

The Agile Program Office...

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Why are we doing this?

Take advantage of Lean Principles!

Leverage Small Batch

- Increase Flow
- Improve Productivity
- Deliver Quality

Visualize and Manage WIP

- WIP Limits
- WIP Policies
- Visually see the work being done





Why are we really doing this?

Get Real Life Experience with Agile

Government gains real life experience with

- Agile Processes
- Agile Tools

Why?

- More practical knowledge of the art of the possible when collaborating with Agile Contractors
- Greater understanding for contractors when they have problems


More effectively manage organizations

- **With Products**
- **With Services**
- **With Both**





How is your work like a service?



Services imply ongoing relationships governed by service agreements.

Services are delivered through the operation of a service system.

Services are often simultaneously produced and consumed.

Services have a different business rhythm than goods.

| | | |
|---------|---------|---------|
| Goods | Develop | Deliver |
| Service | Develop | Deliver |

The diagram illustrates the business rhythm for goods and services. For goods, the process is linear: 'Develop' followed by 'Deliver'. For services, the process is simultaneous: 'Develop' and 'Deliver' occur at the same time. The 'Deliver' phase for goods and the 'Develop' phase for services are highlighted with yellow circles in the original image.

Hallmarks of Services vs Development



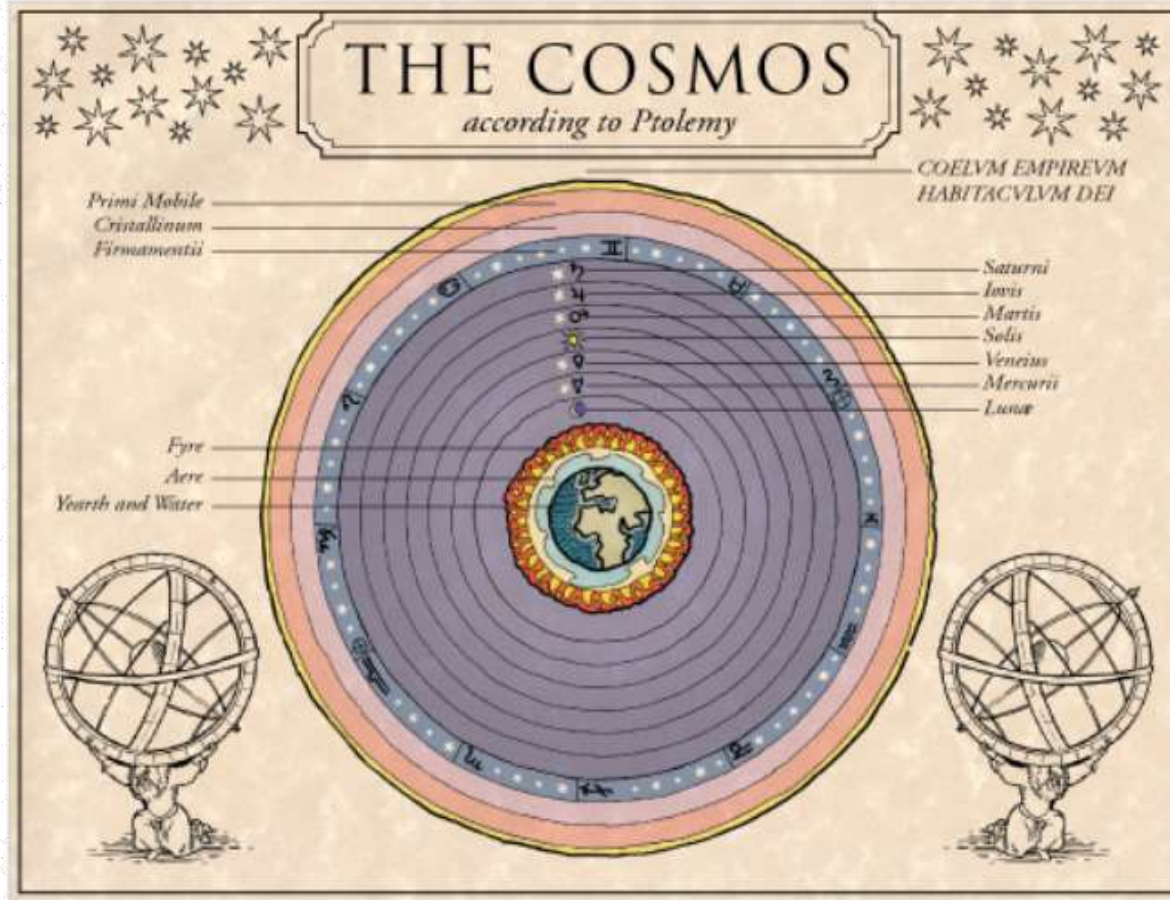
Service

- no second chances
- attentiveness
- immediacy and simultaneity
- attention to details
- consumers noticing details immediately
- visibility into how problems are resolved
- real time communication
- value strongly influenced by point of contact
- quality can be objective or amorphous

Product Development

- iterating toward final correct product frequently expected
- quality frequently defined in objective terms
- value easily connected to specific performance results, independent of point of contact
- communication infrequently real time
- circuitous path from failure to producer

Why Kanban?



Kanban is an Agile Method Most Relevant to Service Delivery Environments



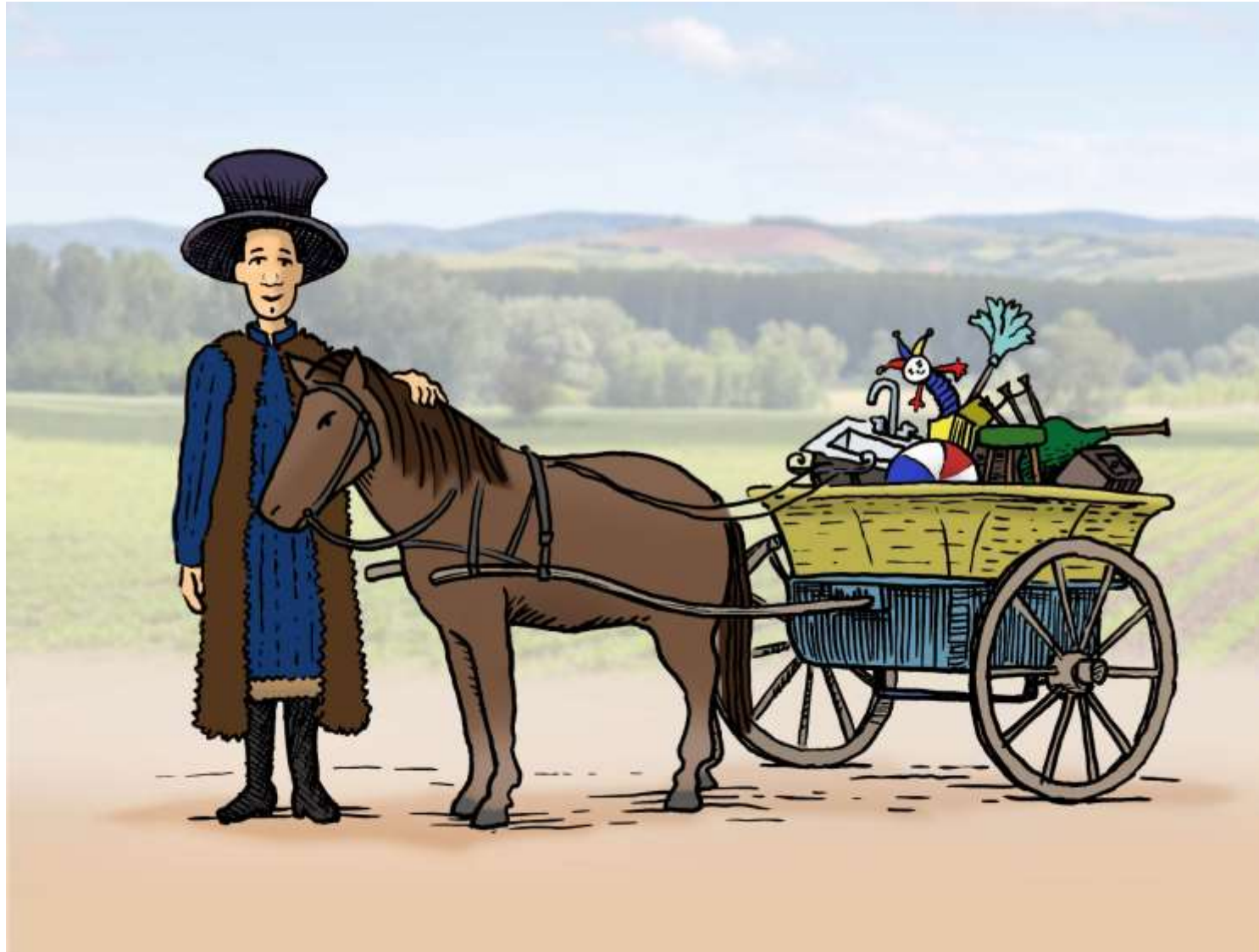
Originally a “pull” method of inventory management implemented at Toyota

Common historical reference is the “New Product Development Game”

An approach to visualizing many different types of work

In recent years, used extensively for visualizing and managing different types of knowledge work

Customer Experience



Vision and Goals



Why was the customer interested in this approach?

Vision

- Demonstrate that agile methodologies can be successfully implemented in a program management environment

Goals

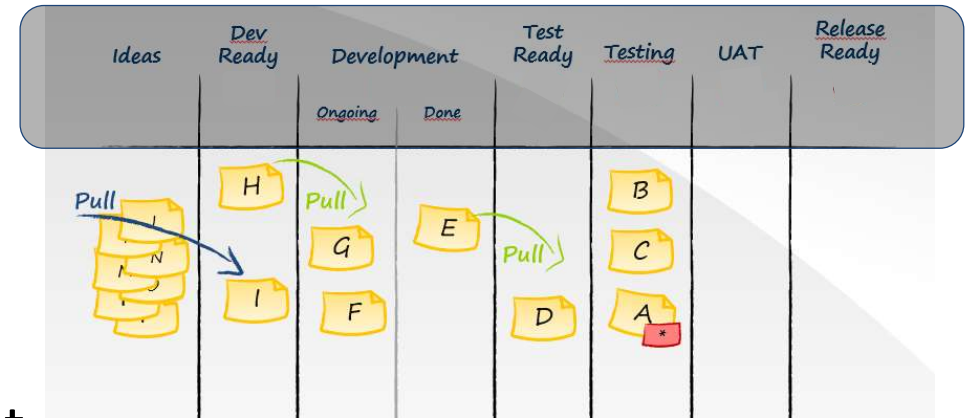
- Understand the work better (flow, bottlenecks, anomalies)
- Improve stakeholder management (transparency)
- Decrease time and effort required to on-board members
- Reliably repeat success and learn from failure
- Make timely and high-quality decisions
- Centralized data/information
- Increase knowledge and skills in using modern workflow approaches

Start With The Basics



Start with a basic, Proto Kanban

- No WIP management
- No sizing with timeframe
- No formal backlog
- Simple set of policies, task board and assignment
- Control Flow with entry limits
(Only let something else in when something goes out)



Remember: A Key tenant of Kanban, Start with what you do now!

Environment



Leverage cloud based platform, DI2E*

- Creating a Jira Project or Confluence space requires a one time email to the administer. Usually satisfied in a few days to establish then environment and local administrator. This requires users to have a Common Access Card (CAC).
- Jira Projects and Confluence spaces are then self administered. The local administrator adds/manages the group members.

DI2E contributed significantly to creating a Minimal Viable Product (MVP) in days/weeks rather than weeks/months/years.

*DI2E Developer Collaboration Tools

The DI2E Developer Collaboration Tools (DevTools) are provided for Government programs and their supporting developers. They provide documentation and design artifact hosting, issue tracking, and project collaboration on government owned property. DI2E DevTools has become the first system at NRO to receive an ATO in the unclassified, AWS GovCloud environment!

- **DI2E FAQ** <https://www.di2e.net/display/DI2E/DI2E>

Customer Deliverables



Jira Project

- Issue Backlog
- Kanban Board
- Automated “Big Board” aka BVIR* in a common area
Large flat panel display with constant updates based on Jira Status, filtered for latest auto generated reports
- Reminder reports auto generated and emailed
Overdue Issues, Late-To-Start Issues, Issues due within next week
- Workflow
Internally within the team
- Cumulative Flow Diagram

*BVIR – Big Visual Information Radiator
- **Scaled Agile Framework**

Customer Deliverables



Confluence (Wiki) Space

- Landing Page
Event Calendar, linkage to “My Tasks” and Overdue Tasks in Jira
- Explicit Kanban Policies
- Contact Sheet
- Training and Readiness Schedule
- Vision, Goals and Metrics
- Tips and Tricks

Results

Benefits accrued from their new workflow visualization “system”

- Increased HW complexity without impacting schedule
- Pulled the overall schedule 2 weeks to the LEFT
- Junior POC for next major activity is working on the current activity and will have a fully annotated checklist (aka Jira) ready to take over. Previous handoff via PowerPoint.
- Cross regional information availability/visibility since Jira lives in the cloud using DI2E.
- Leveraging Jira/Confluence in DI2E provided relief for issues such as ATO, hardware administration, software acquisition, etc., etc. This reduced time to deliver first MVP significantly from months or years to weeks.
- Increased flow attributable to information being in one place (Jira/Confluence) rather than distributed across spreadsheets, email, SharePoint, etc., etc.
- Initially this was targeted for a single team. Within the first 90 Days, fully extended to 3 other teams including integrated workflow.



Customer Testimonial

Excerpt from customer email

Last week the team presented a demonstration of how they have implemented a version of agile program management in the Branch. ***They selected Kanban as the technique for agile implementation, held training and a team workshop, selected a software tool, and began implementation.***

Over a month later, they are functioning as an agile program management team. Their software tool holds a wealth of data on their work products, facilitates geographically separated works to participate with the team, and makes it easier on the team to keep making progress when any member is out on vacation or TDY. And those are just a few of the benefits the team have discovered so far.

I was very impressed with the progress made by the team in just a few weeks. ***Their approach to agile program management is already paying dividends now,*** and holds more promise as we gain understanding and experience with the tools and techniques.

Interested in learning more, or expanding their efforts to your workspace? I encourage you to reach out and ask questions, request a demo, or bring in a different variation of agile program management that would work best for your specific situation. ***Ask to see their electronic summary board, and walk through how they see it benefiting program management. It's impressive.***

I'm now sitting in the Air Force Senior Materiel Leader Summit at Wright Patterson AFB, Ohio. There are about 100 O-6s, GS-15s, and a few General Officers and SES leaders in attendance. There are two different presentations on agility and innovation during this two day course. In the opening comments made by Lt Gen McMurry (Commander, Air Force Life Cycle Management Center), the first thing he referenced is that our future acquisition leaders will be using agile techniques and need to learn and use them now.

Yes, you can ignore agile methods...for now. ***But if you dive in and experiment today, you'll be ready to lead a team of agile acquisition professionals in the future.*** So...what's holding you back? Let's innovate.



Customer Testimonial

Excerpt from customer email

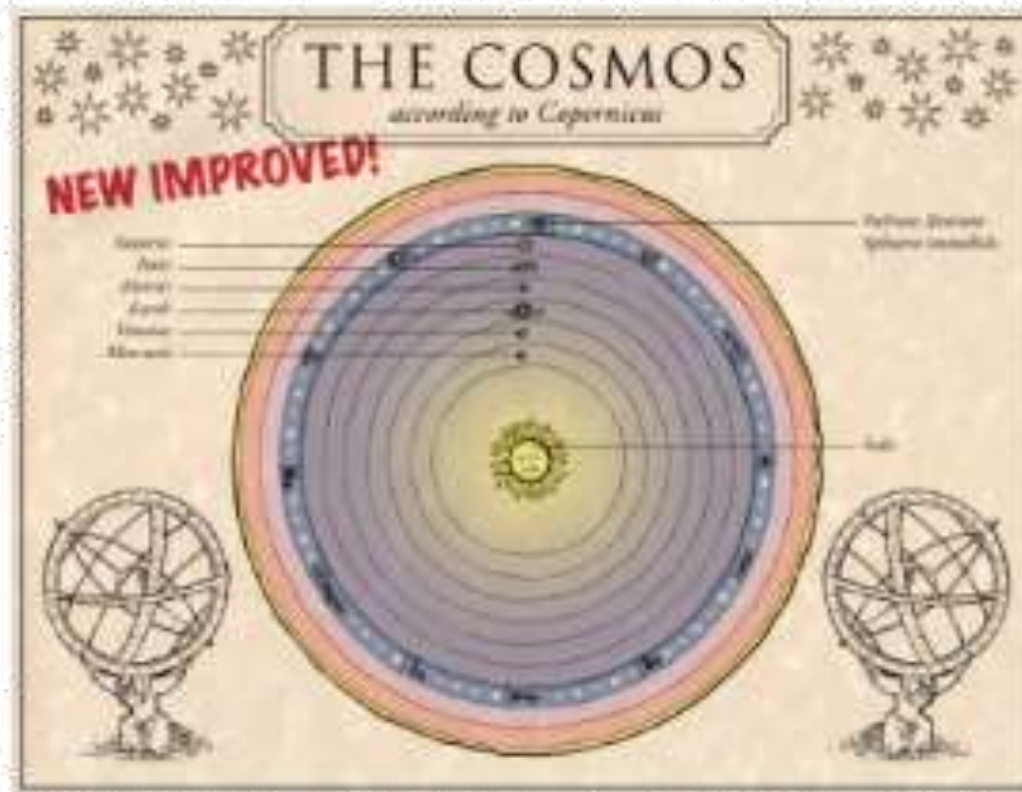
We recently completed **a \$600K+ tech eval in only 17 days**. This would **normally take 90 days or more**. **We reconfigured the vehicle with added complexity in only 3 months**. This would **normally take a year to 18 months**. We also demonstrated agility when we **moved up the delivery date by 14 days** to better accommodate another mission.

So how did we do it?

Our success reflects an undeniable truth: **that self-organizing teams perform better**. By adopting the Kanban agile technique, **team members pull their own work, and are accountable for it**. Our cloud-based tracking tool helps us to corral our work into manageable tasks. The filters help us manage the flow of work, which in turn, accelerate the velocity of the work. A single-threaded (task) leader pulls together a distributed team which previously worked in silos. The **result is a higher level of collaboration and better quality decisions**. By adding tablets to the mix, we've **unbound the workspace so each member can contribute anywhere -- at home, on an airplane, or on a commute**. With the customization in the tool, we've created a sort of bespoke platform that feeds us data how we want it, when we want it. The automation in the **tool frees us from repetitive tasks** and lets us work on **creative problems, like how to compress the 551 conversion into only 3 months**. We have tremendous talent on the team, and the agile pilot was really a kick-start that allowed us to think differently about our work and try some new things.



Conclusion



Summary



Rapid success with the Agile Program office enabled by

- Leveraging Lean-Agile concepts (Reduce WIP, Small Batch, Visualization)
- Rapid learning to quickly begin delivering positive results
- Using relatively simple, well known tools (like Kanban, Jira and Confluence)
- Utilizing existing cloud-based tooling environment (DI2E)
- Staffing with team that is dedicated to end goal and committed to find a better way

Parting Thought



Be prepared...

- You may not like what find in your visualization.
- You may more clearly see in the past, work was not getting done only due to lack of resources but also due to large batch/large WIP issues, task interruptions, changing staff commitments, etc....

This gives you the opportunity to open up the discussion with easier to consume visuals rather than just talking about being over worked

And Finally...



Backup Charts

Kanban Vs Scrum?



Scrum – Scrum as the starting point

- Specific formalities
- Specific ceremonies

Kanban – Start with what you do now!

- Add formality as needed
- Add ceremonies when needed



Leverage Lean Kanban Underlying Concepts

Intangible goods (professional services) can use similar visualizations to tangible goods production

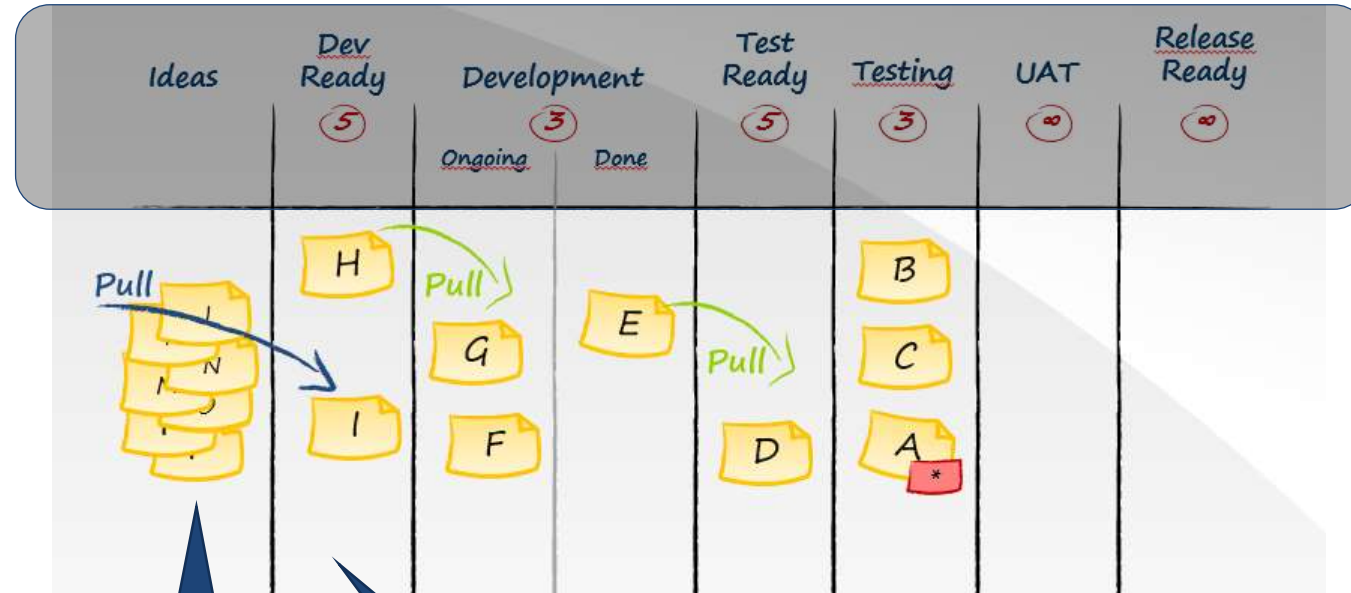
Make invisible work and workflows visible

The “unit of inventory” for services and knowledge work is “unvalidated decisions”

Limiting work in process (decisions on the way to validation) is needed to keep a steady flow of work going through the service system



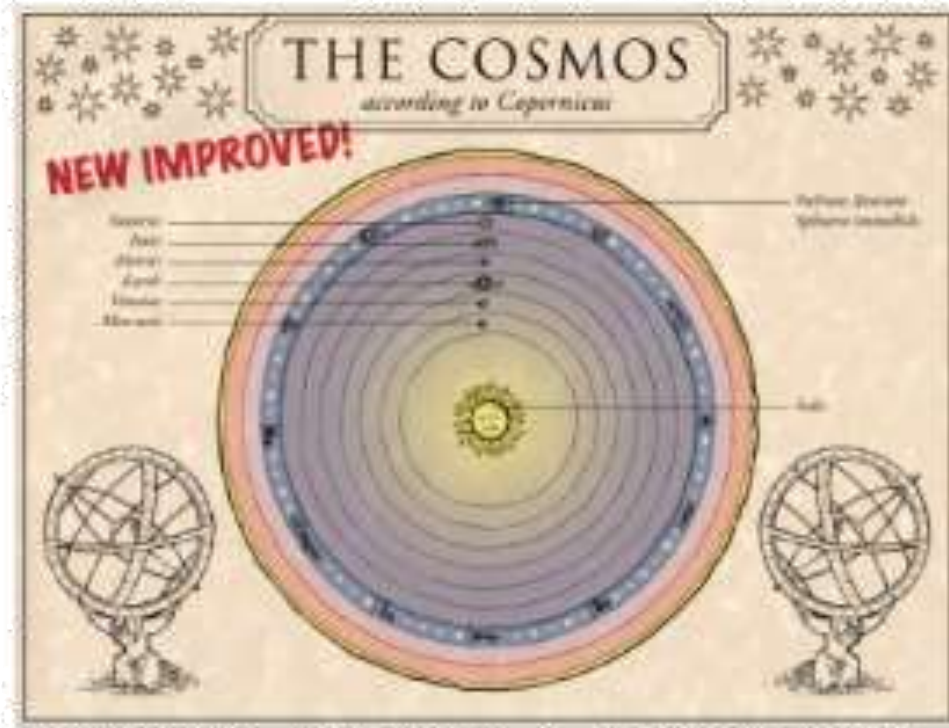
Kanban Helps to See What's Committed vs What's Desired....



The items in this backlog aren't yet committed

This is the commitment point

Improving Results with Visual Management

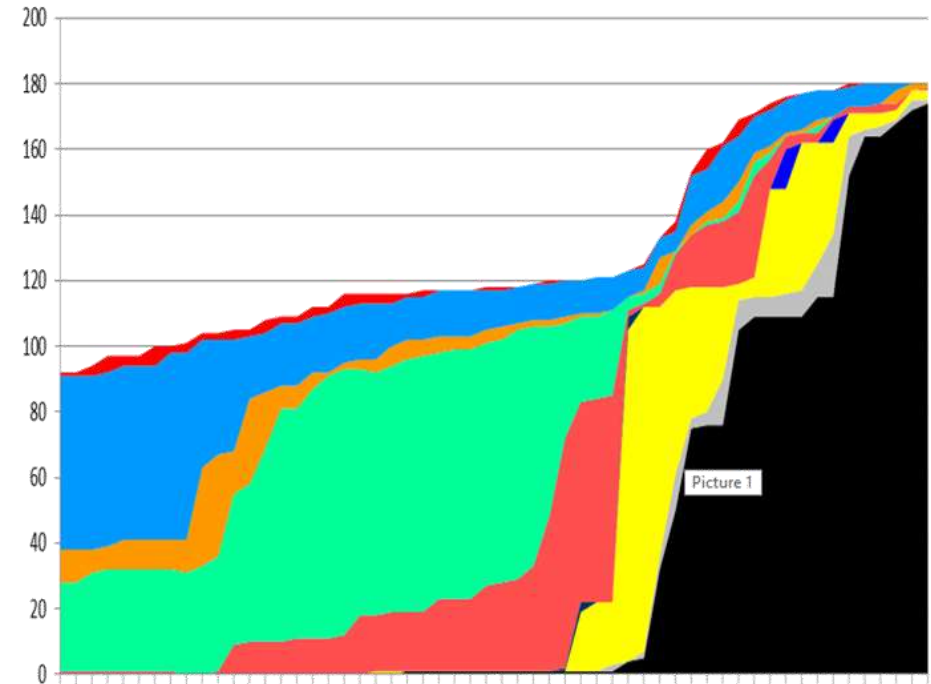
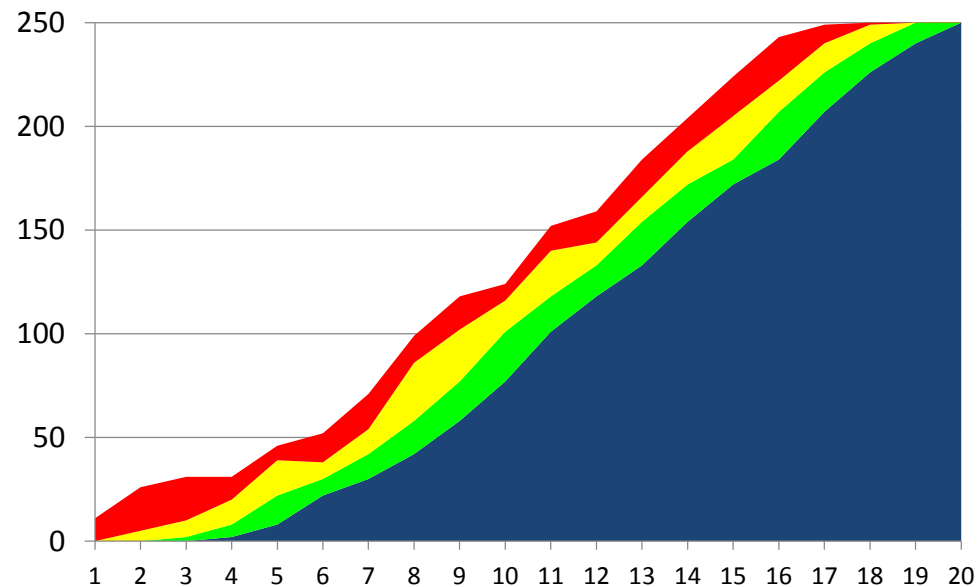


Manage Results with Cumulative Flow Diagrams



Cumulative Flow Diagram

- Heterogeneous teams have different ceremonies, different policies, measures, etc.
- Common way to visualize progress
- Common way to visualize problems



Customer Experience

