Introductions/Ice breaker

While you are getting settled at your tables…

1. Pair with someone you don’t know
2. Introduce yourself
3. Tell the person one thing you know about Innovation Accounting or what you are looking forward to learning
4. Now let the other person share with you
5. Repeat steps 1-4 until time is up
Business Agility with Innovation Accounting Workshop
Agile 2018
Joe Vallone
Sr. Consultant and SPCT,
Scaled Agile, Inc.
“Frustrated amateur economist”
Twitter: @joejv
LinkedIn: https://www.linkedin.com/in/joevallone
The problem to be solved

Difficult to evaluate the profitability of initiatives and the implementation of large complex systems

Businesses require agility

Traditional financial metrics (e.g. NPV, IRR, etc.) are based on DCF and are insufficient to measure risk and returns on large, complex systems
“What if we found ourselves building something that nobody wanted? In that case, what did it matter if we did it on time and on budget?” – Eric Ries, The Lean Startup
At a minimum, business agility requires...

- Predictability
- Fast feedback to gather data and learn
- Ability/willingness to pivot or persevere
- Lean-Agile budgeting

Learning is not compulsory... neither is survival

W. Edwards Demming
The Innovation Accounting framework

Created by Eric Ries in *The Lean Startup* (but not just for startups)

Minimum Viable Product (MVP)

Tune the engine

Pivot or persevere
Build-Measure-Learn feedback/PDCA loop
Lean Startup cycle applied

Approved airline website Lean Business Case and **hypothesis**

**Epic** → **Build MVP** → **Evaluate MVP**

- Users can browse flight schedules
- Implement additional Features
- **Persevere**
- **Continue until WSJF determines otherwise**
- **Pivot** → **Stop work**

**Tune the Engine**: Did call volumes decrease? Did website queries increase?

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“Small batches go through the system more quickly and with less variability, which fosters faster learning.” – Dean Leffingwell
Activity: Quick write and teach-back

- On a sticky note, write down three ideas for implementing Innovation Accounting, in your context
  - Consider: Hypothesis, MVP, Tuning, Pivot
- Pair up with someone at another table, and explain your ideas for 3 minutes, then switch
- Share with the class
Increase ROI using lean economics
“While you may ignore economics, it won’t ignore you.” – Don Reinertsen, Principles of Product Development Flow
Why not use common ROI indicators

- Return on Investment (ROI) indicators are lagging indicators
- Based on predictable risk for homogenous systems
- Based on *crystal ball* calculations which are complex to create and track
- Not flow based
- Difficult to quantify for strategic jobs
Non-economic-based prioritization

Product Owners, Product Managers and Epic Owners will often face non-economic-based prioritization.

- **HiPPo** – Highest-paid person makes the decision.  
  “The Senior VP said we should do this project.”

- **Squeaky Wheel** – The person who yells the loudest or makes the biggest promise of revenue. ROI indicators may be too optimistic.  
  “Fund my project and we will make a billion dollars!”

- **LIFO/FIFO** – Making a decision based on when the project arrived in the queue. Leads to increased WIP and poor economic visibility.
Prioritize Features for optimal ROI

In a flow system, job sequencing by Product Owners, Product and Solution Managers are the keys to economic outcomes.

To prioritize based on Lean economics, we need to know two things:

1. What is the Cost of Delay (CoD) in delivering value?
2. What is the cost to implement the valuable thing?

If you only quantify one thing, quantify the cost of delay.

—Donald G. Reinertsen, Principles of Product Development Flow E3
Why use WSJF

- Because we are in a flow based system
- Fast, easy to understand, without the complexity of traditional ROI (e.g. NPV, IRR, Payback, etc.)
- Routinely prioritize when there is new significant information
- Gives preference to the smaller jobs

WSJF = \( \frac{\text{CoD}}{\text{Duration}} \)
WSJF Ignores Sunk Cost

- Reinertsen’s quote illustrated in SAFe Principle #1 Take an economic view: *While you may ignore economics, it won’t ignore you*
- Do not consider money already spent
- This enables us to work in a more serial fashion
Working in your group, answer the following question:

- How do you currently prioritize initiatives (e.g. HIPPO)?
- What are the benefits of using CoD and WSJF vs your current prioritization method?
- What economic advantages do you see?
- Be ready to do a ‘pop-up’ share with the room
Example walk-through
Example: An Airline website

Epic hypothesis

Business outcomes & MVP

Leading Indicators using non-standard financial indicators

NFRs (Non-Functional Requirements)
For **XYZ Airline** members and guests who **Want** to purchase airline tickets online, **XYZAirline.com** is a **website** that **Provides** the ability to purchase tickets, **search for** flights, **manage upgrades**, and check **in for** flights.

Unlike **PDQ Airline**, our solution **Processes** electronic ticket refunds.

### Business outcome hypothesis:
- Majority of ticket sales will occur via website
- Call center volumes decreased
- Better customer experience via website

### Leading indicators:
- Less call center activity regarding flight schedules
- Increase purchases via website rather than phone

### NFRs:
- Two factor authentication login
- PCI compliant credit card transactions
1. At your table, identify a large initiative from one of your contexts and write the hypothesis

2. Determine an MVP to validate this Epic

<table>
<thead>
<tr>
<th>Epic Hypothesis Statement</th>
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<tbody>
<tr>
<td>For &lt;customers&gt;</td>
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<td>who &lt;do something&gt;</td>
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<tr>
<td>the &lt;solution&gt;</td>
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<td>is a &lt;something – the ‘how’&gt;</td>
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<td>that &lt;provides this value&gt;</td>
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<td>Unlike &lt;competitor, current solution, or non-existing solution&gt;</td>
</tr>
<tr>
<td>our solution &lt;does something better – the ‘why’&gt;</td>
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</tbody>
</table>

Outcomes hypothesis: 

Leading indicators: (early innovation accounting measures)

NFRs: 

PREPARE 10 min
How Zappos used Innovation Accounting

- Hypothesis: People will buy shoes via the Internet
- MVP: basic web site and manual shipping
- Leading indicator: Orders
Leading Indicators vs. Vanity Metrics
Beware of vanity metrics!

- Lagging indicators that make us feel good
- Doesn’t provide information about proving/disproving the hypothesis
- Does not provide information as to the success or failure of the initiative
- Doesn’t help with the *pivot* or *persevere* decision

Examples:
- Velocity
- Raw page views/hits
- Revenue
Focus on leading indicators

- Answers two questions:
  - Are we making progress on our outcome hypothesis?
  - How do we know?

- Actionable metrics focused on measuring early outcomes, based on data

- Examples:
  - Evaluating new features based on control groups
  - Cohort Analysis e.g. conversion rates
And now the bad news…

There are no standard leading indicators

More bad news…

You will have to think!
Discussion: vanity metrics vs. leading indicators

- Step 1: Identify three examples of vanity metrics from your context and write them down.
- Step 2: Write down what you think might be some leading indicators to use instead of the vanity metrics.
- Step 3: Share your insights with the class.
## Leading indicators

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<tbody>
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<td><strong>Average Call Center Volume</strong></td>
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<td>7200</td>
<td>6800</td>
<td>6500</td>
<td>6300</td>
<td>6200</td>
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<td><strong>Average Calls for Flight</strong></td>
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<td>Schedules</td>
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<td>4500</td>
<td>3000</td>
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<td><strong>Average Talk Time</strong></td>
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<td><strong>Visits to the site</strong></td>
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<td><strong>Web site flight schedule</strong></td>
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<td>queries</td>
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<td>500</td>
<td>900</td>
<td>1700</td>
<td>2200</td>
<td>3300</td>
<td>4200</td>
<td>4500</td>
<td>6000</td>
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</tbody>
</table>

### Airline Website MVP Leading Indicators

- **Average Call Center Volume (per day)**
- **Average Calls for Flight Schedules**
- **Average Talk Time (in minutes)**
- **Visits to the site**
- **Web site flight schedule queries**
Half of your table stays

The other half walks around the room to observe what was done at the other tables and ask questions

After 5 minutes, switch

Tweet your pics: @joejv
Business Agility: The decision to pivot or persevere

- So difficult, many companies fail to make it
  - Data indicating a pivot is often disregarded
- Must ignore sunk cost
- Have we delivered sufficient value?
- Money allocated $\neq$ money spent
- Enables true business agility at scale
Money allocated does not mean, money spent

- Approved airline website
- Lean Business Case and hypothesis

**Lean Startup Cycle**

1. **Epic**
   - Build MVP
   - Users can browse flight schedules
   - Implement additional Features
   - Continue until WSJF determines otherwise

2. **Evaluate MVP**
   - Persevere
   - Pivot

3. **Stop work**

**Tune the Engine:** Did call volumes decrease? Did website queries increase?
Learn more – www.scaledagileframework.com

Advanced Topics
- Agile Contracts
- Agile HR Playbook for SAFe
- Agile HR with SAFe
- Applied Innovation Accounting
- CapEx and OpEx
- Enterprise Backlog Management
- Lean UX and SAFe
- SAFe Portfolio Workflow

What’s New in SAFe 4.5
SAFe 4.5 reflects the latest in Lean-Agile thinking, more visibly incorporating scalable DevOps and the Continuous Delivery Pipeline. It demonstrates advancements in configurability, implementation guidance, and enhanced capabilities for improving the user experience and accelerating time-to-market.

Recent Blog Posts
- Lean UX and the SAFe Program Increment Life Cycle
- An HR Playbook for a Successful SAFe Implementation
- SAFe 4.0 Being Retired on Oct. 31, 2018
- GDPR — Action required to continue receiving communications
Activity: Pop-up exercise

- Write 3 things you learned from this workshop
- Pair with a person from another table and explain how you will use this in your context
- Pop up and tell us something you learned
Summary

SAFe applies Innovation Accounting

Fast feedback loops (PDCA) and small batch sizes are key

Multiple learning opportunities to analyze data

Leading Indicators vs. Vanity Metrics

Pivot vs. Persevere
Feedback
Q&A