope	Based on the vision of what must be built. Comprehensive and metaphorical representation of objectives and expected outcomes in an ambiguous and challenging way
Scope Conformance	Changes are identified and planning is adjusted for each interaction
Control and Monitoring	Made from physical and/or virtual visual artifacts and devices, such as posters, murals and pictures, with short and frequent team meetings
Management Style	Flexible, variable, and adaptive. No project manager. Multidisciplinary teams, selfmanaged and with low hierarchy

HYBRID PROJECT MANAGEMENT

- **Combined when:**
  Need to minimize unnecessary or low-value function or to obtain faster development

- **Not recommended when:**
  Organizations need to obtain long-term goals or a higher degree of documentation and scope control

- **Three main challenges:**
  Conflicts of process, business and people

Multiple models in the literature defining how a hybrid model should look like:
→ Most of them combine roles, strategies and working practices of both worlds.

HYBRID PROJECT - CHARACTERISTICS

| Characteristic Type	Hybrid
Planning Horizon	Long-term planning focused on the entire project life cycle, and short-term planning focused on iterations
Project Planning	Sophisticated initial planning with constant re-evaluations and refinements
Activities Details	Predictable, nonlinear, and measurable detailing for the complete cycle; unpredictable and immeasurable for iterations. Both incremental and phased deliveries, with balanced and formal documentation
Project Scope	Composed of a long-term specification with formal descriptions of the objectives and expected results for the project as a whole, and a short-term view for iterations, based on metaphorical and abstract representations of each iteration objective
Scope Conformance	Changes are identified and short-term planning is adjusted for each interaction, avoiding deviations in long-term planning
Control and Monitoring	Incorporates traditional control and monitoring practices from a long-term perspective (project life cycle) and agile from a short-term perspective, project iterations
Management Style	Adaptive and formal. Presence of the figure of a project manager. Multidisciplinary teams with medium hierarchy

HYBRID BY HAYATA AND HAN (2011)

'Waterfall up front' and 'waterfall at end'
- Traditional approaches at the initial and final phases
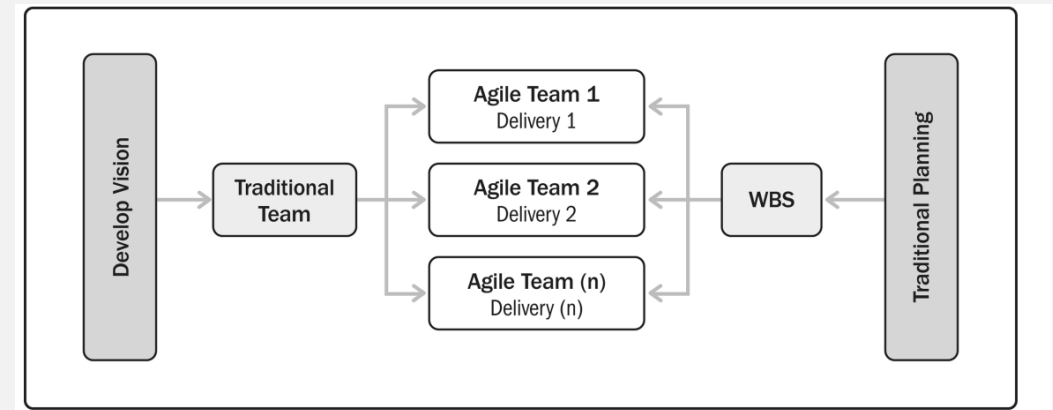- Agile approaches in the development and testing phase
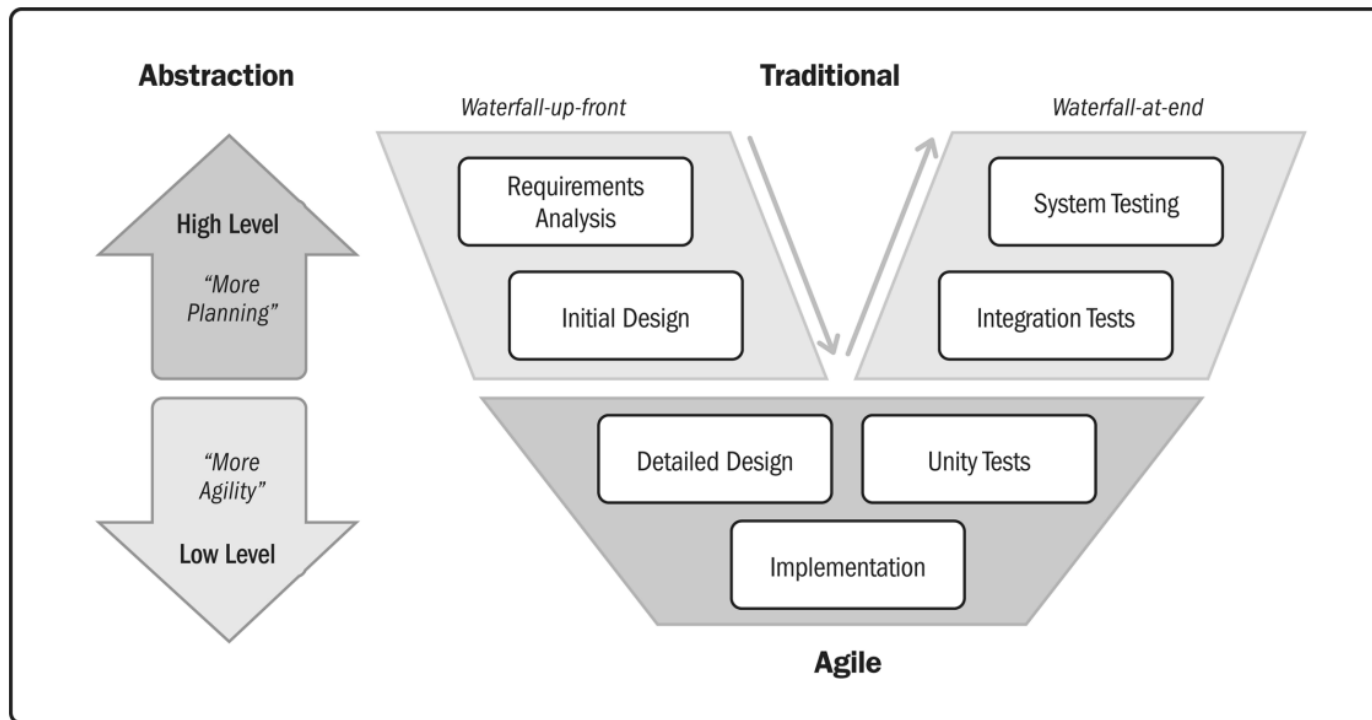
HYBRID BY BONFIRE (2016) & HYBRID BY AMARAL (2011)

- Traditional approaches in initial and final phase
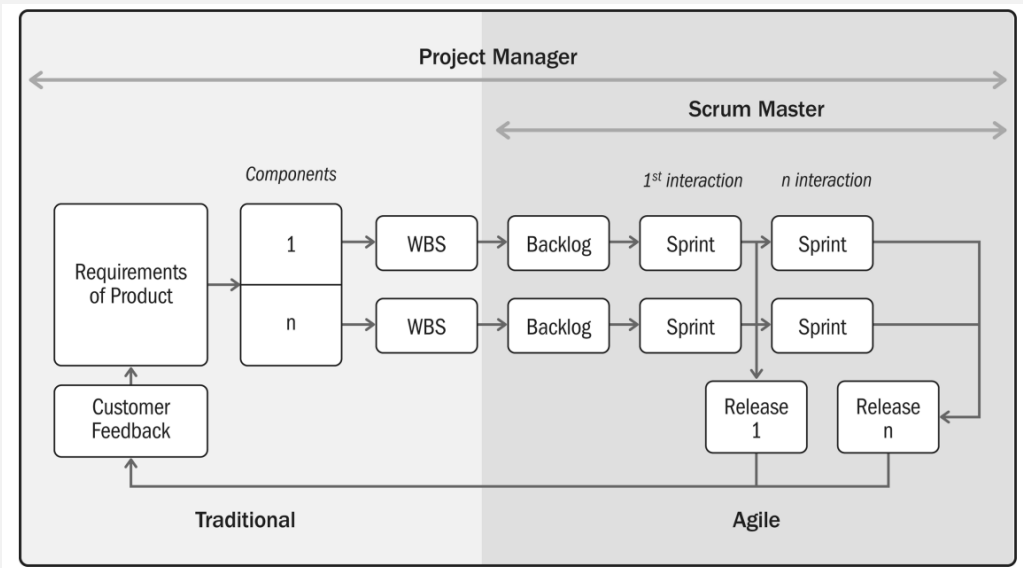
- As well using practices and approaches from both worlds

BROADER PERSPECTIVE

STRATEGIC CHALLENGES NOW AND THEN

General uncertainty as big challenge
- '..an individual's inability to predict something accurately.' (Miliken, 1987)
- macroeconomic, political, social, technological, environmental, specific industry

Problem: Underestimating uncertainty is dangerous.

- **Worst case:** Unable to protect the company against threats.

- **Best case:** Strategies that ignore the potential opportunities inherent in uncertainty

3 Core Domains of Uncertainty:
1. Volatility
2. Complexity
3. Ambiguity

STRATEGIC CHALLENGES NOW AND THEN

Volatility

- Strategic decision are influenced by sudden changes which affect the company's situation.
  On a **firm level:** raw material price, shorter product lifecycles, changing technology → difficult long-term decisions
  For example: Radio (38 years to reach 50 million people) vs. Facebook (two years to reach the same)

- On a **macro-level** influenced by strongly interconnected sectors (Merkel's switch from nuclear to fossil and renewable → completely new transitional structures → What's now: Ukraine crisis and back to nuclear?)

STRATEGIC CHALLENGES NOW AND THEN

Complexity

- Growing **number of dimensions**
- Address a **broader range of stakeholder interest**
- **Increasing global presence** through globalization especially in industrialized worlds
- Additionally, a wide **variety of products** are forcing to have a complex product portfolio
- **Information overload** increases in speed

Ambiguity

- This leads to increasing ambiguity in decision making (which variables are involved, new situations → lack of clarity).

WHAT SHOULD BE MANAGED AGILE?

Agility a framework to handle uncertainity so actitivites which should be managed in an agile way include the following:

- IT architecture (bank application as an example: guest presentation)

- Regulatory issues (Macron Law)

- In environmental issues (climate change)

SPECIFIC FRAMEWORKS

Agility might be a solution

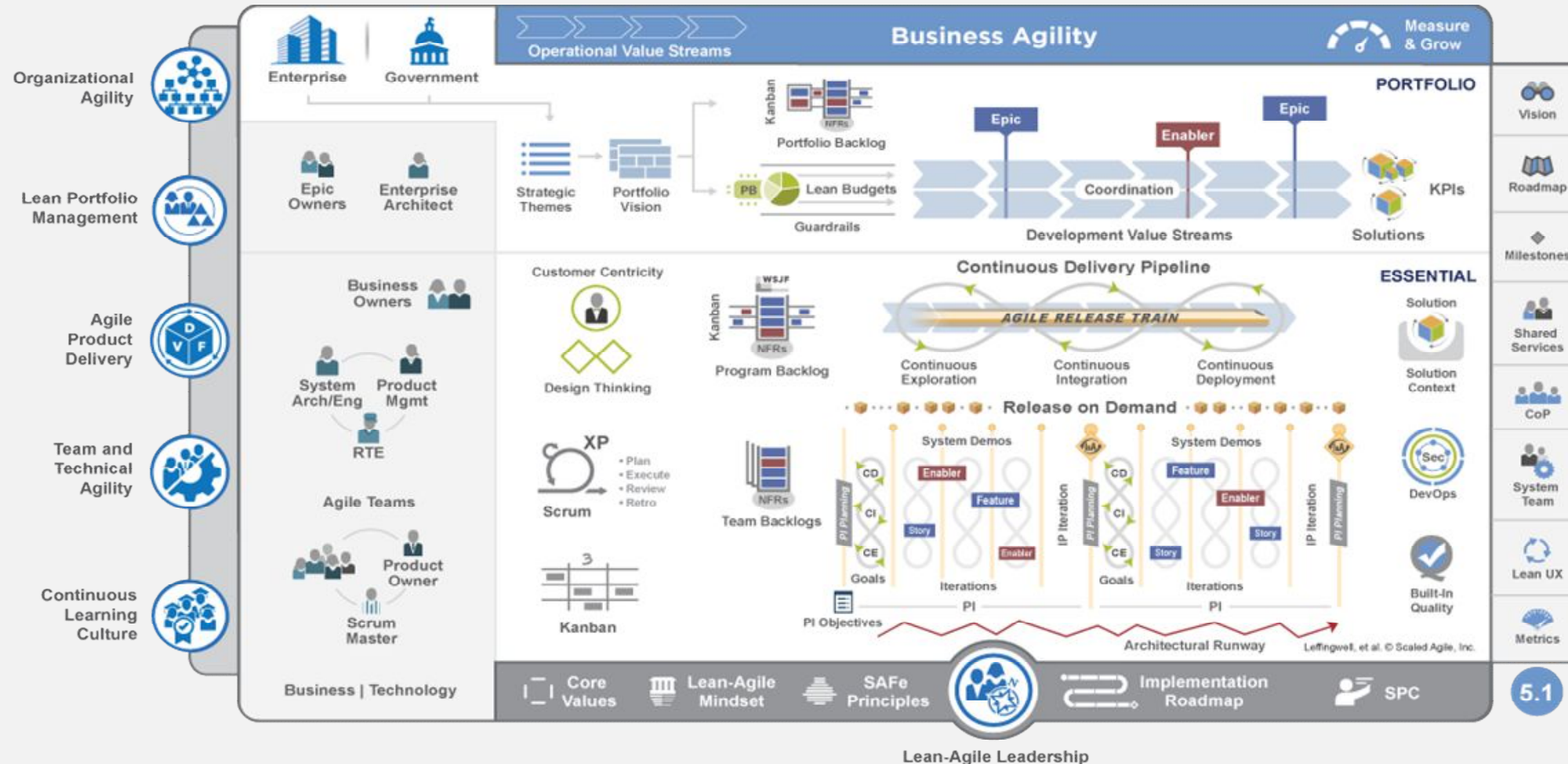In today's business, we face many challenges, uncertainity and unpredictability and companies need scaled agility:

- Scaled Agile Framework Level 1: Team Level

- Scaled Agile Framework Level 2: Program level

- Scaled Agile Framework Level 3: Large Solution Level

- Scaled Agile Framework Level 4: Portfolio Level

SPECIFIC FRAMEWORKS

Scaled Agile Framework

# AGILITY IN OTHER COURSE TOPICS

AGILE AND DIGITALIZATION

Digital Transformation: „.. a tool for transforming business processes, cultures, and organizational aspects to meet changing market requirements brought about by digital technologies." (Nasiri et al. 2020)

- For digitalization organizational change is a precondition
- It easily becomes a bottleneck if not adapted properly.
- Necessity to change/replace traditional processes, structure, management to more agile approaches
- Even redesigning organizational structures based on the new conditions to gain organizational agility.
- Organization's ability to identify unexpected changes in the environment and respond swiftly and efficiently by utilizing and reconfiguring internal resources, thus gaining a competitive advantage in the process

AGILE IN PROJECT PORTFOLIO MANAGEMENT

By definition, a portfolio usually represents a collection of projects, products, investments, programs, etc.

- Promotes flexibility

- Enables portfolio managers to reallocate funds to emerging priorities based on changing customer requirements

- Focus on maintaining transparency

- Continuously experiment to determine whether a project is valuable
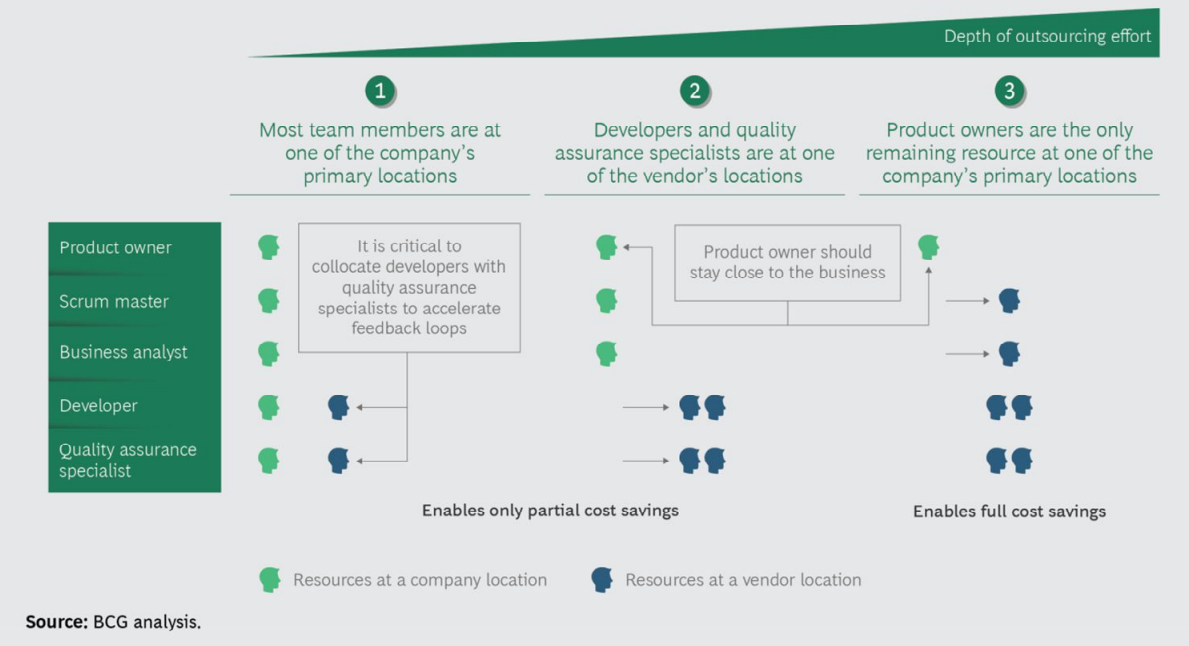
- Align strategy with execution

Source: Stettina & Hörz. "Agile portfolio management: An empirical perspective on the practice in use." 2015
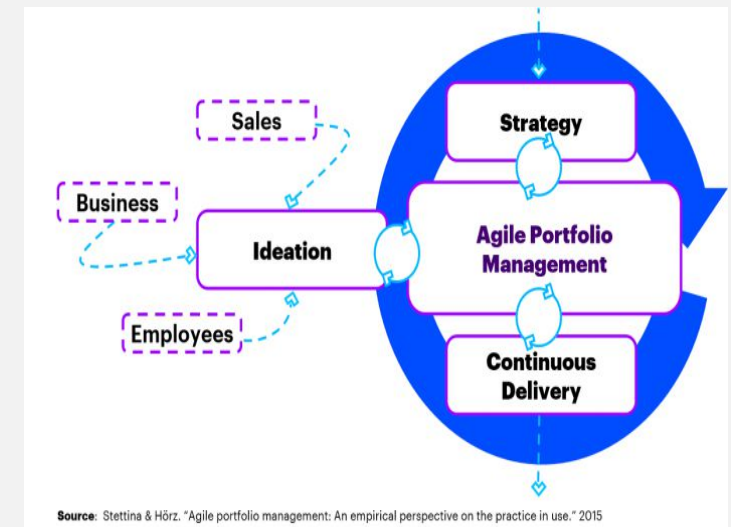
AGILE IN OUTSOURCING & OFFSHORING

Distributed Agile
- Widely used in software development but applicable to various other domains as well

EXHIBIT 2 | Companies and Vendors Can Apply Three Distributed Agile Models

Depth of outsourcing effort

1. Most team members are at one of the company's primary locations
2. Developers and quality assurance specialists are at one of the vendor's locations
3. Product owners are the only remaining resource at one of the company's primary locations

Product owner
Scrum master
Business analyst
Developer
Quality assurance specialist

It is critical to collocate developers with quality assurance specialists to accelerate feedback loops

Product owner should stay close to the business

Enables only partial cost savings

Enables full cost savings

Resources at a company location   Resources at a vendor location

Source: BCG analysis.

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