

Case Study: An Engineering-Focused, Scaled Agile Rollout at S&P Global Platts

Stan Guzik & Mary Thorn

WHO WE ARE: STAN GUZIK



Chief Technology & Innovation Officer
S&P Global Platts

Managed Global Engineering Teams of 900+

Building Agile Programs for 13 Years

Hobby Writing Code

Former USA Boxing Armature Boxer

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2

WHO WE ARE: MARY THORN



During her more than **20 years of experience** with financial, healthcare, and SaaS-based products, Mary has held VP, Director, and Manager level positions in various software development organizations.

A seasoned Leader and Coach in agile and testing methodologies, Mary has direct experience building and leading teams through large scale agile transformations. Mary's expertise is a combination of agile scaling, agile testing, and DevOps that her clients find incredibly valuable.

She is also Chief storyteller of the **book The Three Pillars of Agile Testing and Quality**, and avid keynote and conference speaker on all things agile and agile testing.

AGENDA

- 1** Guiding Principles
- 2** Discovery
- 3** Drivers for Change
- 4** Desired State
- 5** Delivery Timeline
- 6** ROLLOUT

WHY AGILE?

Technology needed to evolve from “business as usual” to “Power the Markets of the Future”.

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Guiding Principles

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GUIDING PRINCIPLES

“BE VIEWED AS THE #1 TECHNOLOGY GROUP IN S&P Global”

- 1** Strengthen, don't brake the Core
- 2** Evolve into a Tech Enabled Digital Data Company
- 3** Create a Technology Vision and Strategy
- 4** GSD: Get Stuff Done
- 5** Create a Culture of Transparency and Alignment
- 6** Innovate

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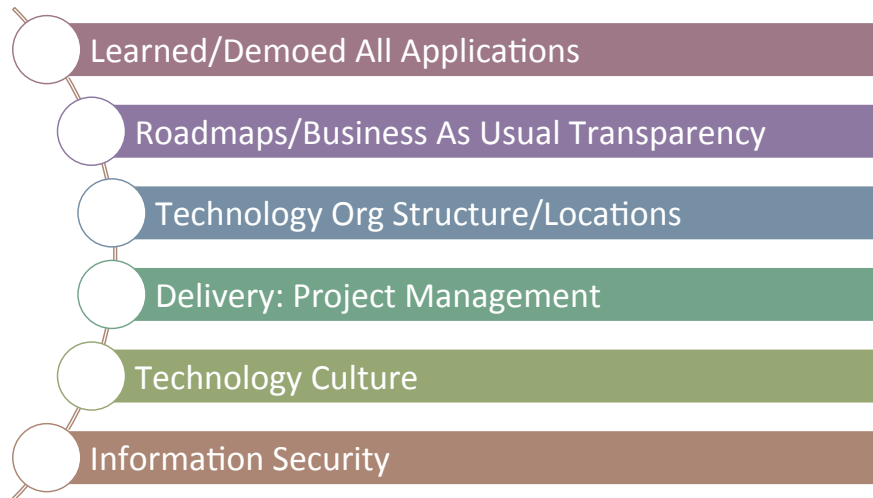


Discovery

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DISCOVERY

Roll Up the Sleeves and Deep Dive

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DISCOVERY

Learn Your Products and Be Able to Demo

- Ask direct reports to demo software followed by architecture review
- A number of acquisitions over the years
- Need for a technology integration strategy to address:
 - Number of Applications
 - Multiple Cultures
 - Office Locations
 - Project / Program Management Offices

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DISCOVERY

Opportunity to rationalize a mixed bag of technology



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Multiple
Customer
Applications

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Multiple Customer Applications

Multiple Applications

Logos shown: Microsoft ASP.net, MarkLogic, Microsoft IIS, Microsoft .NET WPF, Microsoft .NET WinForms, Microsoft Silverlight, ASP.net MVC3, Microsoft SQL Server, ORACLE, MySQL, Visual C#, Java, JavaScript, Linux Server, HTML5, CSS3, jQuery, python, amazon web services, Perl.

Both internal and external complexities shape our desire for simplification

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DISCOVERY (TEAM STRUCTURE)

Client/Server Org Structure Run By Project Management

Project Management

App 1 App 2 App 3 App 4 App n...

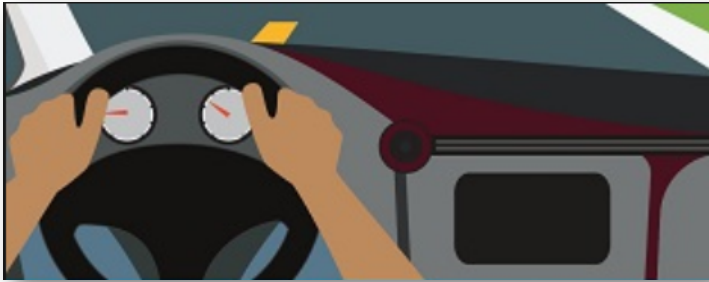
Database Development

Quality Assurance

- Project Management Run
- Fluid Project Teams
- Stove Pipe Development
- Multiple Locations
- Multiple Time Zones

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Drivers for Change

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DRIVERS FOR CHANGE

Focus on the Customer and Drive Digital Transformation

- **Platform Strategy to Delight the Customer**
 - Multiple login URLs
 - Multiple usernames / passwords
 - Multiple password complexity rules
 - Multiple user experiences
 - Reduce duplicate development
 - Limit BAU to 20%
- Build to “Power the Markets of the Future”

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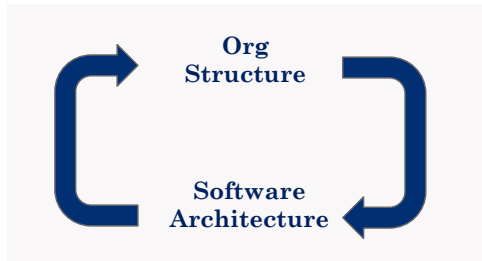
DRIVERS FOR CHANGE

Evolve the Org Structure to Enable Platform Development

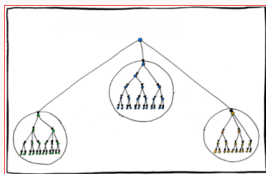
“Organizations which design systems (in the broad sense used here) are constrained to produce designs which are copies of the communication structures of these organizations”



Melvin Conway, Datamation, 1968



Reverse Conway's Law



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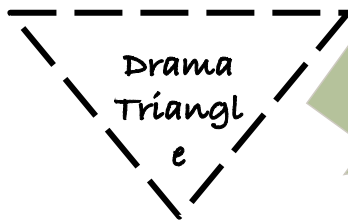
CULTURE SHAPING

Get Stuff Done! Common Language and Common Tool

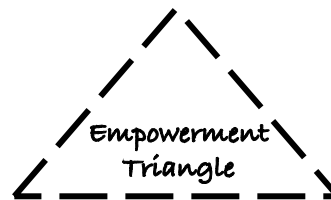
The Rescuer
 Poor you! Let me help
 Enabler, pain reliever,
 keeps victim dependent

The Persecutor
 It's all your fault!
 Critical, blaming, controlling,
 superior

The Creator
 I can do it!
 Outcome focused



The Victim
 Poor me!
 Powerless, hopeless, stuck



The Coach
 How will you do it?
 Supports, assists and facilitates
 desired outcome

The Challenger
 You can do it!
 Builds others up, encourages
 learning and growth

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Desired State

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DESIRED STATE

Technology Vision and Strategy

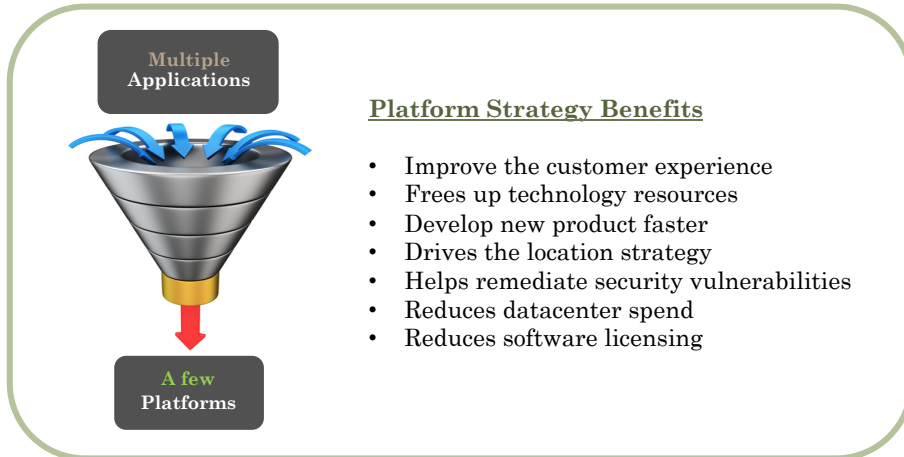
- Platform strategy to “Power the Markets of the Future”
- Create a platform migration plan to delight the customer, simplify technology operations and tackle technical debt
- Align tech / product organization structure with the platform strategy to develop capabilities
- Optimize team locations based on the platform migration strategy
- Align tech / product projects and bring transparency with the agile transformation
- Execute on Culture Shaping

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DESIRED STATE

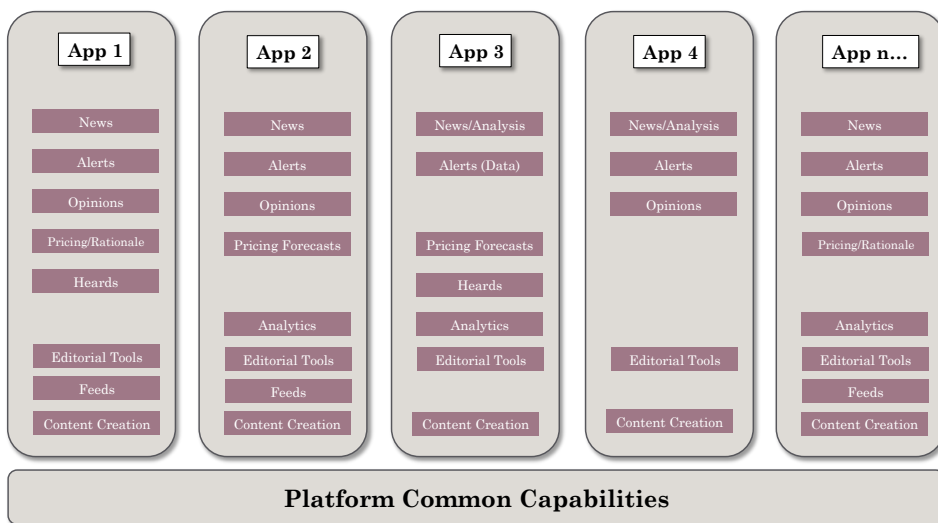
A platform migration strategy can significantly simplify the technology stack



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PLATFORM STRATEGY

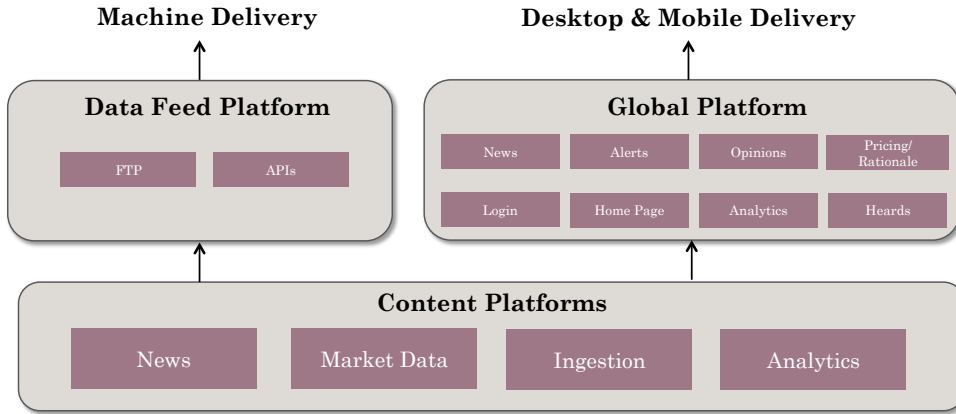
Identify common capabilities in applications and migrate them to one of the a few platforms



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PLATFORM STRATEGY

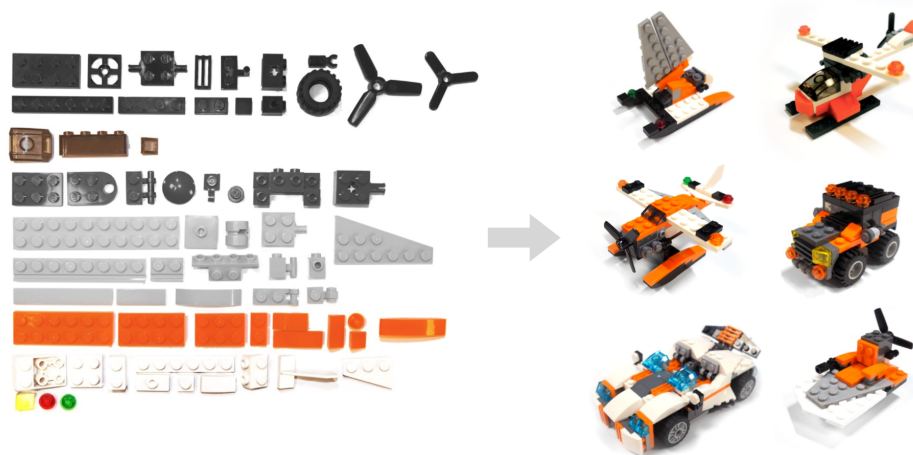
High-level abstraction of common components in a platform



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PLATFORM STRATEGY

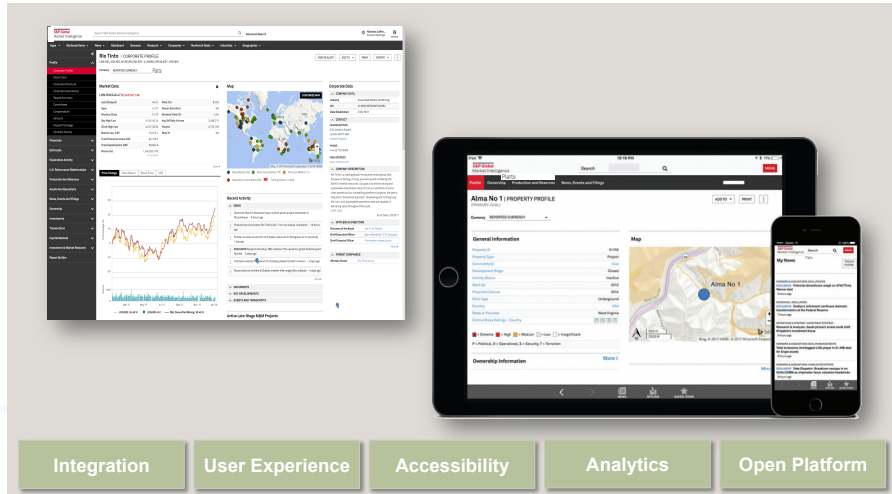
Common components are the Lego blocks to build the next gen platforms



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PLATFORM STRATEGY – S&P GLOBAL PLATFORM

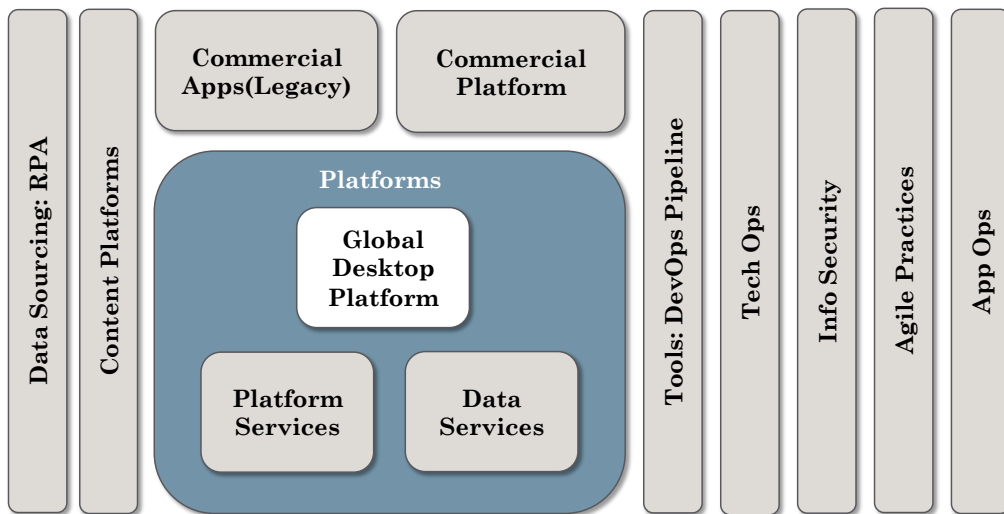
Platforms are open and configurable to enable application migration



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ORGANIZATION & PROGRAM DESIGN

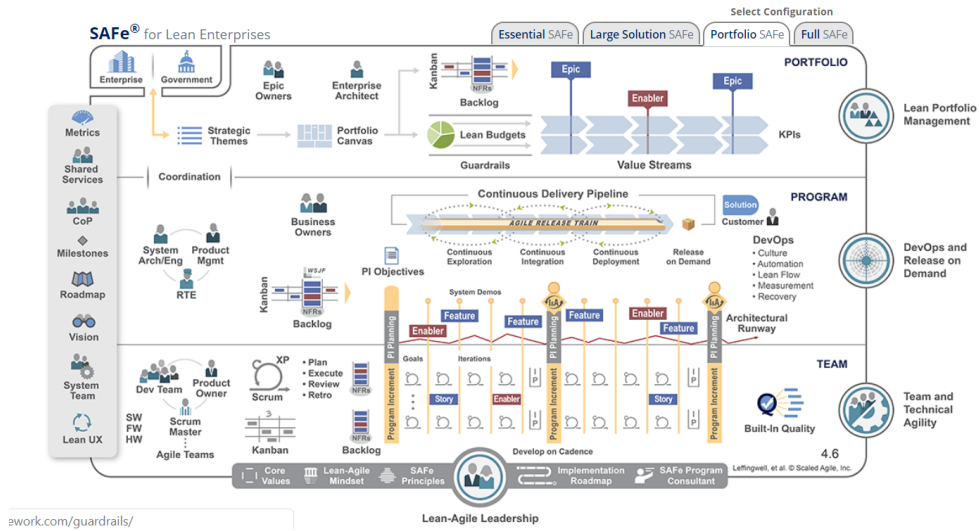
In a platform organization the program/team design reflects the platform strategy to reduce friction among the teams



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BUSINESS DEVELOPMENT LIFECYCLE

In Portfolio Management, Prioritization & Agile Delivery

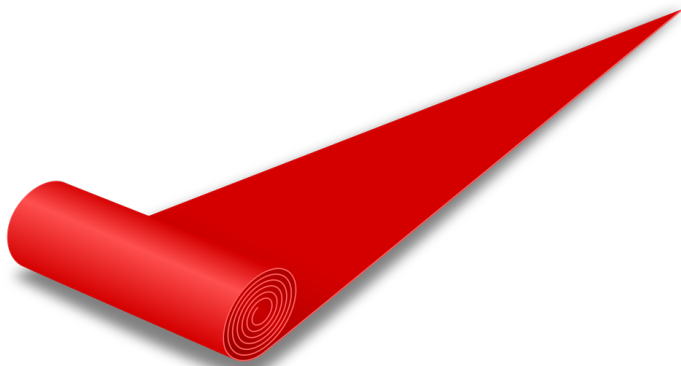


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Lean-Agile Leadership

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The Rollout and Outcomes

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TRAINED OVER 400 EMPLOYEES OVER 3 MONTHS

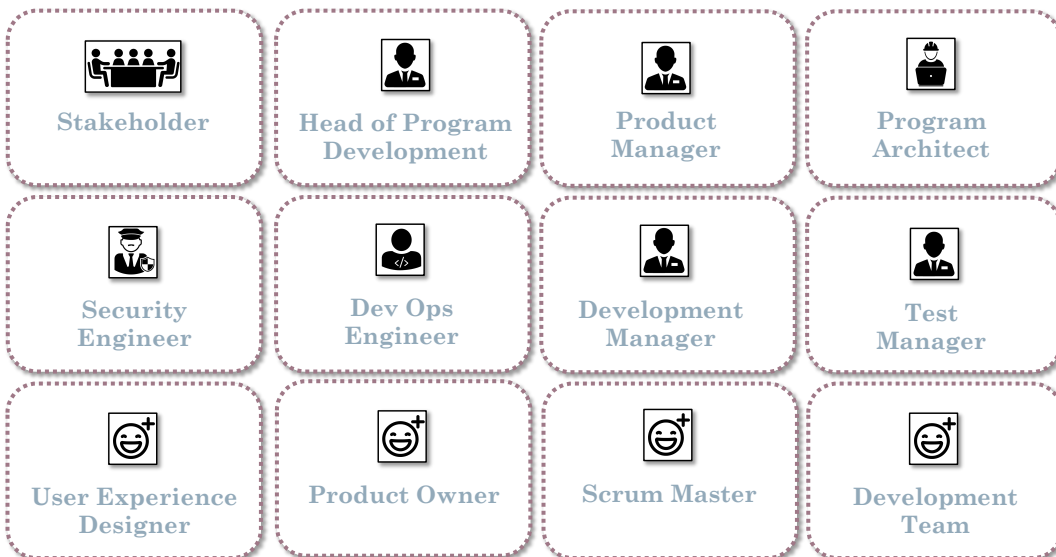


Introduction Agile 101

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COMMON UNDERSTANDING OF ROLES AND RESPONSIBILITIES



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ENTERPRISE DEFINITION OF READY – USER STORY

A user story cannot be pulled into the Sprint Backlog unless it is “Ready”. Being “Ready” means that a User Story has all the required attributes, fleshed out by the Team, to successfully execute on it. At Platts, “Ready” is defined by the following characteristics:



DESIGN:

- A User Story is defined and captured in VSTS in the following format: **“As a/an <type of user>, I want <some goal> so that <I can achieve some value>.”**
- Personas are understood for any new UI development
- Usability Design is compliant with the Platts Style Guide, or waiver has been obtained.
- Approved Project exists, which covers defined functionality.
- Integration points/APIs (external & internal) are understood, along with any necessary action
- Database changes/migration paths are understood by team
- Dependencies are identified (includes other scrum teams and non-dedicated resources) and people are committed. Documentation of dependencies is optional.



QUALITY:

- Non-functional requirements have been defined and are understood by the team (security, performance, scale, compatibility etc.)
- Team has accounted for required automated unit and integration tests in the scope of the story
- Acceptance Criteria is defined and captured in VSTS, and clarifies what must be true for the intended user to accept the functionality. More than one criterion may be included.
- If developing on S&P Global Platform, the User Story checklist has been reviewed and the requirements set in the document have been met.



COLLABORATION:

- Story Point Estimate, provided by the team, is defined and captured in VSTS.
- The User Story is feasible for completion in the Sprint (based on Story Points and Dependencies).
- The Product Owner, Dev and QA (3 Amigos) have reviewed all elements of the User Story, and all feedback has been resolved.

ENTERPRISE DEFINITION OF DONE – USER STORY

Functionality cannot be demonstrated at a Sprint Review unless it is “Done.” “Done” means that the functionality is completely engineered and could potentially be releasable to BETA. At Platts, “Done” is defined by the following characteristics:



DELIVERY:

- Development is complete in accordance with Platts Playbook/team coding standards, which includes peer code reviews and adherence to security principles (run security scans, if applicable).
- Code checked into source control and demonstrable in development/integration environment
- If developing on S&P Global Platform, then the Universal Checklist (UCL) passed.
- Representative data available



QUALITY:

- All planned tests must be ran manually (including Non Functional Requirements and test cases have been added to the test repository)
- All planned automated tests (unit, integration, or UI) have been written, code reviewed, run, PASS and added to the Continuous Integration build process as per playbook.
- ZERO P1, P2 Bugs



COLLABORATION:

- Any technical support documentation has been completed
- All planned user acceptance testing performed by Product Owner

STANDARD TOOLS FOR PROJECT TRACKING



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CONSTANT COACHING & WEEKLY MEETING WITH TEAMS

Team Health



Team Morale



Turnover Team Members



Scrum Team Members



Story Points earned %



DoR Backlog Depth



h Team overlap



DoR % & DoD %



BAU vs. New



Team Utilization % & Planned Utilization %

Project Tracking "Scaled Meta Scrum"

Weekly Meeting:
Including Product & IT...
Of "in Danger" Projects...



To review...
& mitigate risks!

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DELIVERY TIMELINE

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec 18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	
Strategy																			
100 Day Plan					X														
Discovery Phase			X																
BDLC Buy in			X																
Platform Strategy			X																
Org Design					X														
Culture Strategy					X														
Engineering Practices																			X
Rollout																			
EWS Upgrade					X														
Serena			X			X													
VSTS			X			X								X					
BDLC Framework			X	X		X	X			X									
Agile Scrum																			X
Plan Development																			
Org Change Mgt				X	X														
Platform Migration						X													
Location Strategy									X										
Data Sourcing								X											
Problem Management							X												
Information Security								X											
Innovation PoC->Core									X										
24																			

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Outcomes

- 1. First Release of Platform Vision Delivered in 6 months
- 2. Technology & Product are Aligned With an Agile Project Mgmt Framework
- 3. Technology is Seen as a Poster Child for GSD!
- 4. Technology Engagement Score Increased by 10%
- 5. Agile is being implemented in NON-Technology Areas
- 6. Innovation has Moved into Technology



QUESTIONS



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