Agile practices at Global Edge

Smart Practices

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CONTENTS

ABSTRACT

I would like to take this as an opportunity to explain what me and my team have been through in the last 8 to 10 months practicing Agile methodologies. I will attempt to answer some of the key questions:

Q: How the project execution has changed from "Follow the plan" to "Disrupt for Good"

Q: How would such projects run?

Q: How do projects handle such continuous disruptions?

Q: What it means by a continuous improvement?

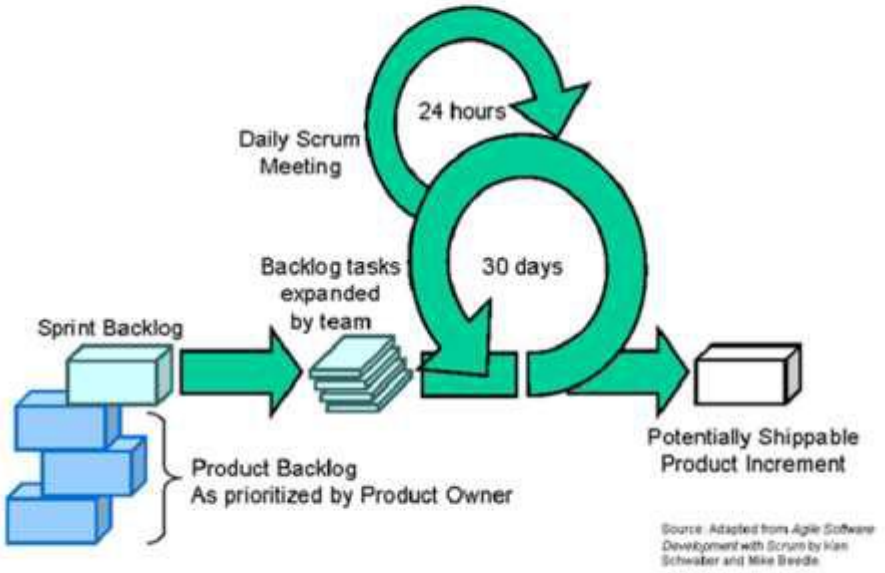
Also, i would like to take this as an opportunity to compare with rest of the industry on the metrics that we are preparing from Sprint to Sprint.

INTRODUCTION

We at Global Edge exercised Agile Methodology to execute customer project. This paper depicts ups and downs of our last 8 to 10 months of effort. So far we have completed 8 sprints successfully and through this paper presentation we would like to put forward / share few templates, best practices that we followed for our project execution and we would like to learn from the audience the best practices followed in the industry.

DETAILS OF THE PAPER

Scrum Sprint Perspective. Source: Adaptive Project Management Using Scrum



How the project execution has changed from "Follow the plan" to "Disrupt for Good"?

- Following the plan is the first discipline human has learnt over the years. Leadership is to create the plan and project team to follow the plan to execute the project. This has worked very well for decades. However as the time has passed to cover loop holes in following the plan new new disruptive methods are innovated. One such method is Agile.
- Agile primarily talks about:
  - Slave Leadership.
  - Build agile team.
  - Develop Working software.
  - Product Owner to provide product backlog.
  - Agile team to create user stories and story points to complete the Sprint activities.

- Scrum master to facilitate team to achieve Sprint deliverables.
- Performance management.

How would such projects run?

- One of the key advantage of Agile methodology is to inspect and adapt to changes. How did we do in the previous sprint. How can we improve. Since this happens over a short period of time i.e. through Sprint retrospective meetings, probability of success increases many folds.
- Adapting to continuously changing customer requirements. As and how the clarity of working software increases customer became more and more ambitious to achieve more than what the team is delivering. Difficulty that we faced is we cannot say no to customer. What did we do: accept the change request and request for additional time. Thankfully customer is technically sound and gives time to innovate new ideas. This has led to the increase in teams moral confidence to achieve customer expectations. On many occasions project team has proposed new ways of doing things and customer has happily accepted to our suggestions.

How do projects handle such continuous disruptions?

- Mind-set to adapt to changing environment. Ensure proper stake holder engagement. Handling the team by keeping low profile (Servant Leadership) to achieve project objectives.

What it means by a continuous improvement?

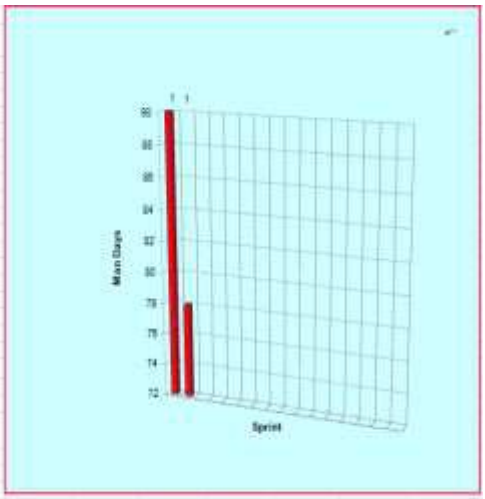
- Sprint planning should be done for a defined period of time. i.e. for 2 to 4 weeks of sprint duration. Here we can easily show how team has improved over sprint on sprint. But in my scenario we have observed varying sprint duration. Hence velocity is not a metric to show continuous improvement.
- If you look into our way of creating user stories, deciding on story points have grown from sprint to sprint. This is growth with maturity. I as a Scrum Master have played the role of an individual contributor till Sprint7. Sprint8 is completely executed by the project team.

Release Plan Template

Sprint Name- Project Name-Release-Deliverable						
Sprint #	Start Date (DD-MMM-YY)	End Date (DD-MMM-YY)	Man Days	Team Size	Release Date	Goals
1	DD-MMM-YY	DD-MMM-YY	90	6	DD-MMM-YY	Sprint1 Goals
1	DD-MMM-YY	DD-MMM-YY	78	6	DD-MMM-YY	Sprint1 Goals

Document Change History

Version No	Date	Brief Description of Change	Prepared By	Reviewed By	Approved By	Remarks
1	DD-MMM-YY	Initial Version				



Product Backlog Template

1	Product Backlog							
2	User Story ID	User Story	Sprint	Status	Priority	Comments		
3	Sprint#.01	User Story 1	1	Completed	Low		Status	
4	Sprint#.02	User Story 2		Completed	Low			Not Started
5	Sprint#.03	User Story 3		Completed	Low			In Progress
6	Sprint#.04	User Story 4		Completed	Low			Nearing Completion
7	Sprint#.05	User Story 5		Completed	Low			Completed
8	Sprint#.06	User Story 6		Completed	Low		Priority	
9	Sprint#.07	User Story 7		Completed	Low			High
10								Medium
11								Low
12								
13								
14	Document Change History							
15								
16	Version No	Date	Brief Description of Change	Prepared By	Reviewed By	Approved By	Remarks	
17								
18								
19								
20								
21								
22								

Requirement Traceability Matrix Template

1	Requirement Traceability Matrix								
2	User Story ID (Sprint#.xx.yy)		Sprint# Requirements	Responsible	Design	Code	Test Cases	Impacted Requirements	Comments
3	1.01	1.01.01							
4		1.01.02							
5		1.01.03							
6	1.02	1.02.01							
7		1.02.02							
8		1.02.03							
9		1.02.04							
10	2.01	2.01.01							
11		2.01.02							
12		2.01.03							
13		2.01.04							
14	2.02	2.02.01							
15		2.02.02							
16	3.01	3.01.01							
17		3.01.02							
18		3.01.03							
19		3.01.04							
20		3.01.05							
21		3.01.06							
22		3.01.07							
23		3.01.08							
24		3.01.09							
25		3.01.10							
26		3.01.11							
27		3.01.12							

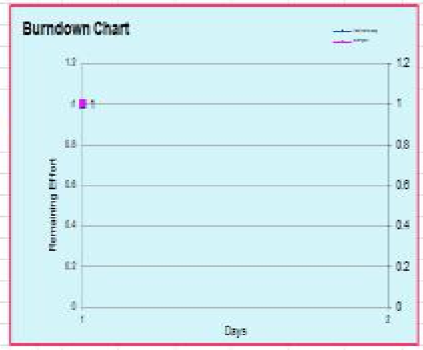
User Story Template

Sprint#	
Total Effort Remaining	0 0 0 0 0 0 0 0 0 0 0 0 0 0
Ideal Progress	0
Total Effort Spent	0 0 0 0 0 0 0 0 0 0 0 0 0 0
Trend calculated based on	n Weeks

User Story ID	User Story	Responsible	Start Date (DD-MMM-YY)	End Date (DD-MMM-YY)	Status	Priority	Comments	Effort Estimated(Hrs)	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Activity 1				Completed	Low																
2	Activity 2				Completed	Low																
3	Activity 3				Completed	Low																
4	Activity 4				Completed	Low																
5	Activity 5				Completed	Low																
6	Activity 6				Completed	Low																
7	Activity 7				Completed	Low																
8	Activity 8				Completed	Low																
9	Activity 9				Completed	Low																

(Header note over day columns: "o of days in Sprint and Effort Spen")

Status		This Color indicates Formula Based
Not Started		
In Progress		
Nearing		
Completed		
Priority		
High		
Medium		
Low		



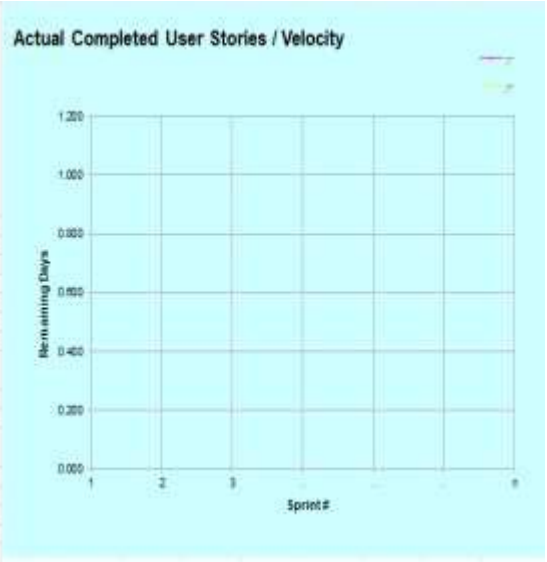
Project Metrics Template (1/2)

Sprint #	No of user Story Planned	Actual Completed User Stories	Velocity = Actual completed user stories / No of user stories planned for a particular sprint	Planned Effort	Actual Effort	Effort Variance	# Defects Found (Customer)	#Defects Fixed	KLOC	Review Defects (Internal)	Testing Defects (Internal)	Total Defect (internal) = Review Defects (Internal) + Testing Defects (Internal)	DRE (Defect Removal Effectiveness) = Total no of defects found by QES Team (Review defect + Testing defect) / Total # of defect in the sprint (QES defect + customer reported defect)	Defect Density (Total Defects / KLOC)	#Defects Injected Sprint	# of Original requirements(User stories) before start of sprint(As agreed with customer)
1																
2																
3																
n																

Status	
	This Color indicates Formula Based
Not Started	
In Progress	
Nearing Completion	
Completed	
Priority	
High	
Medium	
Low	

Project Metrics Template (1/2)

# of Original requirements(User stories) before start of sprint(As agreed with customer)	# of requirements added during the sprint	# of requirements modified during the sprint	# of requirements deleted during the sprint	Requirement Stability Index = (# of Original requirements(User stories) before start of sprint(As agreed with customer) + # of requirements added during the sprint + # of requirements modified during the sprint + # of requirements deleted during the sprint) / # of Original requirements(User stories) before start of sprint(As agreed with customer)



Project Status Report Template

Serial Numbe	Task ID	Task Priorit	Task details	Statu	Sprint
1	1	1	User Story 1		
2	1.1	2	ACT 1:	Completed	Sprint1_YYYYMMDD
3	1.2	3	ACT 2:	Completed	Sprint1_YYYYMMDD
4	2	4	User Story 2		
5	2.1	5	ACT 1:	Completed	Sprint1_YYYYMMDD
6	2.2	6	ACT 2:	Completed	Sprint1_YYYYMMDD
7	2.3	7	ACT 3:	Completed	Sprint1_YYYYMMDD
8	3	8	User Story 3		
9	3.1	9	ACT 1:	Completed	Sprint1_YYYYMMDD
10	3.2	10	ACT 2:	Completed	Sprint1_YYYYMMDD
11	4	11	User Story 4		
12	4.1	12	ACT 1:	Completed	Sprint1_YYYYMMDD
13	4.2	13	ACT 2:	Completed	Sprint1_YYYYMMDD
14	5	14	User Story 5		
15	5.1	15	ACT 1:	Completed	Sprint1_YYYYMMDD
16	5.2	16	ACT 2:	Completed	Sprint1_YYYYMMDD
17	5.3	17	ACT 3:	Completed	Sprint1_YYYYMMDD
18	5.4	18	ACT 4:	Completed	Sprint1_YYYYMMDD
19	5.5	19	ACT 5:	Completed	Sprint1_YYYYMMDD
20	6	20	User Story 1		
21	6.1	21	ACT 1:	Completed	Sprint2_YYYYMMDD
22	6.2	22	ACT 2:	Completed	Sprint2_YYYYMMDD
23	6.3	23	ACT 3:	Completed	Sprint2_YYYYMMDD
24	6.4	24	ACT 4:	Completed	Sprint2_YYYYMMDD
25	6.5	25	ACT 5:	Completed	Sprint2_YYYYMMDD
26	6.6	26	ACT 6:	Completed	Sprint2_YYYYMMDD

Project Specific Documents

- SRS
- Design Documents
- Workbook
- Stake Holder Register
- Tailoring Documents
- Code Review Document
- Release Documents
  - User Guide
  - Release Notes
  - Test Report
  - Known Issues

Project Workbook

- Project Plan
- Customer Feedback
- Issue, Assumption, Dependency and Constraint
- Risk Register
- Knowledge Map
- Training Plan
- Project Metrics
- Infrastructure Plan
- Stake Holder Management
- Skill Competency Matrix

Project Reports

- Audit Reports
- Weekly Status Report

Project Scrum Sheet

- Release Plan
- Product Backlog
- RTM
- Sprint1 to SprintX sheet
- Current Risks
- Metrics

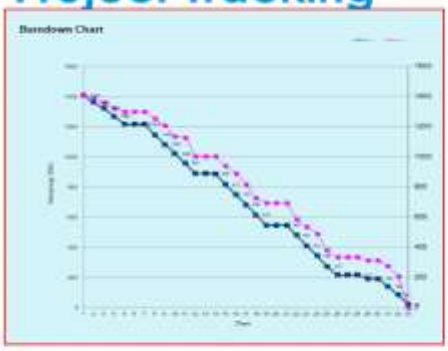
Project Meetings

- Kick-Off Meeting
- Daily Scrum
- Daily Sync Up Call with customer
- Sprint activity plan
- Sprint planning meeting
- Sprint review meeting
- Sprint retrospective meeting
- Monthly Delivery Review
- Quarterly Business Review

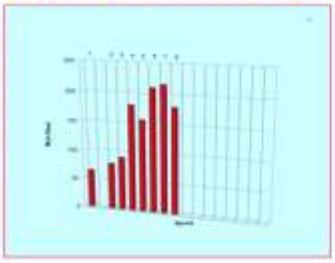
Project Metrics

- Velocity (Actual Completed User Stories / Number of user stories planned)
- Effort Variance (Actual Effort – Planned Effort)
- KLOC
- DRE (Defect Removal Effectiveness)
- Defect Density (Total Defects / KLOC)
- CSAT

Project Tracking



Sprint (Man Days)



CONCLUSION

Through this paper I have exposed enough the agile practices practiced at Global Edge. Now is the time to learn from my audience. Where do we stand in the industry?

REFERENCES

[1] http://www.methodsandtools.com/archive/archive.php?id=18