Agile and the USMC – MCRISS II Program

Program Background

- The Marine Corps Recruiting Information Support System II (MCRISS II) is Marine Corps Recruiting Command's (MCRC) enterprise software system for tracking all Officer, Enlisted and Prior Service recruiting activities.

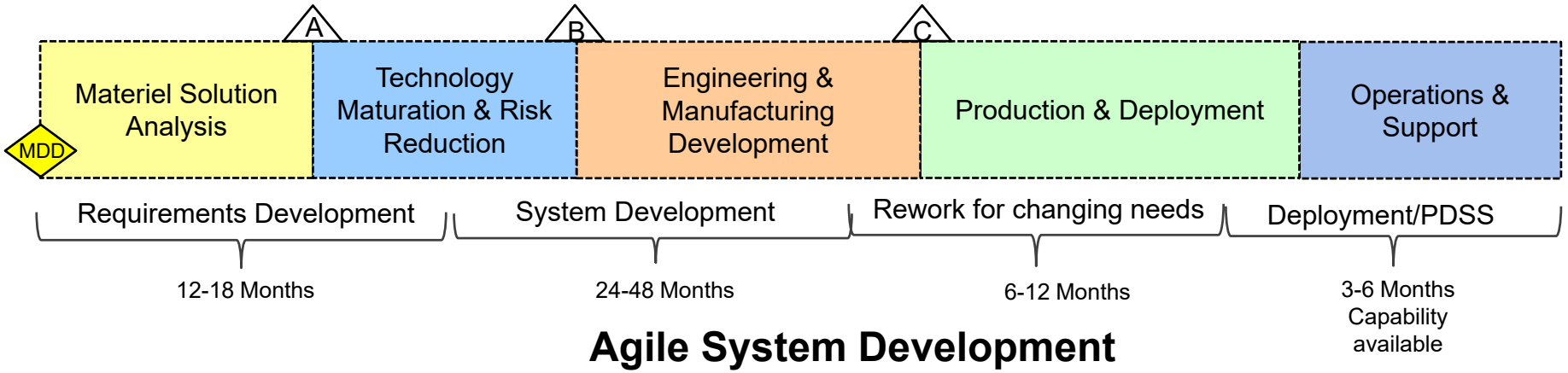
- MCRISS II enables the command and control of systematic recruiting operation across all distributed locations around the globe. Additionally, through the collection of data, it enables demographic and market analysis to optimize the performance of the recruiting force.

- MCRISS II is the USMCs first cloud based and mobile capable enterprise business system

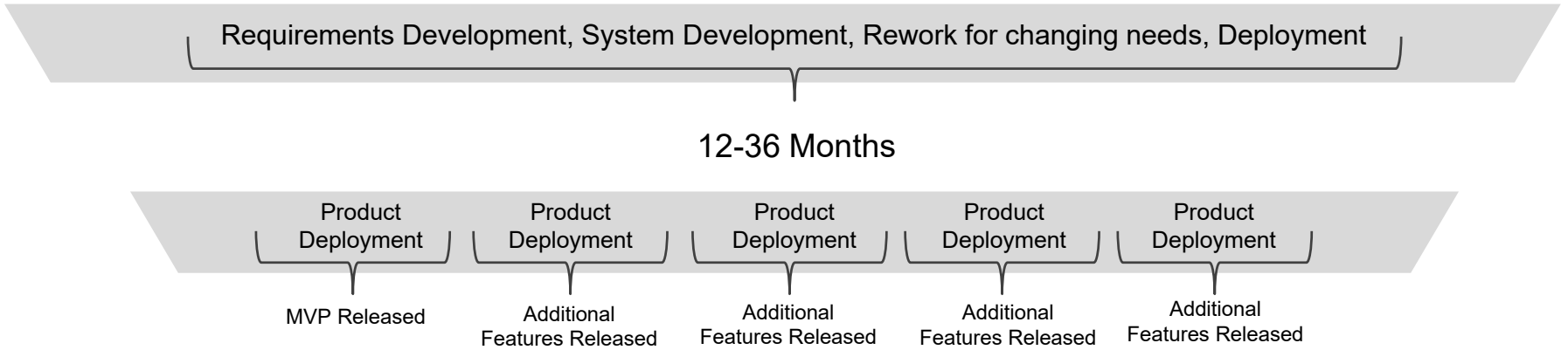
- It is also the first major system to use Government and Contractor fully integrated agile development processes.

What does Agile look like?

Traditional System Development



Agile System Development

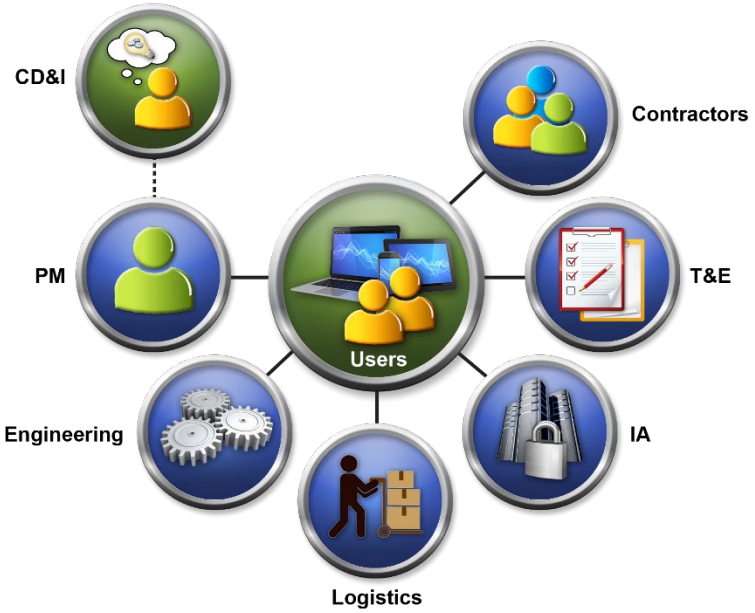


Agile Myths		Agile Reality
Faster		Predictable
Cheaper	Vs.	Focused
Easier		Disciplined
		Manpower Intensive

New Strategies Emerged

- MCRISS II Concept – Sep 2016
- Contract Awarded – Mar 2017
- BCA Completed – Aug 2017
- Statement of Need – Sep 2017
- Agile Options Presented – Nov 2017
- ~~CDD Completed~~
- ~~Requirements Development – Oct 2017 – Oct 2018~~
- ~~SSS, SRR, Design Reviews/Approval~~

- Primary Focus is the User
- Agile Contract that meets FAR Guidelines
- MVP Delivery = Capability Sooner



- Dev Environment Standup – Jan 2018
- Development Begins – Apr 2018
- Build 1 Completed – July 2018
- Build 2 Completed – Oct 2018
- Build 3 Completed – Jan 2019
- Build 4 Completed – Apr 2019

What does Agile Require?

- Areas that need to adapt for Agile to be successful
  - Cultural Transformation
  - Mission Owner Commitment
  - Acquisition Commitment
  - Infrastructure
  - Transforming accreditation and testing
  - Results

Cultural Transformation

- The need for a team cultural that fits an agile project cannot be overstated.

- Agile is a mindset:
  - Organizations have to be open for change
  - Ready for continuous delivery and continuous improvement Ready to learn through failures

- For an agile team to be effective, every team member is informed on the progress of the project and is empowered to make decisions on his/her own.

Mission Owner Commitment

- Agile Best Practice
  - Overall Vision of the need (Need Statement, Problem Statement, UNS, etc.)
  - Providing SME support for the development effort
  - Supporting change as it is realized to allow adoption at the speed of development
  - The mission owner must be an equal part of the daily evolutions

- Agile as Implemented for MCRISS II
  - Provided 6 experienced Marine Corps Recruiters full time to the program
  - Provided G6 and Operations resources as part of the program
  - Marines are co-located with Developers
  - Marine Corps Recruiting Command is an equal member of the team and part of all decisions

Acquisition Commitment

- Agile Best Practice
  - Strategic Contracts to allow for fast entry into development timeline
  - Dedicated Teams to facilitate efforts
  - Agile expertise to guide mission owners through the process
  - Committed leadership
  - Streamlined Technical Reviews
  - Agile approach to statutory requirements (BCAC, 5000.75, NDAA 874)

- Agile as Implemented for MCRISS II
  - Strategic Contract developed to shorten task order awards from 3 months to 3 weeks
  - Allows for modernization of all Manpower Systems in Agile manner
  - Provided Dedicated Team consisting of Government and contractors
  - Provided Agile experienced PM and Agile training and coaches
  - Leadership is committed to reducing bureaucracy and focusing on providing working software to the customer
  - Technical reviews are held on each item as Marines review and approve designed items and then tested before considered done

- Agile Best Practice
  - Integrated with the development team
  - Adapts to changes in demands during development
  - Testing is done as an integrated part of each sprint and build
  - Accreditation and Authorization must keep pace with development

- Agile as Implemented for MCRISS II
  - Using tools to automate test documentation
  - Building automated regression tests
  - Technical reviews are held on each item as Marines review and approve designed items and then tested before considered done
  - Develop IPT with MCOG, C4, MCSC and MCRISS II Team
  - Engage RMF team on procurement and project planning
  - Education sessions with ISSMs (about the cloud) and with developers (about RMF) to create understanding and advocates
  - Work CAP, SCCA and Cloud Environment in Parallel

Transforming accreditation and testing

- Agile Best Practice
  - Integrated with the development team
  - Adapts to changes in demands during development
  - Testing is done as an integrated part of each sprint and build
  - Accreditation and Authorization must keep pace with development
- Agile as Implemented for MCRISS II
  - Using tools to automate test documentation
  - Building automated regression tests
  - Developed IPT with Cyber Operations Teams, Cyber Policy Teams, Expert Users and MCRISS II Team
  - Work CAP, SCCA and Cloud Environment in Parallel

Results

- Agile Best Practice
  - Agile focus on products vs projects
  - Agile focuses on working software over documentation
  - Agile focuses on solving the problem the customer has presented
  - Agile allows for creative evolutions as requirements are realized or changed from higher policy

- Agile as Implemented for MCRISS II
  - Improved timeline from conception to development and customer impact (MVP)
  - Providing useful deliveries to close gaps not addressed by legacy system
  - BETA testers are helping to drive change
  - BETA testers are becoming early adopters of new technology
  - Giving customer exactly what they want and need
  - Causing business process re-engineering to occur

Positive Lessons Learned

- ❑ MCRISS User Involvement
  - ❑ User Stories
    - ❑ Enables better system development
    - ❑ Allows for instant feedback
    - ❑ Allows for requirements to be written as users and developers understand them
    - ❑ RFIs allow for further feedback instantly
  - ❑ BETA Testers
    - ❑ Allows feedback of additional 750 users
    - ❑ Build completion videos delivered to all 6k MCRISS users for feedback
  - ❑ User Feedback
    - ❑ Sprint demos every 2 weeks
    - ❑ Feedback every day during Marine Review stages of sprint
    - ❑ Design review and feedback as each item is built
- ❑ What does this mean to the user?
  - ❑ The system is built for what the user actually needs
  - ❑ Entire System vision is kept as the goal
  - ❑ Multiple chances to get it right

Before

Requirement: Developed by engineers

The System shall be capable of adding a new lead

After

User Story: Developed by recruiters

As a recruiter I need to be able to add a new lead while conducting AC activities
- I need this ability to be mobile native
- I need to be able to take credit for AC contact as it happens
- I need to be able to check the global list to ensure the contact does not already exist

Other Lessons Learned

- Mission Owner Commitment
  - Previous MCRC MCRISS Team was comprised of 3 Marines – Now 6
  - User involvement is full time
  - Not all users agree all the time
    - This is positive
    - Disagreement leads to exposing subculture but drives standardization for user community
  - SMEs have the connections to experts in all areas that influence the design
- Release planning and timeline needs to be established upfront to prioritize incremental capabilities
- SMEs will drive doctrinal changes that need to be adopted
- Missed opportunities to align new agile processes with Higher Headquarters for policy and implementation roadmaps
  - Course correction driving to implementation
- Where is the line for scope creep and delivering the capability needed

Trusted & Empowered Users/Team drive system and cultural change

POCs

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