

TURNING THE SHIP WITH HEALTHY AGILE METRICS

JIM PICARD, SR. CSM

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JIM.E.PICARD@GMAIL.COM

C: 703-785-5629

WHO IS THIS GUY?

1. DEPARTMENT OF HOMELAND SECURITY'S INITIAL IT PROGRAM MANAGEMENT OFFICE
2. DEPARTMENT OF DEFENSE PROCESS IMPROVEMENT AT THE DEFENSE LOGISTICS AGENCY
3. DHS - IMMIGRATION AND CUSTOMS ENFORCEMENT (ICE) FIRST AGILE PROCESSES AND TEAMS
4. RELEASE MANAGER/PO – COMMODITIES AND FUTURES TRADE COMMISSION
5. SCRUM MASTER/PO FOR - BIG BANKING (7 LARGEST IN U.S.) FRAUD ANALYSIS PLATFORM
6. SCRUM MASTER/RELEASE MANAGER – MARYLAND HEALTH AND BENEFITS EXCHANGE
7. SCRUM MASTER/PO – ACCOUNTING RECONCILIATION AND CLOSURE SOFTWARE
8. SCRUM MASTER - LAS VEGAS CASINOS ELECTRONIC GAMES
9. SCRUM MASTER – CONVENIENCE STORE MERGER AND ACQUISITION INTEGRATION

WHAT DID I LEARN?

- WE WASTE A LOT OF MONEY (TAXES) CONFUSING OURSELVES WITH CHANGING GOALS AND METRICS AROUND THEM
- EVERYONE WANTS TO THINK “WE ARE A SPECIAL CASE” – THIS IS A CRUTCH; AND IT’S FALSE
- EVERYONE IMPLEMENTING AGILE STRUGGLES WITH THE SAME THINGS – AND IT’S USUALLY MANAGEMENT’S FAULT – AND THEY DON’T EVEN KNOW IT

We don't know “Why” Agile – we just get told it will fix things if we “Do it”

WHY AGILE?

1. ACCELERATED TIME TO DELIVERY
2. BETTER TIME UTILIZATION
3. ABILITY TO ADAPT TO RAPIDLY CHANGING PRIORITIES

| EFFICIENCY

4. CONSTANT CUSTOMER FEEDBACK
5. BETTER ALIGNMENT BETWEEN (IT) AND THE BUSINESS
6. ENHANCED (SOFTWARE) QUALITY
7. SATISFIED CUSTOMERS AND STAKEHOLDERS

| VALUE

8. EARLY RETURN ON INVESTMENT
9. REDUCED COSTS
10. MORE TRANSPARENCY AND BETTER VISIBILITY

| PLANNING/BUDGETING

AGILE PURPOSE

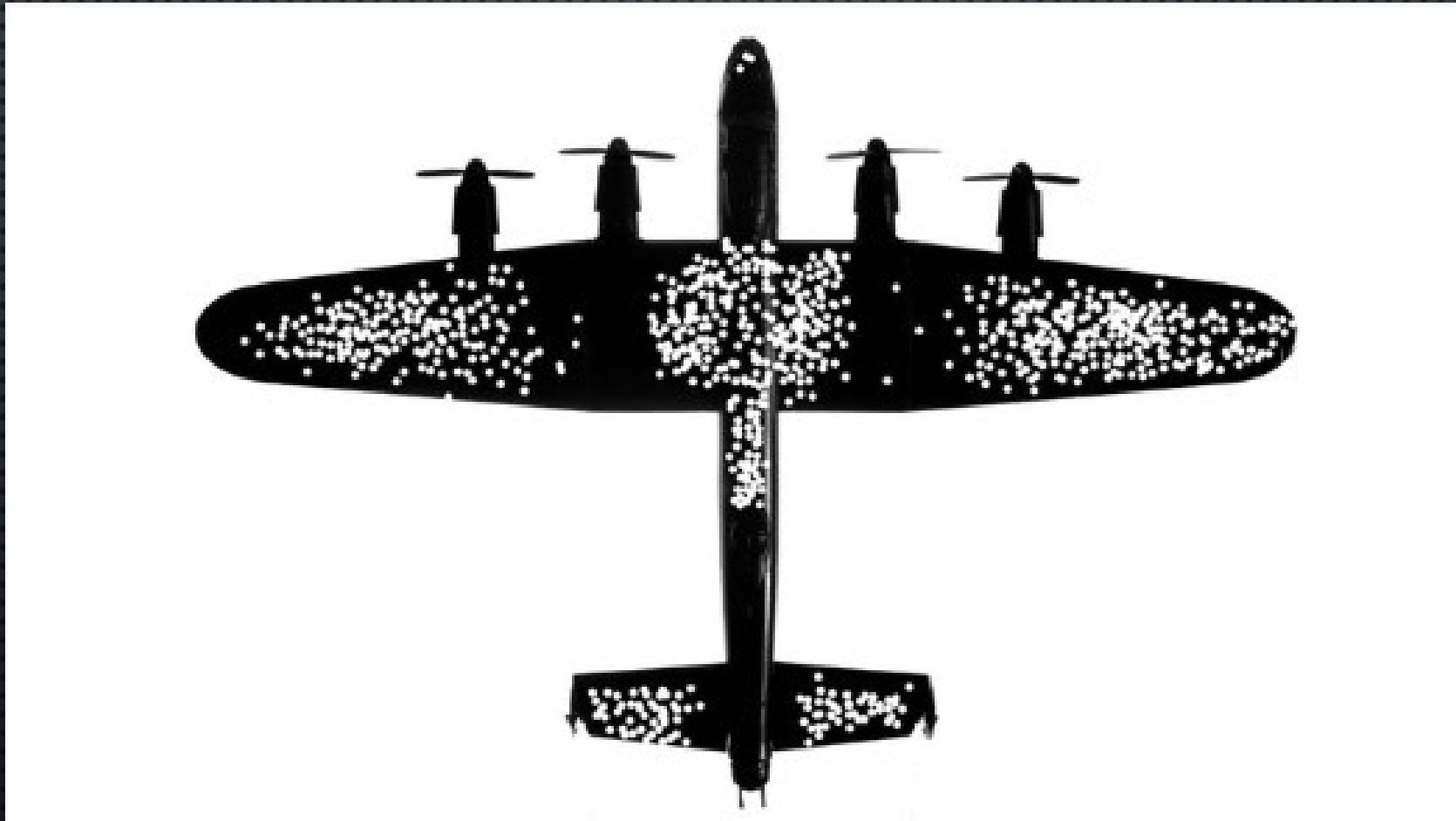
“OUR HIGHEST PRIORITY IS TO SATISFY THE CUSTOMER THROUGH EARLY AND CONTINUOUS DELIVERY OF VALUABLE SOFTWARE.”

- 1ST OF 12 PRINCIPLES OF THE AGILE MANIFESTO

“If we are blindly following a methodology - we have missed the point.”

- Me

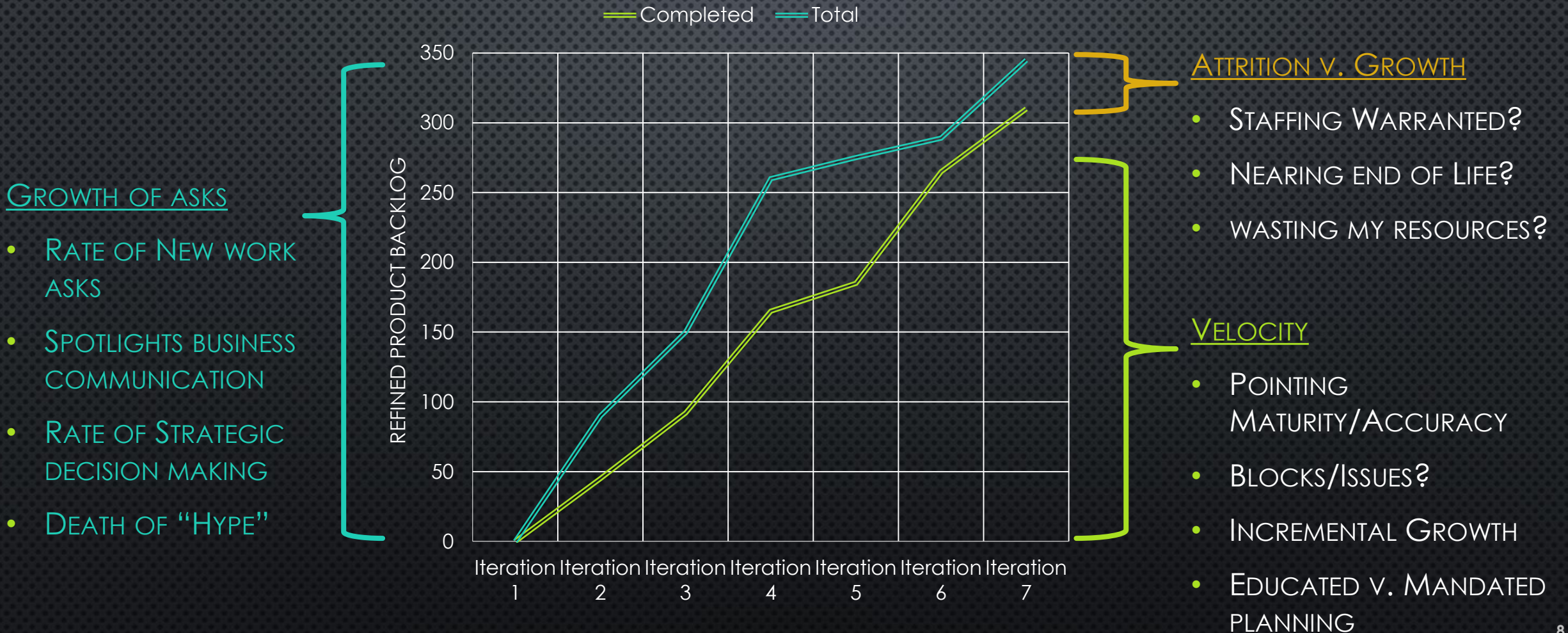
ABRAHAM WALD – METRICS W/O A STORY “SURVIVORSHIP BIAS”



AGILE METRICS – PURPOSES AND GUIDELINES

- **THE METRIC IS USED BY THE TEAM** – AGILE METRICS SHOULD NOT BE IMPOSED OR MEASURED BY MANAGEMENT, THEY SHOULD BE USED VOLUNTARILY BY AGILE TEAMS TO LEARN AND IMPROVE.
- **THE METRIC IS SURROUNDED BY CONVERSATION** – METRICS SHOULD NOT JUST BE NUMBERS, THEY SHOULD BE THE STARTING POINT OF A CONVERSATION ABOUT PROCESS AND ROADBLOCKS AFFECTING THE TEAM.
- **THE METRIC IS PART OF A SPECIFIC EXPERIMENT** – METRICS SHOULD BE USED TO ANSWER A SPECIFIC QUESTION ABOUT AGILE PROCESSES, NOT JUST MEASURED FOR THE SAKE OF MEASUREMENT.
- **THE METRIC IS USED IN TANDEM WITH OTHER METRICS** – EVEN A GREAT METRIC, IF USED ALONE, MIGHT LEAD TO TUNNEL VISION, AND INCENTIVIZE TEAMS TO MAXIMIZE THAT METRIC AT THE EXPENSE OF ALL ELSE. USING SEVERAL METRICS TOGETHER PROVIDES A BALANCED PICTURE OF AGILE ACTIVITY.
- **THE METRIC IS EASY TO CALCULATE AND UNDERSTAND** – METRICS THAT ARE OVERLY COMPLEX OR NOT FULLY UNDERSTOOD, EVEN IF THEY PROVIDE GOOD INSIGHTS ABOUT A TEAM'S WORK, ARE NOT USEFUL IN GUIDING DAY-TO-DAY ACTIVITIES.

BURN UP – WHAT CAN WE SEE?



BURN DOWN – WHAT CAN WE SEE?

Iteration Burn Down



COMMITTED WORK

- MORE/LESS THAN USUAL FOR THIS TEAM?
- DOES IT INCREASE MID-ITERATION?
- LOTS OF HOLIDAYS?

CONSISTENCY OF BURN

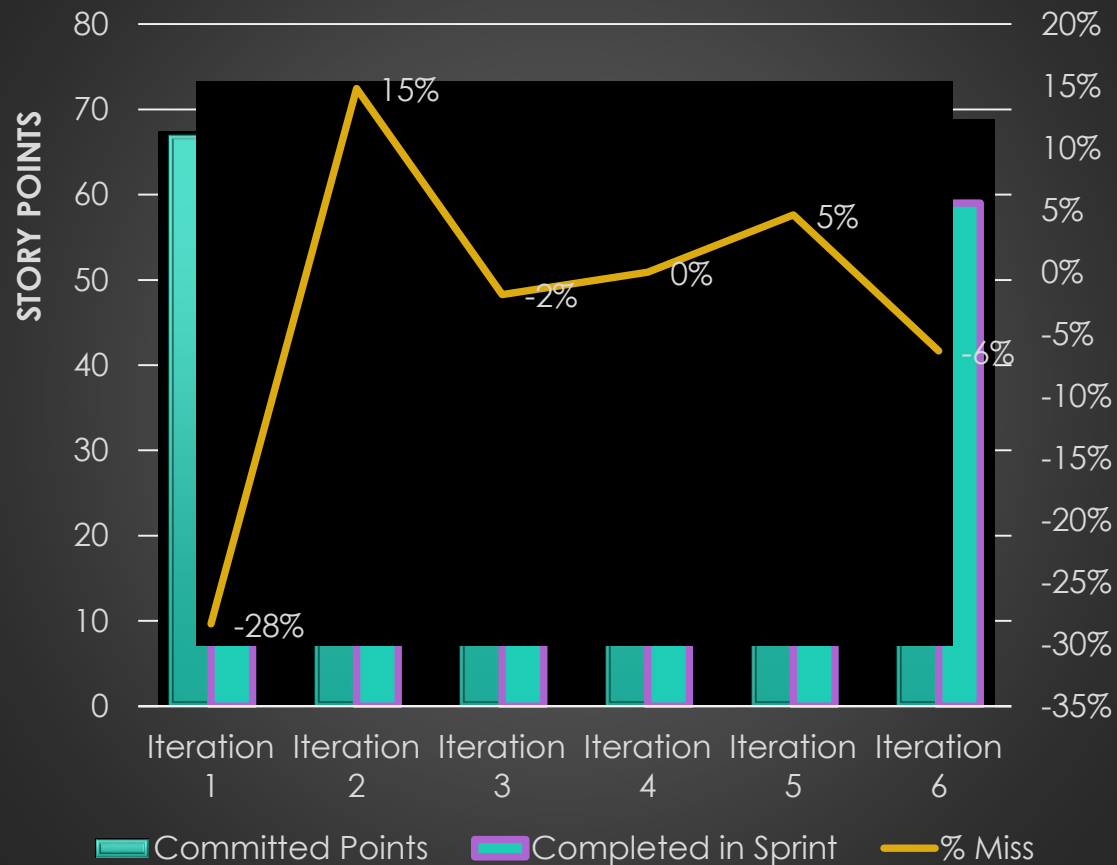
- POINTING MATURITY/CONSISTANCY
- BLOCKS/ISSUES?
- IS COMPLETING > STARTING?

PRECISION OF COMMITMENT

- HOW WELL DO WE KNOW OURSELVES?
- ARE WE PUSHING OURSELVES?
- OVERCOMMITTING OURSELVES?

COMMITMENT PRECISION— WHAT CAN WE SEE?

Commitment Accuracy



PRECISION OF COMMITMENT

- HOW WELL DO WE KNOW OURSELVES?
- ARE WE PUSHING OURSELVES?
- OVERCOMMITTING OURSELVES?
- HOW MUCH FAITH WILL OUR STAKEHOLDERS HAVE IN US?

TOO MUCH NEGATIVE OR POSITIVE IS A BAD THING

LEAD TIME AND CYCLE TIME – WHAT CAN WE SEE?

LEAD TIME

- HOW FAST ARE WE RESPONDING TO THE INDUSTRY?
- HIGHLIGHTS REFINEMENT PROCESS AND BACKLOG QUALITY

ANSWERS THE QUESTIONS:

“WHEN DO YOU THINK I CAN HAVE THAT BY?”

“WHEN SHOULD WE GET INTO THE QUEUE IF WE WANT IT BY SEPTEMBER?”



ANSWERS THE QUESTIONS:

“YOU TOLD ME YOUR TEAM IS WORKING ON IT,
WHEN WILL IT BE DONE?”

“WHY IS THIS TAKING SO LONG? IT FEELS LIKE
IT’S TAKING LONGER THAN USUAL...!?”

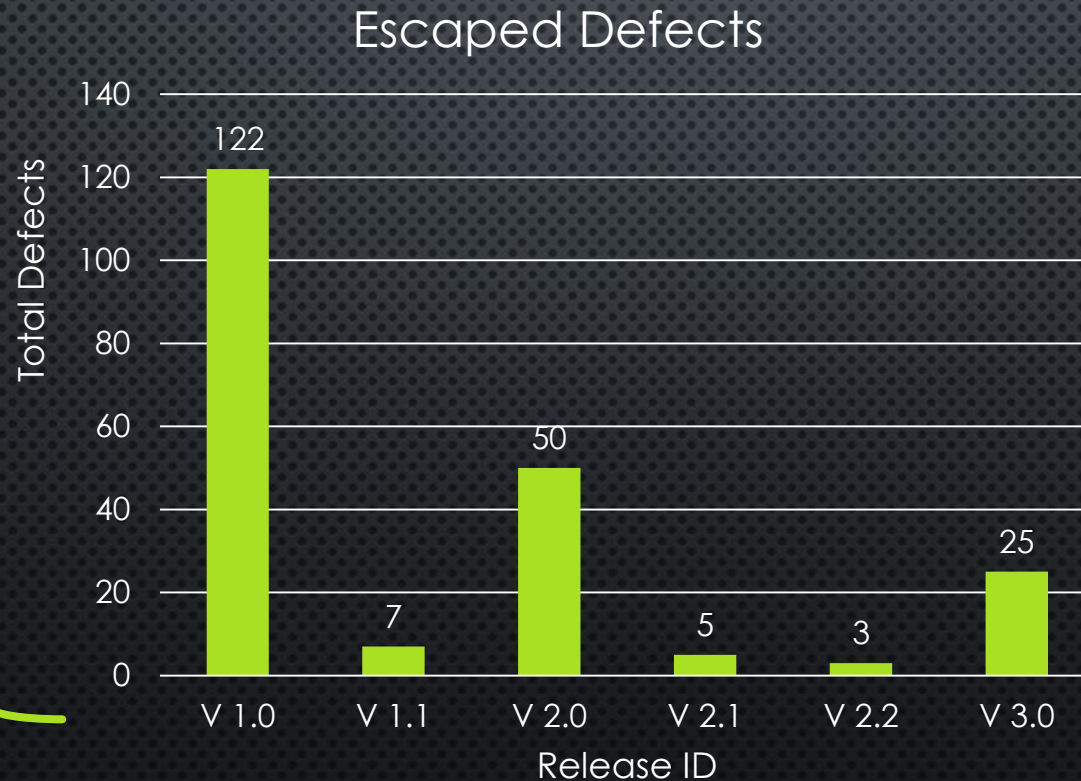
CYCLE TIME – SHOULD BE LESS THAN THE ITERATION LENGTH

- HOW LONG DOES WORK TAKE TO DO
- HOW GOOD ARE OUR ACCEPTANCE CRITERIA?
- ARE WE OFTEN BLOCKED?
- ARE WE GOING TO MAKE THIS ITERATION GOAL?

ESCAPED DEFECTS – WHAT CAN WE SEE?

TOTAL DEFECTS

- MORE/LESS THAN USUAL?
- WAS IT A BAD RELEASE, A MAJOR RELEASE, OR JUST BEEN AROUND AWHILE?
- DID WE TOUCH A HIGHLY UTILIZED PART OF THE SYSTEM?



ADDITIONAL FILTERS JIM LOVES:

- CATEGORIZE BY PRIORITY (P1, P2, P3...)
- CATEGORIZE BY FUNCTIONAL AREA – DISPLAYS TRAINING GAPS
 - “REPORTING”
 - “MOBILE CONVERSION”
 - “TRANSLATION RENDERING”
- “CARRIED OVER DEFECTS” – WAS THIS IN A PRIOR VERSION?
- STAKEHOLDER WHO ESCALATED THE DEFECT

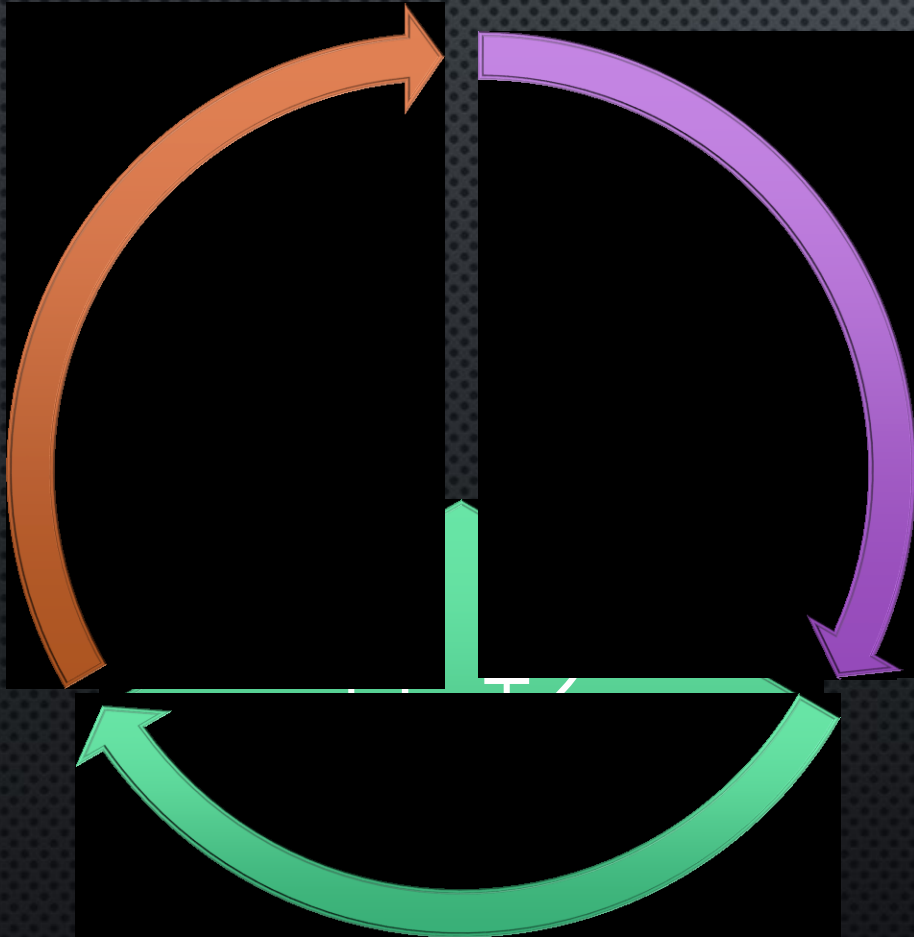
STAKEHOLDERS SUPPORTED – WHAT CAN WE SEE?

Stakeholder Group or Personas	POC	What have we done for them?
Report Users	Sara Veyor	<ol style="list-style-type: none"> 1. Created Regionalized Filtering 2. Increased Report rendering performance by 1.5 minutes
International Users	Carol West	<ol style="list-style-type: none"> 1. Addition of Japanese Translation 2. Addition of French Translation
Auditors	David Checker	<ol style="list-style-type: none"> 1. ??????
System Architects	Tom Builder	<ol style="list-style-type: none"> 1. Implemented system health logging

ANSWERS THE QUESTIONS:

- “WHY DON’T YOU DO ANYTHING FOR MY TEAM?”
- “WHAT COULD POSSIBLY HAVE BEEN HIGHER PRIORITY THAN....”
- “HOW DID THIS BECOME PRIORITY?”
- “HAVE WE SPOKEN TO EVERYONE WHO IS GOING TO BE AFFECTED?”
- “WHO TOLD YOU THIS WAS IMPORTANT?”

RECIDIVISM



COUNT OF HOW OFTEN A PRODUCT BACKLOG ITEM OR TASK GOES BACK AND FORTH BETWEEN DEVELOPMENT AND TESTING

- ENVIRONMENT MUST HAVE STRONG TRUST AND CULTURE FOR THIS TO WORK
- MANAGEMENT MUST NEVER USE THIS METRIC FOR PUNISHMENT – IT IS HIGHLY GAMEABLE BY THE TEAM AND UNDERMINES MORALE
- IF YOU CAN ABIDE BY THE ABOVE – THIS METRIC CREATES A GREAT WAY TO POINT OUT TRAINING GAPS
 - ACCEPTANCE CRITERIA QUALITY
 - WEAKNESS IN CODING SKILLS
 - GAPS IN APPLICATION KNOWLEDGE
 - COMMUNICATION ISSUES WITHIN THE TEAM – IS TESTING INVOLVED EARLY ENOUGH?

CHEAT SHEET

Traditional Scenarios

Good Metrics

Answers the following:

- Back log item counts
- Imposed Project Time Lines
- Budget allocations on dated projects/products

- Burn Up and Burn Down Charts
- Lead Time

How fast are we moving?
How far do we have to go?
Should we keep going that way?

- “Squeaky Wheel” escalations

- Escaped Defects

Is it actually that bad?
Do we understand our own gaps?
Are we addressing the highest priority needs or the loudest?

- Stakeholders feeling unserved
- Perceptions of poor responsiveness

- Lead Time and Cycle Time
- Stakeholder Lists
- Burn Up Charts

Did we miss someone?
Are we ignoring someone?
Are we even positioned to help them?

- Product Team feels like there is not enough effort and /or commitment
- Morale issues
- Resource Attrition

- Commitment Accuracy
- Velocity

Are we pushing ourselves?
Do we have enough/correct resources/training?

- Frustrated Testers
- Late promotion of code in a sprint

- Recidivism
- Cycle Time

Where is the process bottle necking?
Is this a code quality or communication issue?

HOME WORK

- GO TO YOUR METRICS AND ALIGN THEM TO THE METRICS I PRESENTED TODAY
- FLAG ITEMS THAT DON'T PAIR TO ONE OF MINE AND ASK YOURSELF "IS THIS FOR MANAGEMENT, OR FOR BETTERING THE TEAM?"
- GENERATE YOUR METRICS WHILE TIMING YOURSELF
- GENERATE MY METRICS WHILE TIMING YOURSELF

HINT: MINE CAN BE DASHBOARDS IN ALL APPLICATION LIFE CYCLE MANAGERMENTS TOOLS (ALM)

- ASSESS:
 - WHICH IS FASTER?
 - DO I NOW HAVE INSIGHT I DIDN'T BEFORE?
 - DID I LOSE ANY INSIGHT I HAD BEFORE?

STOP CREATING PRESENTATIONS WITH STATIC METRICS, IN STATIC FORMATS, WHEN ALL OF THIS INFORMATION LIVES IN YOUR ALM

QUESTIONS?