Lean Startup Method (LSM) and Agile (Scrum) for Collaborative Initial Project Planning

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LSM/Agile Talk Information

Slides are posted:

• In INCOSE CONNECT:
  • on the Object-Oriented Systems Engineering Method (OOSEM) Working Group site.

• In Dropbox:
  https://www.dropbox.com/sh/95lvyo07vcif7cc/AAD8wvU7XPPlmx95BdjgXyY3a?dl=0
The ‘Real’ Motivation For This IPP Approach

WALLY, WE DON'T HAVE TIME TO GATHER THE PRODUCT REQUIREMENTS AHEAD OF TIME.

I WANT YOU TO START DESIGNING THE PRODUCT ANYWAY. OTHERWISE IT WILL LOOK LIKE WE AREN'T ACCOMPLISHING ANYTHING.

OF ALL MY PROJECTS, I LIKE THE DOOMED ONES BEST.
Topics

• Introduction to the “Micro-Grid (uGrid) Reference Model (RM)” MBSE Project.
• Introduction of Specific Processes and Process Steps used in this Hybrid Approach to Collaborative Initial Project Planning (IPP).
Micro-Grid (uGrid) Reference Model (RM) MBSE Project


• Ideas discussed to develop a CIPR-related product or service.

• Ideas refined into, “Model Based Systems Engineering (MBSE) to develop a Micro-Grid (uGrid) Reference Model (RM).”

• Initial uGrid RM MBSE Project IPP Workshop facilitated at JHU/APL on July 8, 2017.
  • Objective: uGrid RM MBSE Project Initial Work Items.
  • Three total IPP Workshops held (July to September 2017) to develop Initial Work Items for the uGrid RM MBSE project.

• Reference Model (RM) Definition Used: Overarching logical framework model, for shared modeling of mission or business-specific logical and physical architectures.
Introduction: Lean Startup Method (LSM)

• Also called, “Lean Launchpad”

• A philosophy and methodology based on 1980s Lean Manufacturing.

• A learnable and shareable stakeholder-centric method to quickly, collaboratively, and iteratively develop a new product or service, or update existing products or services.

• Developed in its current form by American entrepreneur Eric Ries, founder and CEO of the Long Term Stock Exchange (LTSE).
  • Former student of Steve Blank, who pioneered the Lean Startup Movement with his Customer Development concept.

• Understanding the Customer and their Feedback is at the center of this Initial Project Planning approach.
Who’s Using LSM for Initial Project Planning?

- National Science Foundation (NSF) Innovation Corps (I-Corps)

- National Geospatial Intelligence Agency (NGA)
  - [https://federalnewsradio.com/fed-access/2017/10/innovation-at-the-nga/](https://federalnewsradio.com/fed-access/2017/10/innovation-at-the-nga/)

- National Security Agency (NSA)
  - [https://www.acast.com/leanstartup/7-season-3-how-lean-startup-coaches-support-department-of-defense-innovation](https://www.acast.com/leanstartup/7-season-3-how-lean-startup-coaches-support-department-of-defense-innovation)

- Office of Naval Research (ONR)

- U.S. State Department
  - [https://steveblank.com/2016/10/31/the-state-department-gets-schooled-hacking-for-diplomacy/](https://steveblank.com/2016/10/31/the-state-department-gets-schooled-hacking-for-diplomacy/)

- U.S. Government “FedTech”
  - [https://www.fed-tech.org/](https://www.fed-tech.org/)

- Dropbox, Wealthfront, Grockit, imvu, Votizen, Aardvark
  - [http://theleanstartup.com/casestudies#dropbox](http://theleanstartup.com/casestudies#dropbox)
Figure 3 1 - Systems Engineering (SE) Engine

IPP in the System Development Life Cycle
IPP in the System Development Life Cycle

https://tinyurl.com/y83g9vvl
uGrid RM MBSE Project Roadmap

Abstract/Plain Language Problems, Issues, Needs, Scenarios, etc.

LSM/Agile Initial Project Planning

Project Vision, Stakeholder Groups, Product Details, Use Cases, Requirements, Features, etc.

Object-Process Methodology (OPM) MBSE Method

Other Model-Based Systems Engineering (MBSE) Methods

High-Level Product or Service Concept Models

Other Product or Service Models
uGrid RM MBSE Project - Perspectives via “Hats”
uGrid RM MBSE Project - Perspectives via “Hats”

Eight uGrid RM MBSE Project ‘HATS’

Project Lead
Consumer
(Customer, etc.)
Engineers
(Systems, Software, etc.)

System Integrator
Producer
Infrastructure
Ops Manager
(County, etc.)
FACILITATOR GUIDE (300 words: 2.5 minutes read aloud)
At __00 a.m. begin. Don’t read words in parentheses.)
1. Welcome, to our Systems Thinking RoundTable (RT).
   My name is ___, and I am today’s facilitator. The RoundTable Guide is in front of you. (Be sure new people have RT Guides). We propose to suspend judgment and experience this together without stopping for 45 minutes today. Let’s take one minute and go around the room for initial introductions--about three words: e.g., your first name, role/title, school. (Cue the person on your left).
2. Thank you and welcome again to everyone. For our reflection today, I’ll suggest the topics ___ (see bottom of page) for everyone to comment on. While we each consider the topics for a few minutes, I’ll ask for volunteers to read aloud the RoundTable Guidelines on the right. Will ___ read OUR FORMAT?... OUR PURPOSES?... GUIDELINES FOR LISTENING? .... GUIDELINES FOR SPEAKING?.. GUIDELINES FOR RESPONDING?...

(At __:05 a.m. please read...)
3. Did anyone come in after the introductions?...
   Welcome! (Option: Ask for 3-word intro and offer RT Guide).
4. Again, today’s suggested topics are: ___ *.
   I would like to hear everyone’s thoughts about these topics or anything else that is on your mind. Let’s each take about (__) minutes to speak. I will use a timer to help us stay on time. Please speak so that everyone can hear. What you say is important to us. (Options: I will start, or we’ll start with ___?) and continue around the circle. (If time permits: a 2nd, 3rd full round.)
5. (If there is time) Anyone who hasn’t spoken who is ready to speak now?

(At __:45 a.m. please read...)
6. It’s time to close.
7. Thank you all for coming today. We hope to see you at a future session. If you have something more to say, ask a colleague to listen to you on your way out.

READINGS: RoundTable Guidelines (300 words: 2.5 min.)

OUR FORMAT. Our unique format is a new best practice in systems thinking. We spend 5 minutes listening to short readings and the suggested topics. We then spend 40 minutes on individual comments, time divided equally among all present (e.g. 22 people = 2 minutes each). Each session is facilitated by a different volunteering facilitator chosen from those in attendance.

OUR PURPOSES. We use a facilitator guide/script and basic readings—RoundTable Guidelines—for many reasons: 1- We pack in a great deal of information in a very short time, thus leaving maximum time for each of us to present our ideas. 2- The result is that we hear everyone’s point of view on a topic. 3- We experience some new real-time effort-free practices in equal participation: including rotating, distributed leadership; equal time; as well as a simple scaffold to facilitate conscious self-guided evolution. 4- We have found that just as we break the sound barrier when we travel faster than the speed of sound, we break the communication barrier when we hear 20 authentic viewpoints in 45 minutes—and a different facilitator at each session.

GUIDELINES FOR LISTENING. Listening to the 5 minutes of readings allows us the opportunity to quiet our minds and silently reflect on the topics, the readings, our inner thoughts, and our work and lives. Listening to each other’s comments, we hear a great variety of viewpoints. We consciously shift our attitudes from “evaluation” to “valuation,” from critiquing to appreciating, from problem-solving to ideal-seeking -- towards one another and towards ourselves.

GUIDELINES FOR SPEAKING. At your turn, please say your name again. Then say something about today’s topic, or anything else that is on your mind. Let’s each take only one turn to speak and limit our time, so we can offer everyone a turn. Or, if you prefer, pass your turn and just listen today.

GUIDELINES FOR RESPONDING. The facilitator may say “thank you” after you speak. In the interest of time and purpose, we will save all other responses to each other until after the session. We don’t want to divert others, or be diverted, from our own individual learning. If someone says something that you want to build on, you may want to make a note of it so you can do so during your turn.
Project Title: “Microgrid (uGrid) Reference Model (RM) and Application Process”

Project Purpose: “Use LSM to Produce Initial Work Items for uGrid RM Project”
**PRODUCT VALIDATION**

Product Vision Board Extended (PVBE)

- Vision
- Target group
- Needs
- Product
- Business Goals
- Competitors
- Revenue Sources
- Cost Factors
- Channels

---

**USER VALIDATION**

Persona Templates

- Picture & Name
- Details
- Goal

- What does the persona look like? What is its name?
- What are the persona's relevant characteristics and behaviors?
- Why would the persona want to buy or use the product?

**SOLUTION VALIDATION**

User Story Workshop/Story Mapping

- Narrative High-Level "User Activities (Scenarios)"
- More Structured User-Centric Scenario Workflow

**SOLUTION BUILDING BLOCKS**

Product Canvas

- Name
- Target Group
- Big Picture
- Metric

---

Note: All content is compliant with Lean Business Model Canvas (BMC) and can be shared in tools like Atlassian 'Confluence' & 'Jira'.
**LSM IPP Step: “Problem Validation”**

**“PROBLEM VALIDATION”**

Product Vision Board Extended (PVBE)

<table>
<thead>
<tr>
<th>Vision</th>
<th>Target group</th>
<th>Needs</th>
<th>Product</th>
<th>Business Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your vision, your overarching goal for creating the product?</td>
<td>Which market segment does the product address?</td>
<td>How does the product create value for its users?</td>
<td>What product is it?</td>
<td>How is the product going to benefit the company?</td>
</tr>
<tr>
<td></td>
<td>Who are the target users and customers?</td>
<td>What problem does it solve?</td>
<td>What makes it desirable and special?</td>
<td>What are the business goals?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Which benefit does it provide?</td>
<td>Is it feasible to develop the product?</td>
<td>Which one is most important?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Competitors</th>
<th>Revenue Sources</th>
<th>Cost Factors</th>
<th>Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who are product’s main competitors?</td>
<td>How can you monetise your product and generate revenue?</td>
<td>What are the main cost factors to develop, market, sell and service the product?</td>
<td>How will you market and sell the product to the customers?</td>
</tr>
<tr>
<td>What are their strengths and weaknesses?</td>
<td>What does it take to open up the revenue sources?</td>
<td>What resources and activities incur the highest cost?</td>
<td>Do the channels exist today?</td>
</tr>
</tbody>
</table>

---

Compliant with Lean Business Model Canvas (BMC)

Can be shared in tools like Atlassian ‘Confluence’
**uGrid RM: Product Vision Board Extended (PVBE)**

**VISION:** Facilitate a Model-Based Systems Approach to Develop Micro-Grids

<table>
<thead>
<tr>
<th>TARGET GROUP</th>
<th>NEEDS</th>
<th>PRODUCT</th>
<th>MISSION/GOALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>- System Integrator</td>
<td>- Challenge to reconstruct multiple stakeholder concerns and emerging threats.</td>
<td>- Common vocabulary</td>
<td>1 Optimize Development</td>
</tr>
<tr>
<td>- Customer</td>
<td>- Improved collaborative decision-making for acquisition and development.</td>
<td>- Multiple views</td>
<td>2 Risk Reduction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Decision-making criteria</td>
<td>3 Improved Comms</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Scalable scope</td>
<td>4 Improved Planning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Composable</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Configurable</td>
<td></td>
</tr>
<tr>
<td>COMPETITORS</td>
<td>REVENUE SOURCES</td>
<td>COST FACTORS</td>
<td>CHANNELS</td>
</tr>
<tr>
<td>- Legacy Methods</td>
<td>- Governments</td>
<td>- Maintenance</td>
<td>- Professional Societies</td>
</tr>
<tr>
<td>- Non-Profits</td>
<td>- Crowd Resources</td>
<td>- Schedule</td>
<td>- Conferences</td>
</tr>
<tr>
<td>- Commercial Enterprises</td>
<td>- Non-Profits</td>
<td>- Training</td>
<td>- News Media</td>
</tr>
<tr>
<td>- Governments</td>
<td>- Venture Capitalists</td>
<td>- Tools</td>
<td>- Government Communications</td>
</tr>
<tr>
<td></td>
<td>- Commercial Enterprises</td>
<td>- Labor (Vols vs Professionals)</td>
<td></td>
</tr>
</tbody>
</table>

**MISSION/GOALS**
1. Optimize Development
2. Risk Reduction
3. Improved Comms
4. Improved Planning

**CHANNELS**
- Professional Societies
- Conferences
- News Media
- Government Communications
uGrid RM MBSE IPP: LSM and Agile (Scrum)

**PROBLEM VALIDATION**

Product Vision Board Extended (PVBE)

- Compliant with Lean Business Model Canvas (BMC)
- Can be shared in tools like Atlassian 'Confluence'

**USER VALIDATION**

Persona Templates

- Can be shared in tools like Atlassian 'Confluence'

**SOLUTION READY PBIs**

Initial Product Backlog Items (PBIs)

- Can be linked/shared in tools like Atlassian 'Confluence' & 'Jira'

**SOLUTION BUILDING BLOCKS**

User Story Workshop/Story Mapping

- Can be linked/shared in tools like Atlassian 'Confluence' & 'Jira'

**SOLUTION VALIDATION**

Product Canvas

- Can be shared in tools like Atlassian 'Confluence'
LSM IPP Step: “User Validation”

**“USER VALIDATION”**

**Persona Templates**

<table>
<thead>
<tr>
<th>PICTURE &amp; NAME</th>
<th>DETAILS</th>
<th>GOAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>What does the persona look like? What is its name?</td>
<td>What are the persona’s relevant characteristics and behaviours?</td>
<td>Why would the persona want to buy or use the product?</td>
</tr>
<tr>
<td>Choose a picture and a name that are representative, and that allow you to develop sympathy for the persona.</td>
<td>Consider demographics, job, lifestyle, spare time activities, attitudes, and common tasks, for instance.</td>
<td>What problems should the product solve?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What benefits does the persona want to achieve?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If there are multiple problems or benefits, identify the main one and put it at the top.</td>
</tr>
</tbody>
</table>

http://www.romanpichler.com/

-- Can be shared in tools like Atlassian ‘Confluence’
## uGrid RM Stakeholder Groups, or “Personas”

<table>
<thead>
<tr>
<th>uGrid RM Personas (Stakeholder Groups)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ricky the Risk Manager</td>
</tr>
<tr>
<td>Carl the City Planner</td>
</tr>
<tr>
<td>Logan the Logistician</td>
</tr>
<tr>
<td>Rob the Economics Analyst</td>
</tr>
<tr>
<td>Mike the Model Manager</td>
</tr>
<tr>
<td>Sam the Software Engineer</td>
</tr>
<tr>
<td>Eddie the Environmentalist</td>
</tr>
<tr>
<td>Nigel the Network Engineer</td>
</tr>
<tr>
<td>Alan the Standards &amp; Governance Specialist</td>
</tr>
<tr>
<td>Tony the Terrorist</td>
</tr>
<tr>
<td>Fred the Model Tester</td>
</tr>
<tr>
<td>Marty the Systems Integrator</td>
</tr>
<tr>
<td>Ted the Toolsmith</td>
</tr>
<tr>
<td>Tom the Threat Analyst</td>
</tr>
<tr>
<td>Paul the Power Provider</td>
</tr>
<tr>
<td>John the County Planner</td>
</tr>
<tr>
<td>Wally the Wire Guy</td>
</tr>
<tr>
<td>Larry the Insider (Threat)</td>
</tr>
<tr>
<td>Kitty the Configuration Manager</td>
</tr>
<tr>
<td>Harry the Hacker</td>
</tr>
<tr>
<td>Nat the Natural Resource Provider</td>
</tr>
<tr>
<td>Sarah the Campus Facilities Manager</td>
</tr>
<tr>
<td>Victoria the Venture Capitalist</td>
</tr>
<tr>
<td>Rita the Systems Engineer</td>
</tr>
</tbody>
</table>
# uGrid RM Project: Example “Persona Template”

<table>
<thead>
<tr>
<th>PICTURE/NAME/TITLE</th>
<th>DETAILS</th>
<th>GOALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samantha</td>
<td>-- Expert MBSE Modeler&lt;br&gt;-- Systems Engineer&lt;br&gt;-- Systems Engineering Tools Expert&lt;br&gt;-- Highly Motivated&lt;br&gt;-- (See Resume and CV)</td>
<td>-- Demonstrate value of MBSE in general and uGrid RM in particular.&lt;br&gt;-- Promote using models for decision-making.&lt;br&gt;-- Convey thinking and give direction to modeling team.&lt;br&gt;-- Demonstrate a real potential solution for real-world problems.</td>
</tr>
<tr>
<td>uGrid RM Modeler</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Example “Persona Cards”

WILL

ALANA

PROJECT MANAGER
SOFTWARE DEVELOPMENT TEAM
BUSINESS TEAM AGENCY TEAM
**“PROBLEM VALIDATION”**

**Product Vision Board Extended (PVBE)**

- Vision: What’s your vision, your overarching goal for creating the product?
- Target group: Who are your customers? Who are the target users and consumers?
- Needs: What are the needs for the product?
- Product: What does it do? What makes it desirable and useful?
- Business Goals: What is the product going to achieve? What are the business goals? What is the most important?
- Competitors: Who are your products main competitors? What are their strengths and weaknesses?
- Revenue Sources: How do you monitor your product and generate revenue?
- Cost Factors: What is the main cost factor to develop, market, sell, and service the product?
- Channels: How will you sell and market the product to the customer? Do the channels exist today?

**Persona Templates**

- PICTURE & NAME: What does the persona look like? What is its name?
- DETAILS: What are the personal’s relevant characteristics and behaviors?
- GOAL: Why would the person want to buy or use the product?

**“SOLUTION BUILDING BLOCKS”**

**User Story Workshop/Story Mapping**

- Narrative High-Level "User Activities (Scenarios)"
- More Structured User-Centric Scenario Workflow

**“SOLUTION-READY PBIs”**

**Initial Product Backlog Items (PBIs)**

- High Priority: Small User Stories, detailed and items ready for consumption in the next iteration.
- Medium/Large User Stories: Might need to be split into smaller User Stories, or incorporate more detail.
- Low Priority: Epics, Use Cases, larger requirements, specifications, ideas.

**uGrid RM MBSE IPP: LSM and Agile (Scrum)**

**“I-N-V-E-S-T”**

**“SOLUTION VALIDATION”**

**Product Canvas**

- Name: The name of the product.
- Goal: The reason for creating the product.
- Metric: The measurement of achievement of the goal between two periods.
- Target Group: The demographic and customer with specific accountable line to reach the goal.
- Big Picture: The desired can contemplates OOS the core journey, the product functionality, the visual design, and the operational properties.
- Product Details: The terms can contain OOS the core journey, the operational properties, and the operational properties.

**“D-E-E-P”**

**“PROBLEM VALIDATION”**

**Product Vision Board Extended (PVBE)**

- Compliant with Lean Business Model Canvas (BMC)
- Can be shared in tools like Atlassian ‘Confluence’

**“USER VALIDATION”**

**Persona Templates**

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**“D-E-E-P”**
LSM IPP Step: “Solution Validation”

“SOLUTION VALIDATION”
Product Canvas

- **Name**: The name of the product.
- **Goal**: The reason for creating the product.
- **Metrics**: The measures to determine if the goal has been met.

<table>
<thead>
<tr>
<th>Target Group</th>
<th>Big Picture</th>
</tr>
</thead>
<tbody>
<tr>
<td>The users and the customers with their needs.</td>
<td>The desired user experience (UX): the user journeys, the product functionality, the visual design, and the nonfunctional properties.</td>
</tr>
<tr>
<td>Personas are a great way to describe the target group.</td>
<td>Epics, scenarios, storyboards, workflows, design sketches, mock-ups, and constraint stories are helpful techniques.</td>
</tr>
</tbody>
</table>

**Product Details**
The goal of the next iteration with specific actionable items to reach the goal. The items are ordered from one to n, and may be captured as detailed user stories.

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Can be shared in tools like Atlassian ‘Confluence’
# uGrid RM Project: Example “Product Canvas”

<table>
<thead>
<tr>
<th>Target Group: uGrid RM Modeler (Other Personas as decided in this Target Group)</th>
<th>Goal: Facilitate MBSE for uGrids</th>
<th>Metrics:</th>
</tr>
</thead>
</table>
| **Ex. Samantha** | **Big Picture:** \n- Use Cases \n- Logical Modeling \n- Scenarios (Story Boards) \n- High Level Decision Support \n- Improved Planning \n- Improved Planning \n- Training \n- Multiple Views | \n- # of Scenarios \n- # of User Types Trained \n- # of Decisions Makers using uGrid RM \n- # Users Applying uGrid RM | \n- Templates for Data Visualization \n- Templates for Information Visualization \n- Aggregate Data into Information \n- Provide at least One Use Case Template for every Scenario \n- etc.
**PROBLEM VALIDATION**

Product Vision Board Extended (PVBE)

- Compliant with Lean Business Model Canvas (BMC)
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**USER VALIDATION**

Persona Templates

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**SOLUTION READY PBIs**

Initial Product Backlog Items (PBIs)

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**SOLUTION BUILDING BLOCKS**

User Story Workshop/Story Mapping

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**SOLUTION VALIDATION**

Product Canvas

- Can be shared in tools like Atlassian ‘Confluence’
Agile IPP Step: “Initial Solution-Ready Work Items”

“SOLUTION-READY PBIs”

Initial Product Backlog Items (PBIs)

High

Small User Stories, detailed and item ready for consumption in the next iteration.

Medium and Large User Stories. Might need to be split into smaller User Stories, or incorporate more detail.

Low

Epics, Use Cases, larger requirements specifications, ideas.

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“D-E-E-P”

“SOLUTION BUILDING BLOCKS”

User Story Workshop/Story Mapping

Narrative High-Level ‘User Activities (Scenarios)’

More Structured User-Centric Scenario Workflow

Epic1

‘User Tasks’ or “Themes” For Epic1

Workflow stage sequence (over time)

Start

Theme

Story

End

Higher

Priority

Lower

Research for Product

Business Decision

Search by Theme

Add & Cost

Search by Color

Research from Cost

Search by Author

Place the Cost

More Structured User-Centric Scenario Workflow

Epic2

‘User Tasks’ or “Themes” For Epic2

Workflow stage sequence (over time)

Start

Theme

Story

End

Higher

Priority

Lower

Research for Product

Business Decision

Search by Theme

Add & Cost

Search by Color

Research from Cost

Search by Author

Place the Cost

“D-E-E-P”

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“SOLUTION BUILDING BLOCKS”

User Story Workshop/Story Mapping

Narrative High-Level ‘User Activities (Scenarios)’

More Structured User-Centric Scenario Workflow

Epic1

‘User Tasks’ or “Themes” For Epic1

Workflow stage sequence (over time)

Start

Theme

Story

End

Higher

Priority

Lower

Research for Product

Business Decision

Search by Theme

Add & Cost

Search by Color

Research from Cost

Search by Author

Place the Cost

More Structured User-Centric Scenario Workflow

Epic2

‘User Tasks’ or “Themes” For Epic2

Workflow stage sequence (over time)

Start

Theme

Story

End

Higher

Priority

Lower

Research for Product

Business Decision

Search by Theme

Add & Cost

Search by Color

Research from Cost

Search by Author

Place the Cost

“D-E-E-P”

-- Can be linked/shared in tools like Atlassian ‘Confluence’ & ‘Jira’

“SOLUTION-READY PBIs”

Initial Product Backlog Items (PBIs)

High

Small User Stories, detailed and item ready for consumption in the next iteration.

Medium and Large User Stories. Might need to be split into smaller User Stories, or incorporate more detail.

Low

Epics, Use Cases, larger requirements specifications, ideas.

-- Can be linked/shared in tools like Atlassian ‘Confluence’ & ‘Jira’

“D-E-E-P”
Example: “Initial Solution-Ready Work Items”

- Reflect External uGrid Interfaces
- Reflect Internal uGrid Interfaces
- Represent Constraints
- Enable Model Instantiations
- Follow Established Modeling Guidelines
- Depict Real-Life uGrid Domain
- Reflect uGrid Infrastructure
- Describe uGrid Logical and Physical Components
## Example: “Initial Solution-Ready Work Items”

### uGrid RM ‘Epics’ – Iterations Work

<table>
<thead>
<tr>
<th>Work Flow</th>
<th>Describe Electric Power</th>
<th>Reflect Arch. Behavior</th>
<th>Follow Model Guides</th>
<th>ID Products Needed</th>
<th>Reflect External Interface</th>
<th>Reflect Limits</th>
<th>Describe Model Parts</th>
<th>Enable Mods</th>
<th>Depict uGrid Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>I1</strong></td>
<td>ID Specific Needs</td>
<td>ID Simulate Needs</td>
<td>ID all User Needs</td>
<td>Review all Use Cases</td>
<td>ID Changes Required</td>
<td>ID all Hazards</td>
<td></td>
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<tr>
<td></td>
<td>ID all Policy Limits</td>
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<tr>
<td><strong>I2</strong></td>
<td>ID all Scenarios</td>
<td>ID all Sub Systems</td>
<td>ID all Ops Processes</td>
<td>ID Power Available</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>I3</strong></td>
<td>ID all Power Mediums</td>
<td>ID all Customer Types</td>
<td>ID all Weather Limits</td>
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</tbody>
</table>
Key Points

• This **Hybrid Lean Startup Method (LSM)/Agile (Scrum) Product Backlog Item (PBI) Development Approach to Initial Project Planning (IPP)** has proven itself to be an effective approach to help projects, “Get It Right, Right From the Start”.

• A small group of Decision Makers and Subject Matter Experts (SMEs) can use this approach in a series of off-site style workshops to quickly and efficiently develop together an actionable set of **IPP Focus Mechanisms** that any Development Team can use throughout the life cycle of any system solution project:
  • ‘**Hats**’ project perspectives/insights
  • **Project Title & Purpose**
  • **Product Vision Board Extended (PVBE)**
  • **Persona List and/or Personal Hierarchy**
  • **Persona Templates/Cards**
  • **Product Canvas**
  • **Initial Set of Solution-Ready Work Items**
MBSE, LSM, and Agile References

  [http://tinyurl.com/y8bazggw](http://tinyurl.com/y8bazggw)

  [http://tinyurl.com/y7nvq66c](http://tinyurl.com/y7nvq66c)

  [http://tinyurl.com/yc9ucoox](http://tinyurl.com/yc9ucoox)

  [https://tinyurl.com/y856stnk](https://tinyurl.com/y856stnk)

  [https://tinyurl.com/yby2esm9](https://tinyurl.com/yby2esm9)
THANK YOU!!

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