John Tanner
Metrics for Good Not Evil or:
How I learned to stop worrying and trust the KPIs
A little update...

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Married one year ago to this beautiful woman...
Session history, format, and how I loathe slide decks...
Why Capture Metrics at all?
Why capture metrics at all?

Some might say:
Because it’s a quantitative and qualitative way to demonstrate business performance in the lenses of the various strata of your organization as well as how it relates to external market pressures and internal risks and controls.
I prefer:
Because we want to be able to do good stuff in good way and know if our stuff is any good
OKRs, KPIs, and GQM
Understanding your business drivers

What do we need to survive?
What do we need to thrive?

Business drivers should connect every aspect of an organization
Defining KPIs, OKRs and other unrelated acronyms

OKRs – Objectives and Key Results

A framework for defining and tracking objectives and their outcomes - Wikipedia

**Example Objective:**
Increase new customer acquisition by 20%

**Key Results:**
Identify 40 high potential customers to meet with by October
Meet with and demo the product with 20 of them before December
Sign contracts with 10 of them before January
Defining KPIs, OKRs and other unrelated acronyms

KPIs – Key Performance Indicators

A quantifiable measure used to evaluate the success of an organization, employee, etc. in meeting objectives for performance. – Oxford Dictionary

Example KPIs:
Number of customers identified last quarter
Number of customers demoed this quarter
Number of customer acquisitions this quarter
Defining KPIs, OKRs and other unrelated acronyms

GQM – Goal Question Metric

GQM defines a measurement model on three levels:

Conceptual level (Goal) [...]
Operational level (Question) [...] 
Quantitative level (Metric) - Wikipedia

Example GQM:

Goal: Increase revenue through customer acquisition so our company becomes more profitable. 
Questions: Are we targeting the right customers? Are we creating awareness? Is our approach timely? 
Metrics: Customer acquisition ratio, customer acquisition rates, new customer lead time
How do those work together?
Focus on the business drivers

What do we need to survive?
What do we need to thrive?

Connect the organization with use of OKRs and KPIs
Good Intentions Driving Bad Behaviors
Good intentions driving bad behaviors

Team-Level (Punitive Measures)

- Old school:
  Lines of Code

- Modern:
  Velocity
  Check-in frequency
  Defect count
  (every other metric when used for evil)
Our Team-Level mandate is that velocity increases over time.

Team A

Team B

Team Velocity over Time

Which team is doing worse?
Good intentions driving bad behaviors

Program-Level (Obfuscation Measures)

- Old school:
  Earned Value (without releasing anything)

- Modern:
  Velocity Rollup
  Epic Cycle Time
  Cost Per Story
Epic Cycle Time used for Evil

Our program-level mandate is no epics that take over 100 days

Epic A

Estimated: 135 days

Estimated: 90 days
Q1 Epic

Estimated: 90 days
Q2 Epic

Estimated: 90 days
Q3 Epic

Estimated: 90 days
Q4 Epic

How do I solve this problem? Oh, I know!
Good intentions driving bad behaviors

Portfolio-Level (Misguided Measures)

- Old school:
  Stage Gate Performance

- Modern:
  Velocity Rollup
  Due Date Performance
  Cost Per Team Item Delivered
Epic Cycle Time used for Evil

Our portfolio level mandate is the cost per team work item remain below $10,000

Team A
Loaded team cost: $80,000 per 2 weeks
Items delivered: 11
Cost per item: $7,273

Team B
Loaded team cost: $80,000 per 2 weeks
Items delivered: 12
Cost per item: $6,667

Split em’, skip QA, and get em’ out the door.
Break-out, how good are your intentions and behaviors?
Visibly Connected Outcomes and Behaviors
Visible Outcomes Driving Good Behaviors

Our Team-Level objective is that we become predictable and stable over time

Throughput
Throughput Variance
Team Stability (Are we committed and happy?)
Backlog Mix (Improvement, Enablers, Value)
Defect Trending (Escaped, Latent, Aging)
… many more in support of the goal!
Discussion

Throughput and Throughput Variance as an Example
Visible Outcomes Driving Good Behaviors

Our Program-Level objective is that we reliably produce value for the organization.

Roadmap Visibility (How far can we see?)
Feature Lead Time (How far from market are we?)
Net Promoter Score
Pirate Metrics (Acquisition, Activation, Retention, Revenue, Referral)
Discussion
Let’s think OKR for a moment

O = we reliably produce value for the organization
KR = 3-6 Months of Market Visibility
     Roadmap Visibility, Feature Lead Time
KR = Increase Customer-centricity & Satisfaction
     Net Promoter Score, Pirate Metrics
Visible Outcomes Driving Good Behaviors

Our Portfolio-Level objective is that we increase ROI through better investment

- Portfolio Mix (Are we investing in the right areas?)
- Value Stream WIP (Are we working a lot without getting paid?)
- Initiative & Epic Lead Time (Are we sitting on a pile of gold?)
Discussion
Let’s think Business Drivers

What are the 3 most common business needs?
Reduce Time to Market
Increase ROI
Reduce Cost
Break-out, how visibly connected are your outcomes and behaviors?
Creating the Environment and Inertia for Change
1. Create awareness: Show how misguided measures can drive bad behaviors

2. Be empathetic: Ask what keeps them up at night

3. Bring solutions: Educate leadership on connecting objectives to measures and how that helps with their needs

4. Be realistic: Measuring the right things doesn’t fix the system

5. Do the work: Measure, change things, measure again
Creating the Environment for Change

1. People don’t trust metrics! Can you blame them?
2. Show everyone the plan
3. Be transparent about why and what we are measuring
4. Maintain a systems view (people aren’t the problem)
5. Never discuss velocity outside of planning again...
Discussion
Thinking strategically about how we collect and leverage data *for good*

This isn’t a single team issue...
Break-out, what outcomes are your organizations trying to achieve? What are you measuring? Let's make those things align.