How WorldVisitz Can Benefit From Agile Delivery Approach Part I

What is Agile?

A methodology that describes:

"Managing a project in several incremental phases"

"The application of a defined set of value and principles for managing a project"

"Agile software development methodologies refers to methodologies based on the the idea of iterative development, in which requirements and solutions evolve through collaboration between self-organizing cross-functional teams"

The 4 Agile Values

1. Individuals and interactions over processes and tools

2. Working software over comprehensive documentation

3. Customer collaboration over contract negotiation

4. Responding to change over following a plan

The Agile Manifesto or 12 Agile Principles

- 1. Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.
- 2. Welcome changing requirements, even late in development. Agile processes harness change for the customer's competitive advantage
- 3. Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter time scale.
- 4. Business people and developers must work together daily throughout the project
- 5. Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.
- 6.The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.
- 7. Working software is the primary measure of progress.
- 8.Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.
- 9. Continuous attention to technical excellence and good design enhances agility
- 10. Simplicity the art of maximizing the amount of work not done is essential.
- 11.The best architectures, requirements, and designs emerge from self-organizing teams.
- 12. At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behavior accordingly.

Why is Agile process important?

Doing Agile - Efficiently and effectively delivering the best solution in the least amount of time. This about executing agile practices.

Being Agile - Builds on the benefits of being agile. Create an environment with psychological safety so that people feel safe to take risks to innovate.

- Agile process allow business to be more competitive
- Pave ways to delight customers
- Businesses can Innovate and introduce change more quickly
- Allow being able to attract and retain high-performing employees

They can identify and exploit opportunities much faster

Deliver on those opportunities effectively and maximise profitability

The Benefits of Agile Methodology

Among the benefits of Agile methodology are:

- Manage changing priorities effectively and timely
- Increased team productivity
- Improved project visibility
- Increased team morale and motivation
- Faster time-to-market

Agile vs Waterfall

Image source

	Agile	Waterfall
Product Life Cycle	Iterative	Distinct Phases
Design Process	Incremental	Sequential
Change	Change is embraced	Change is challenging
Mindset & Focus	Customer needs	Completing the project
Collaboration	Significant collaboration	Limited Synchronisation
Requirement	Prepared incrementally	Prepared at start
Organization	Self directed team	Led by product manager

Problems and Concerns Identified/Recommendation

Some of the problems with WorldVisitz project situations are:

- 1. Current detailed requirements and specifications document has an 18 months' estimate for project delivery.
- 2. Lack of knowledge transfer between team members
- 3. Not adhering to coding standards (weak)
- 4. Lack of trust and camaraderie between the offshore and onshore resources.

Recommendation

The Agile framework and methodology will be beneficial for WorldVisitz because it specifically address all of the issues faced by the organization. Solutions can be easily implemented in the process as the new culture is in practice.

How will the Agile methodology help worldvisitz?

Problem/Concern	Agile Advantage / Solution / Manifesto	
Current detailed requirements and specifications document has an 18 months' estimate for project delivery.	"Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter time scale."	
	Agile incremental short-term frequent delivery approach will eliminate the 18 months wait time. We must deliver value timely and frequently	
Lack of knowledge transfer between team members	"The most efficient and effective method of conveying information to and within a development team is face-to-face conversation."	
	Often times, lack of communication between team members leads to lack of knowledge transfer. Adopting Agile face-to-face conversation within will definitely improve the situation . Also, culture of trust and respect.	

The Agile Framework

A variety of Frameworks that are aligned with Agile values & principles.

The Agile is an Umbrella of ideas with the following characteristics:

- Deliver Value
- Continual Improvement
- Flexibility
- Trust and Respect
- Cultivate Mastery

The Three Common Agile Frameworks

Scrum

Kanban

Extreme Programming(XP)

Scrum

Scrum Pillars

- **Transparency** Transparency builds trust and openness both within the Agile Team, as well as with those stakeholders outside the Agile Team.
- **Inspection** Inspection involves the business users reviewing the Agile Team's progress towards the defined goals.
- **Adaptation** Agile Teams adjust and adapt based on opportunities for improvement that are identified either by the Agile Team themselves or through feedback from others outside the team. Scrum Values

Scrum Values:

Focus Courage Openness Commitment Respect

Kanban 7 Lean Principles

- Eliminate Waste- Anything that does not add value to the customer.
- Build in Quality- Lean focuses on good practices to ensure integrity and prevent defects.
- Create Knowledge- Lean encourages both training and peer to peer knowledge transfer.
- Defer Commitment- Lean recommends the Agile Team wait until the "last responsible moment" to make a decision, which allows for additional time to innovate.
- Deliver Fast- Lean encourages the Agile Team to create and deliver the product incrementally.
- Respect People- The Team must feel trusted and valuable to think and solve problems for themselves.
- Optimize the Whole- Lean encourages decreasing barriers to increase efficiencies by decreasing the amount of hand-offs and reducing WIP.

The Kanban 5 Fundamental Principles

Kanban is known as Lightweight Agile Framework

- Visualize the Flow
- Limit Work in Progress
- Manage Flow
- Make Policies Explicit
- Improve Collaboratively

Kanban Roles and Ceremonies

Role

- Product Owner
- Facilitator
- Agile Team

Ceremonies

- Project Vision
- Daily Stand up
- Review Demo
- Release Planning

XP - Extreme Programming

XP is deep rooted in software development with 5 Core Values

- Simplicity
- Communication
- Feedback
- Courage
- Respect

The Collective Code Ownership

No single person owns a piece of work

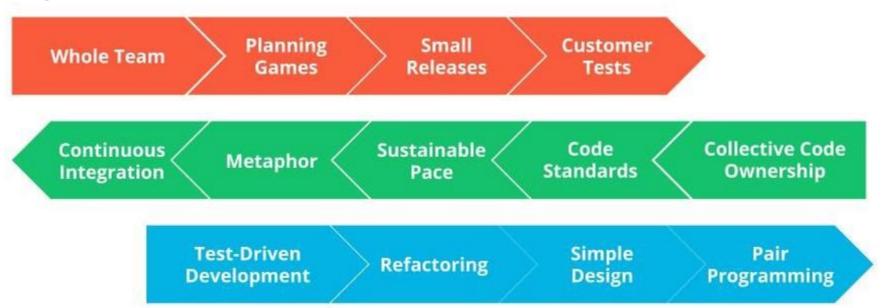
This strengthens the product

Quality is enhances

Reduces risk of loss of knowledge

XP Practices

Image source



XP Roles and Ceremonies

Roles

- **Customer** Somewhat like the PO; customer is the business representative.
- **Tester** Primarily responsible for quality assurance.
- **Coach** Acts as a mentor for team; also a Facilitator for the team.
- **Programmers** Developers who build the product.

Ceremonies

- Iteration Planning
- Iteration Review
- Iteration Retrospective
- Project Vision
- Daily Stand Up
- Release Planning

Scrum, Kanban, XP compared

	Scrum	Kanban	XP
Values	 Commitment . Courage Focus Openness Respect 	 Transparency Balance Collaboration Customer Focus Workflow Leadership Understanding Agreement Respect 	1. Communication 2. Simplicity 3. Feedback 4. Courage 5. Respect
Principles/Practices	 Control over the empirical process Self-Organization Collaboration Value-based prioritization Timeboxing Iterative development 	 Visualization. Limiting work in progress. Flow management (two major ways to do it: managing queues and limiting work in process). Making policies explicit 	 Planning game. Test-driven development Pair programming. Whole team Continuous integration. Refactoring of design improvements

WorldVisitz.

Apply the Agile framework to facilitate value-driven delivery at

Apply the characteristics of Agile to the WorldVisitz scenario and

propose the appropriate Agile framework.

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