

Agile Metrics

Jeff Barschaw

de:

- Take 5 Minutes
- Turn to a Person Near You
- Introduce Yourself
- Business Cards

- An understanding of Metrics characteristics
- What are Agile Metrics
- How to apply the characteristics to improve Agile Metrics



What are some adjectives you use when referring to Agile Metrics?

What Agile Metrics have you heard about or are using?

- Metrics Introduction
 - Leading vs Lagging Indicators
 - Qualitative vs Quantitative
 - Correlated vs Causal
 - KPIs vs Metrics
- What are Agile Metrics
- Common mistakes with Agile Metrics
- Types of Agile Metrics

~ —	
× I	
~ —	
	Л

The difference between KPIs and Agile Metrics



Qualitative vs Quantitative

Qualitative:

Consists of information that cannot be precisely measured (answer Why? or How?)

Pros:

- Offers rich and in-depth information and insights
- Helps in cases where we don't have numbers (yet)
- Not all decisions can or should be solely on numbers

Cons:

- The information could be biased and subjective
- Insufficient amount of information could skew conclusions
- Not asking for the right information

Quantitative:

Data that is grounded in numbers (can be counted or measured)

Pros:

- Is an objective way analyzing information
- Quick and easy to collect

Cons:

• Lacks depth and context, numbers do tell the whole story

When to use Qualitative or Quantitative

- Do you want to understand something, such as a concept, experience, or opinions? Use qualitative data.
- Do you want to confirm or test something, such as a theory or hypothesis? Use quantitative data.
- Are you taking on research? You may benefit from a mixed methods approach to data collection.

Leading vs Lagging Indicators

Lagging indicators assess the

current state of business

Lagging Indicators

- Measures current production and performance
 - How many people logged in this week
 - How many features did we deliver
 - How long does it take to fill out the form
- Lagging indicators are easy to measure but hard to change

Leading Indicators

- Measure actions necessary to achieve goals with measurable outcomes
 - What process can we use or need to change to achieve better outcomes
 - What team skill can we update to achieve desired outcome
 - What steps can be taken to improve production/outcomes
- Leading indicators are dynamic and hard to measure

Leading indicators predict future conditions

Let Rego be your guide.

- Correlated
 - There seems to be a relationship between cause & effect or between two metrics, but often the result/changes can be attributed to other factors.
 - It is the first step toward finding Causal relationships

- Causal:
 - By managing and control more of the variables of the domain, to prove a correlation is Causal

- Key Performance Indicator (KPI)
 - A set of quantifiable measures used to determine how you well your meeting key business objectives
 - They must be specific and Measurable
 - Targets a core business Goal or Objective
- Metric
 - A quantifiable measure the performance of your business
 - This difference is Metrics cover every aspect of business' performance

• KPIs are Metrics, but not all Metrics are KPIs

What are Agile Metrics



What are Agile Metrics

- Agile Metrics are simply metrics that leverage Agile principles
 - Developing SW is a team effort; therefore, Metrics should focus on the team and not the individual
 - Avoid Metrics for the sake of Metrics. Metrics should help the team improve and should always be changing
 - Agile Metrics must include the context along with the data

- Good Agile Metrics:
 - Should measure both the delivery of Value and the Process



Common Mistakes with Agile Metrics



Common Mistakes with Agile Metrics

- Measure individual performance and not the team's performance
- Comparisons be teams, groups, ART, etc.
- Using the same metrics for long periods
- Not embedding metrics into you process
- Vanity Metric Metrics that cannot be acted upon

Types of Agile Metrics



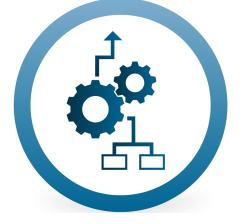
Team Metrics

- Measurements of what a team produces
 - Velocity, Sprint Burn-down, Throughput, Cycle/Lead Time, Cumulative Flow Diagram (CFD)
 - Should be based on Team level work (User Stories, Defect, Tasks)
 - Lagging Indicators
 - Mostly Quantitative Data
- Measurements of how a team produces
 - Agile Team Practice assessment, happiness scores around ceremonies, ability to resolve impediments, etc.
 - Leading Indicators
 - Mostly Qualitative Data



Organization/ART Metrics

- Measurements of what a team produces
 - Velocity, PI/Release Burn up, Throughput, Cycle/Lead Time, Cumulative Flow Diagram (CFD), Business Value delivered
 - Should be based on Organization/ART level work (Features)
 - Lagging Indicators
 - Mostly Quantitative Data
- Measurements of how a team produces
 - SAFe/Organizational Practice assessment, happiness scores around Scrum of Scrums/PO Sync, ability to resolve impediments, Number of Team dependencies, etc.
 - Leading Indicators
 - Mostly Qualitative Data



- Measurements of what a Portfolio produces
 - Throughput, Cycle/Lead Time, Business Value Delivered
 - Should be based on Organization/ART level work (Epic/Capabilities)
 - Lagging Indicators
 - Mostly Quantitative Data
- Measurements of how a Portfolio produces
 - Portfolio Practice assessment, happiness scores around ceremonies, Number of ART/Organizational dependencies, etc.
 - Leading Indicators
 - Mostly Qualitative Data



Did we achieve these Outcomes?

- Leave with a better understanding of the Metrics characteristics
 - Qualitative vs Quantitative
 - Leading vs Lagging
 - Correlated vs Causal
 - KPIs vs Metrics
- Better understanding of Agile Metrics
 - Measure individual performance and not the team's performance
 - Comparisons be teams, groups, ART, etc.
 - Using the same metrics for long periods
 - Not embedding metrics into you process
 - Vanity Metric Metrics that cannot be acted upon
- How to apply the characteristics to improve Agile Metrics
 - Agile Metrics should be a combination of Qualitative vs Quantitative and Leading vs Lagging



Questions?



Surveys

Please take a few moments to fill out the class survey. Your feedback is extremely important for future events.



Let Rego be your guide.

Thank You For Attending Rego University

Instructions for PMI credits

- Access your account at pmi.org
- Click on **Certifications**
- Click on Maintain My Certification ٠
- Click on Visit CCR's button under the Report PDU's ٠
- Click on Report PDU's •
- Click on **Course or Training** •
- Class Provider = Rego Consulting
- Class Name = regoUniversity
- Course **Description**
- Date Started = Today's Date
- Date Completed = Today's Date ۰
- Hours Completed = 1 PDU per hour of class time ٠
- Training classes = **Technical** ٠
- Click on I agree and Submit



Let us know how we can improve! Don't forget to fill out the class survey.



888.813.0444

Email info@regoconsulting.com



Website www.regouniversity.com

Let Rego be your guide.