

# Lean and Agile Microsoft 365 projects

A Gravity Union Webinar

# Housekeeping

- 1. Use the Q&A panel to ask questions or share comments
- The video **recording** and **slides** will be shared after the webinar



# What we'll cover today

- Understanding Software Development Risks
- Agile concepts
- Lean concepts
- How we apply lean and Agile principles to our M365 projects



# Introductions

Nice to meet you!





# Jas Shukla

**Director of Strategy** 

- 15 years experience in enterprise technology consulting
- Previously with Microsoft on the SharePoint product team
- UX designer in a previous life





# Michael Schweitzer

**President and CEO** 

- 14 + years of SharePoint and M365 Records Management project experience
- Microsoft and Collabware certified
- Collabware MVP recipient
- Vancouver Office 365 user group board member
- ARMA Canada guest speaker
- SharePoint Saturdays guest speaker
- Over 100 SharePoint ECM projects completed



# About Gravity Union

Nice to meet you!



#### Who we are

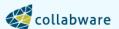
A boutique Canadian compliance-inspired services firm helping organizations in their digital transformation journey

Microsoft Partner

Gold Cloud Productivity
Gold Collaboration and Content
Gold Project and Portfolio Management

**Gold Certified** 

Collabware Partner





#### We're a certified as a Great Place to Work!



















## **Experience Overview**

60+

Years of combined Collabware experience 50,000+

Users using our SharePoint and M365 solutions

40+

Microsoft certifications

30+

Collabware and Collabspace projects

10+

Years of average SharePoint experience across our team 18

Collabware certified consultants

100+

Million documents migrated and managed in our solutions 100%

Project success rate



# Understanding Software Development Risk

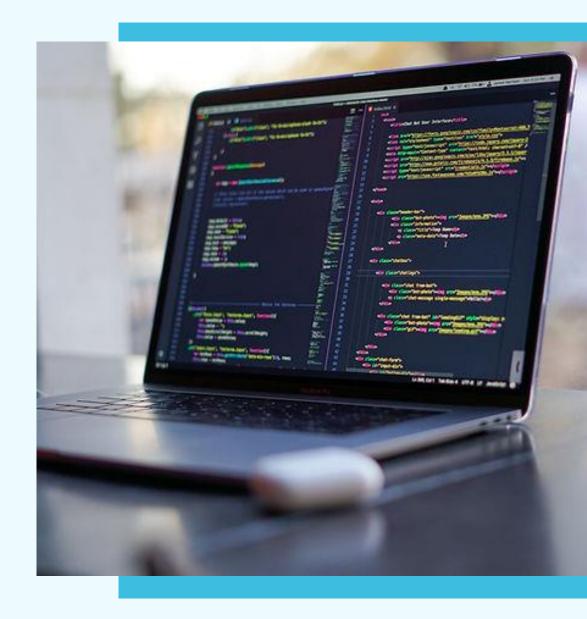
The year was 2009.....



# Software Development Risk

Custom Software development is expensive

- High salaries
- Can take a long time to develop
- Functional requirements and Solution Complexity
- Platform/Browser/Mobile Support
- Language support
- Security, Scalability, Performance



# It's really expensive to do it twice



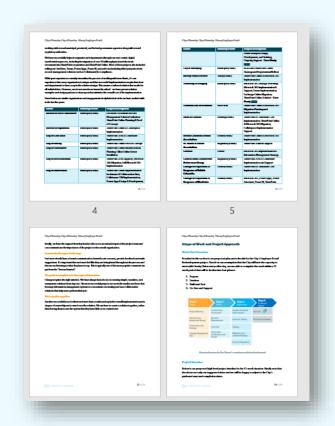


### **Hedging Software Development Risk**

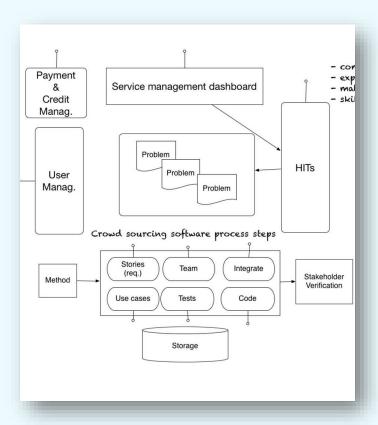
- Make sure the software developer has clear and well understood requirements
- That is to say... we don't want them spending time guessing on what needs to be built or making assumptions about how the software should behave



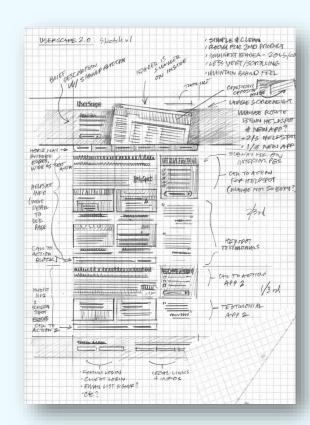
### **Hedging Software Development Risk**



Requirements and Analysis



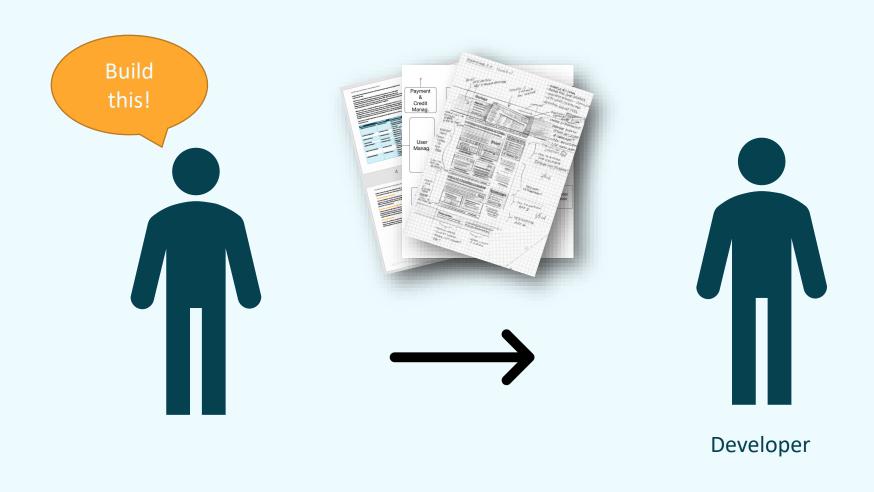
Solution Architecture



Design

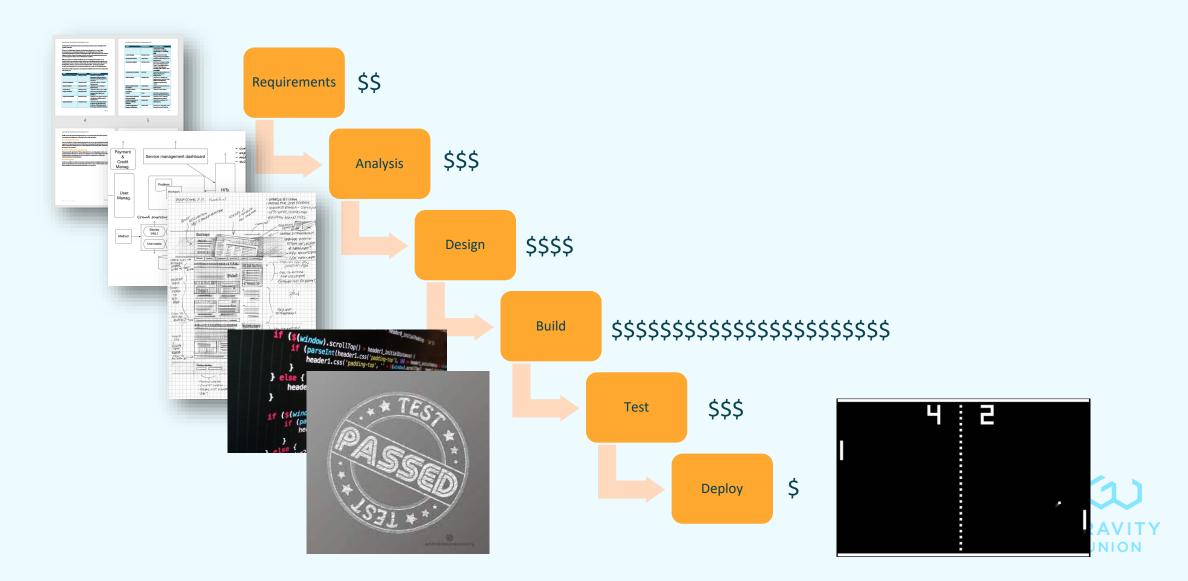


### **Hedging Software Development Risk**





#### The waterfall method



# Problems with the waterfall method

We have issues



# Don't go chasing waterfalls

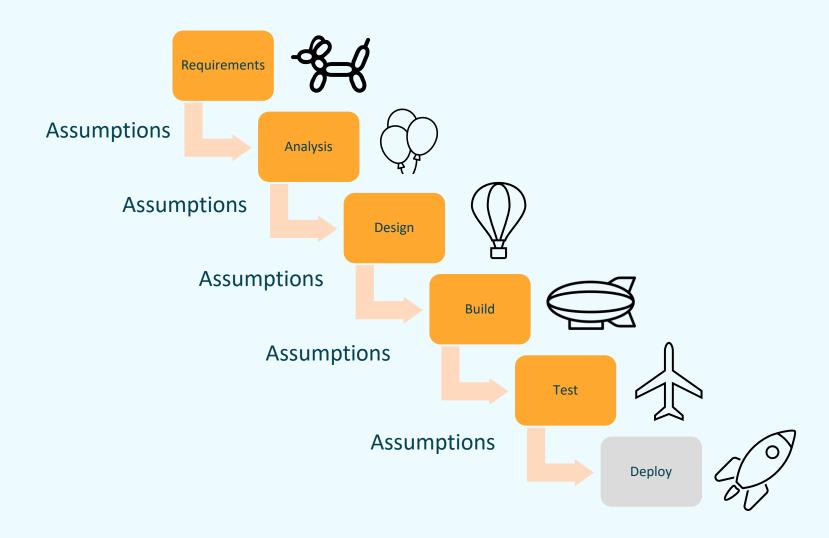
- 1. Assumptions on assumptions on assumptions (lack of customer input throughout process)
- 2. Rigid process (can't go backwards)
- 3. Big hand over from stage to stage tended to slow things down



# Assumptions Requirements **End User** Analysis Design Build Test Deploy

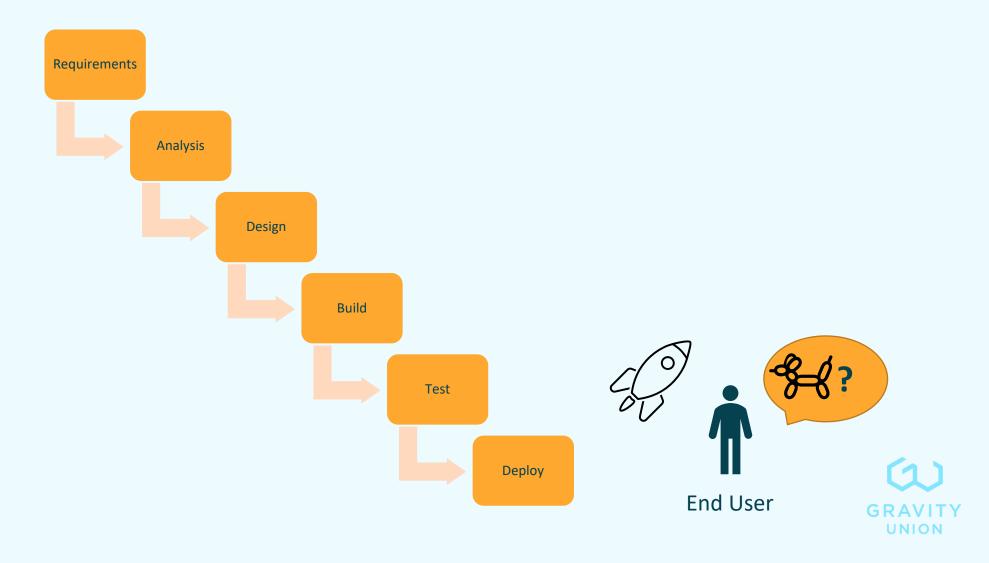


# Assumptions





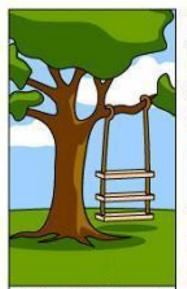
# Assumptions



# Back to the drawing board







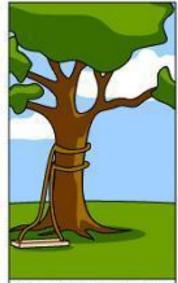
How the customer explained it



How the Project Leader understood it



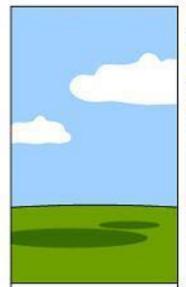
How the Analyst designed it



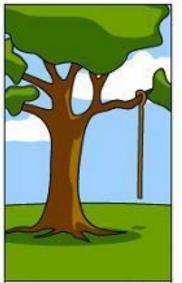
How the Programmer wrote it



How the Business Consultant described it



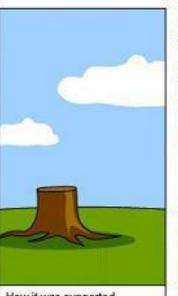
How the project was documented



What operations installed



How the customer was billed



How it was supported



What the customer really needed



#### Canada

#### Gun registry cost soars to \$2 billion











CBC News · Posted: Feb 13, 2004 11:02 PM ET | Last Updated: February 13, 2004

Canada's controversial gun registry is costing taxpayers far more than previously reported, CBC News has learned.

Nearly \$2 billion has either been spent on or committed to the federal program since it was introduced in the mid-1990s, according to documents obtained by *Zone Libre* of CBC's French news service.

The figure is roughly twice as much as an official government estimate that caused an uproar across the country.

The gun registry was originally supposed to cost less than \$2 million. In December 2002, Auditor General Sheila Fraser revealed that the program would run up bills of at least \$1 billion by 2005.

But the calculations remained incomplete, so CBC News obtained documents through the Access to Information Act and crunched the numbers.

A large part of the \$2 billion expense is a computer system that's supposed to track registered guns, according to one document. Officials initially estimated it would cost about \$1 million.



#### Ottawa

#### Phoenix cost soars by another \$137M, paid to IBM











Total value of contract increased from \$5.7M to more than \$393M within 8 years

CBC News · Posted: May 15, 2019 4:00 AM ET | Last Updated: May 15, 2019





#### Ottawa

# Phoenix pay system cost could total \$2.6B before cheaper replacement ready











Federal government watchdog estimates new system won't be ready until 2023

CBC News · Posted: May 16, 2019 10:18 AM ET | Last Updated: May 17, 2019





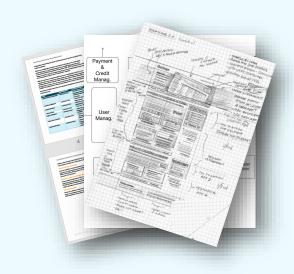
# How did we address these issues?

Governance



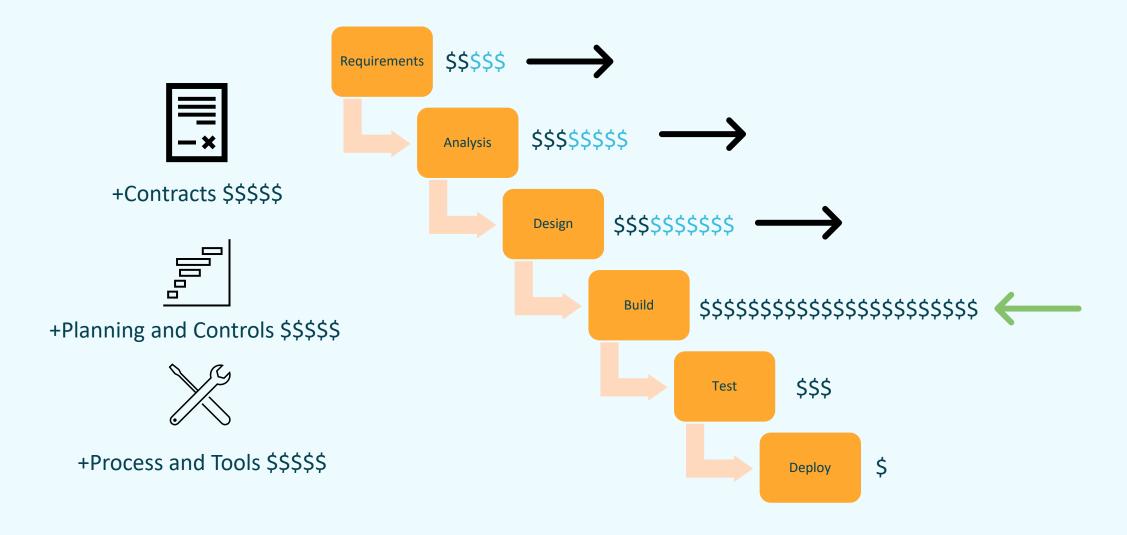
# Initially we increased governance

- More documentation (requirements analysis and design)
- More processes and tools to manage the processes
- Tighter controls, stricter plans
- Increasingly complex contracts



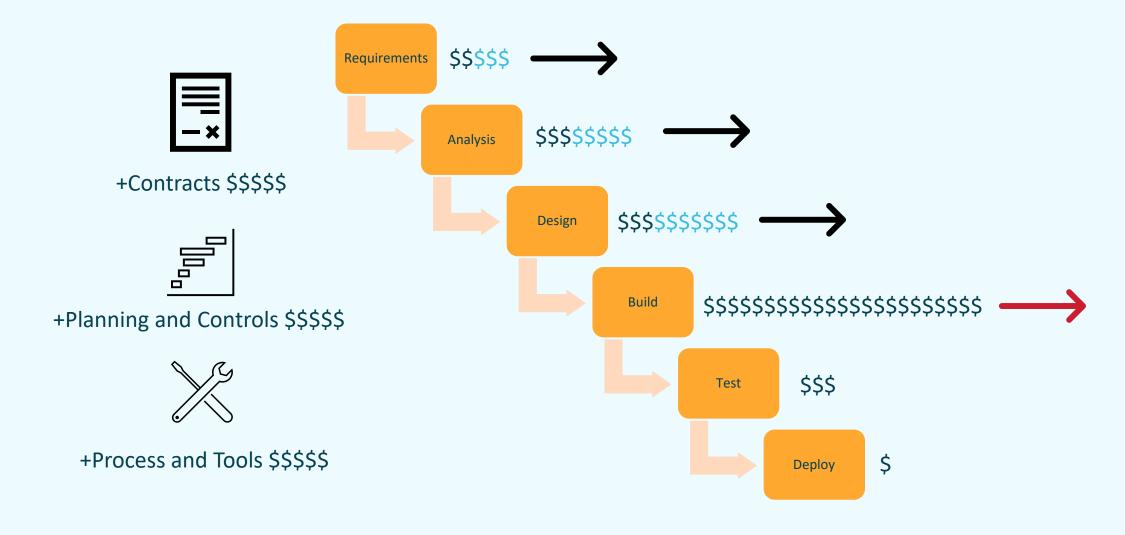


# What we were hoping for...

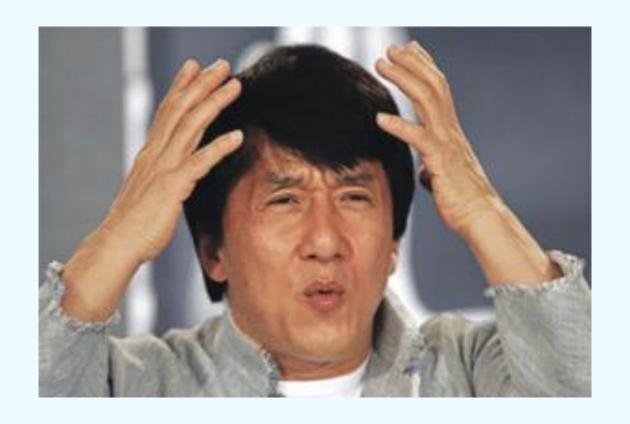




# What we got...









# Agile Concepts





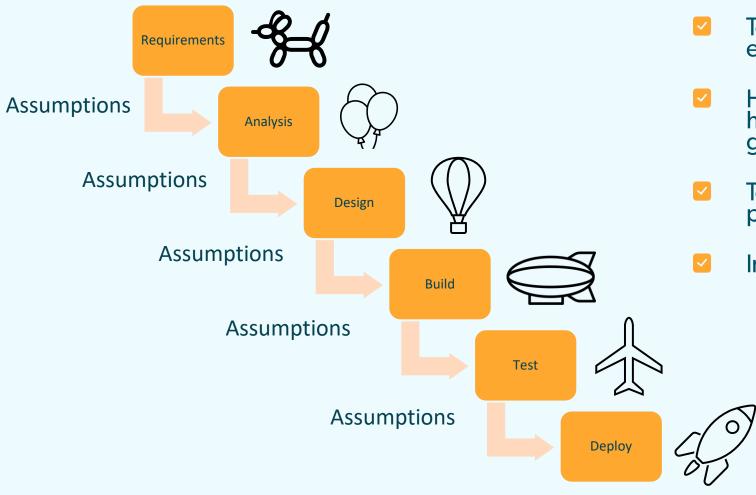


## Intrinsic Value



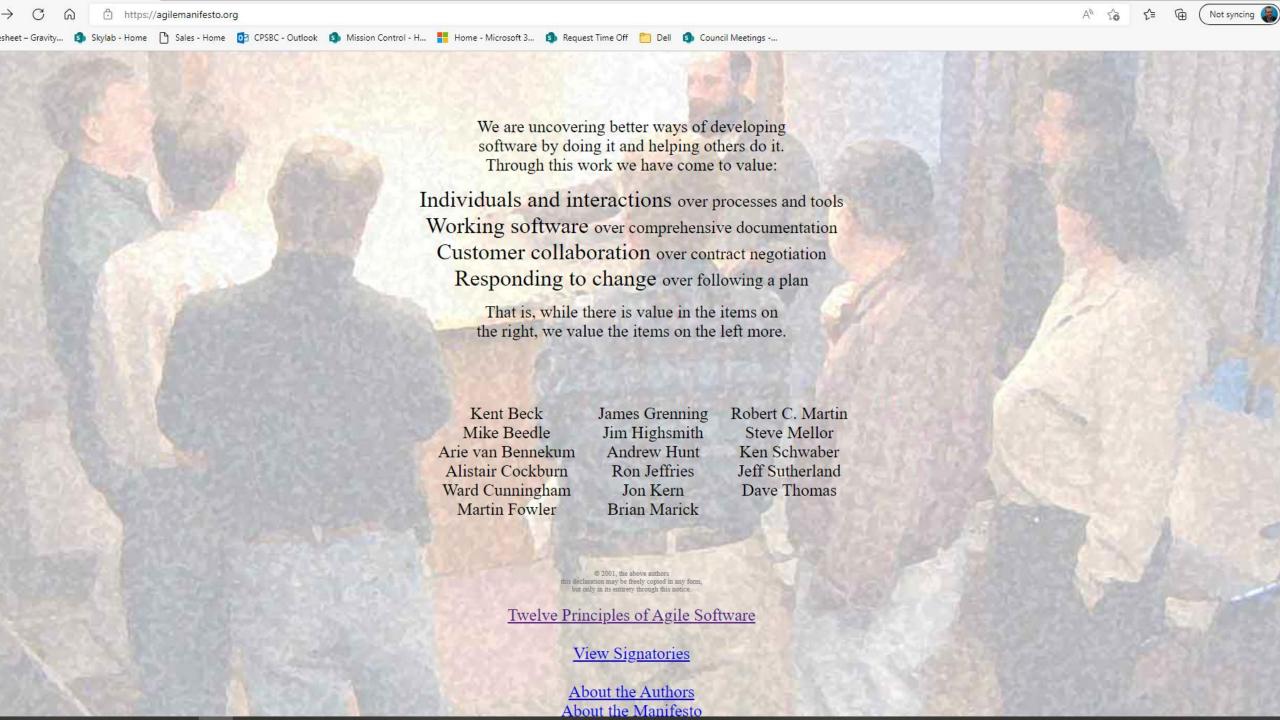
UNION

# **Root problems**



- Too many Assumptions due to the lack of end user engagement
- High overhead and miscommunication handing off between stages (telephone game)
- Too much process and ceremony (effort placed into non intrinsic valued activities)
- Inflexible process and tools





## **Agile Manifesto**

- Individuals and interactions over processes and tools
- Working software over comprehensive documentation
- Customer collaboration over contract negotiation
- Respond to change over following a plan

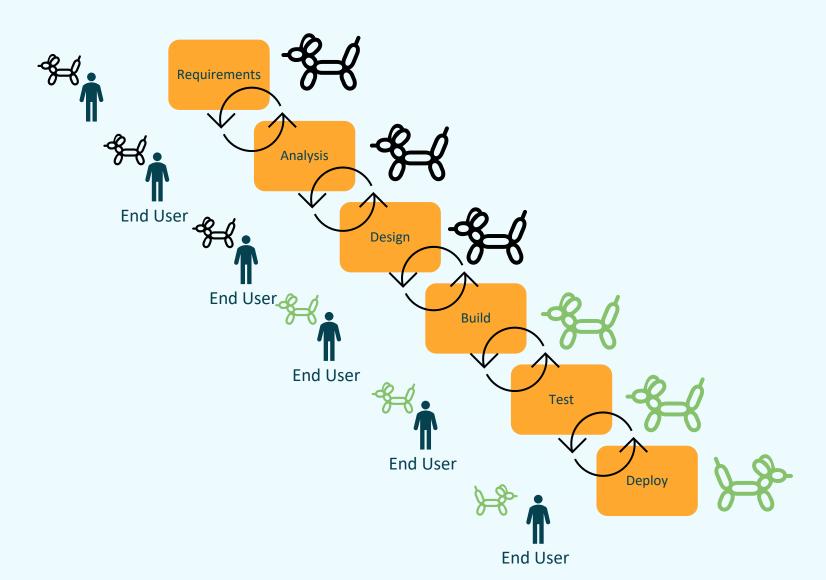


## Individuals and Interactions

- Daily stand ups
- Co-location (pre pandemic) Teams channels now?
- Inclusiveness
- Clients are attending meetings

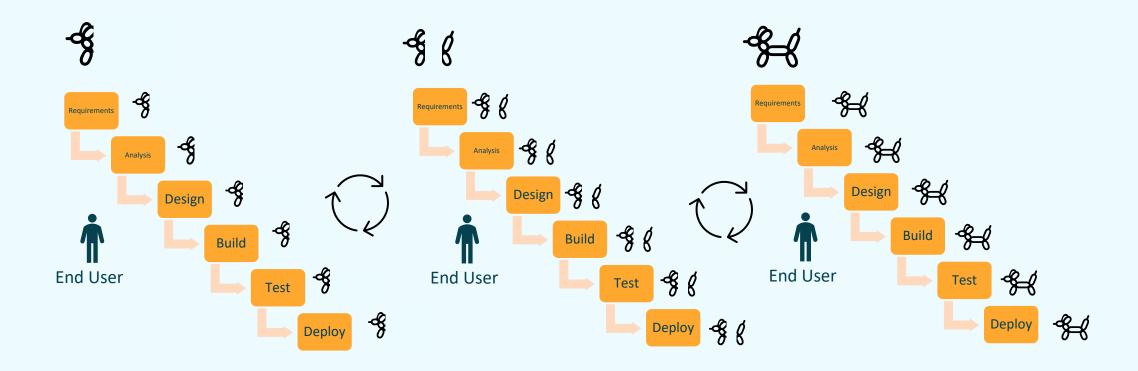


## **Customer Collaboration**



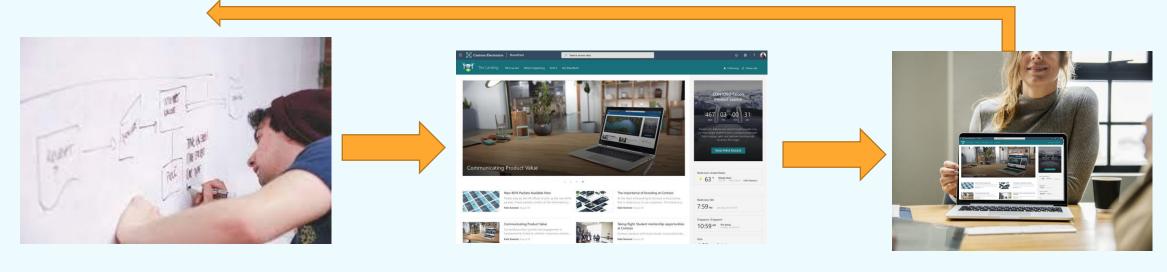


## Responding to change





## **Working Software**



requirements

prototype

Demo



## Lean Concepts

In solution development





Lean is a set of management practices to improve

efficiency and effectiveness by eliminating waste.



### Lean

- Eliminate waste
- Build quality into the process
- Create and share knowledge
- Defer commitment
- Deliver fast
- Psychological safety
- Optimize the whole



## **Reducing Waste**

- Unnecessary approvals and reviews
- Unnecessary process and tools
- Unnecessary documentation
- Delays and waiting
- Momentum and Collaboration
- Defects



## **Building Quality into the Process**

- Automate when possible
- Co-build spot-checks
- Focus on out of the box
- Favour low code over custom development
- Pre-define your design patterns
- Design for scalability, security and reliability



## **Defer Commitment**

- Not plan (in excessive detail) for months in advance
- Nothing is finalized (allow people to change their minds)



## **Create and Share Knowledge**

- Document your approach, standards and guidelines to remove guess work
- Lessons learned
- Co-locate
- Training



## **Deliver Fast**

- Document your approach, standards and guidelines to remove guess work
- Get prototypes and changes to end users ASAP
- Develop for real (in production?)
- Automate when possible



## **Psychological Safety**

- Team members need to feel safe to take risks and be vulnerable in front of the team
- Allow people to make mistakes
- Promote open dialogue
- Communicating proactively
- Encouraging healthy conflict



# How we apply Agile and Lean concepts to M365 Development



# Understanding Platforms and Low Code Development

How Microsoft 365 has evolved over time



### **Platforms**

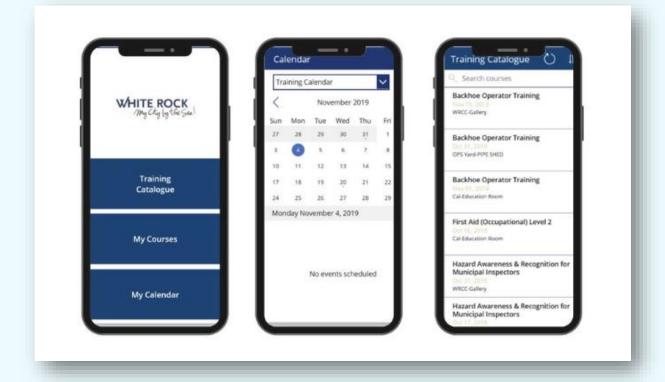
- Expensive software overruns also led to the development of platforms (like SharePoint)
- Allowed developers to focus on high value activities that differed between projects and were able to reuse more common elements (security, search, document management, logging, auditing etc.)
- Many capabilities are configurable
- SharePoint is offering more Out of the Box with the platform as we move forward



## Low Code Development

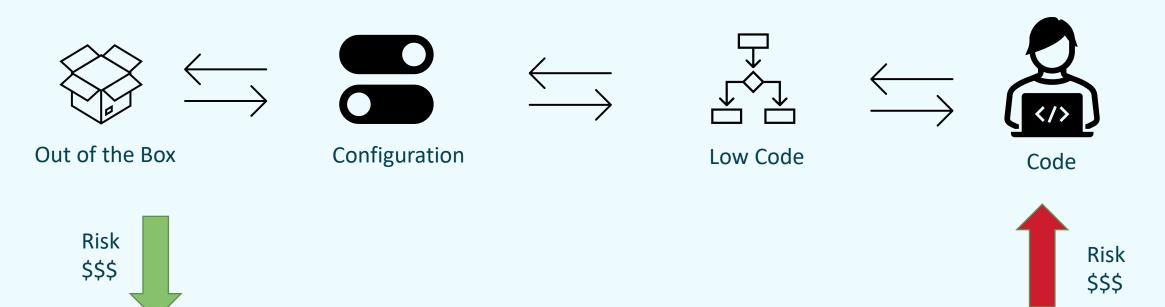
 Providing the ability to configure solutions with minimal code (Power Apps, Power Automate) which reduces overall

risk





## Configuration vs Customization vs Low Code vs OOTB



Needs less formal development processes

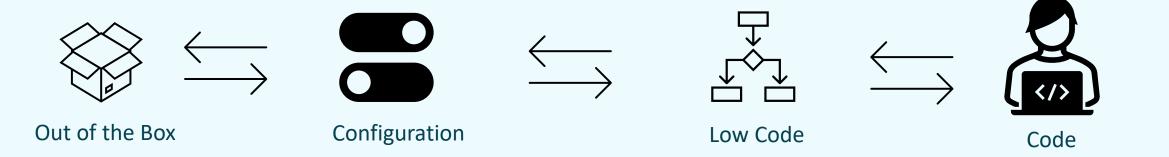
Needs formal development processes



# M365 as a platform is shifting



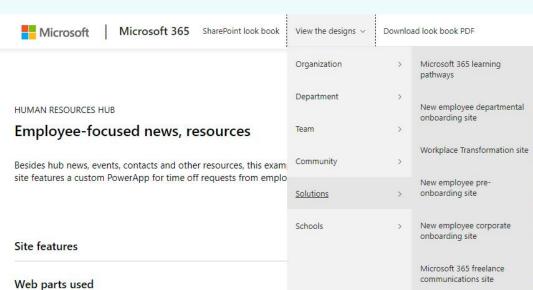
## M365 Maturing as a platform



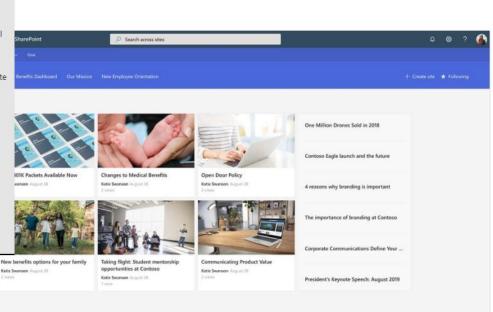


What three years ago took months of coding is now available out of the box with SharePoint.....





SharePoint Success Site



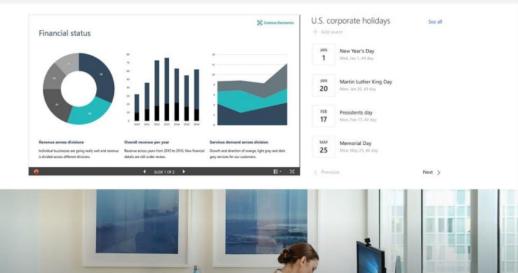
#### Add to your tenant >

Content included

You must be a tenant administrator to deploy this template.

#### **System Requirements**

Minimum		
SharePoint version	SharePoint Online	
Permission required	Tenant Admin	
Site language	English	



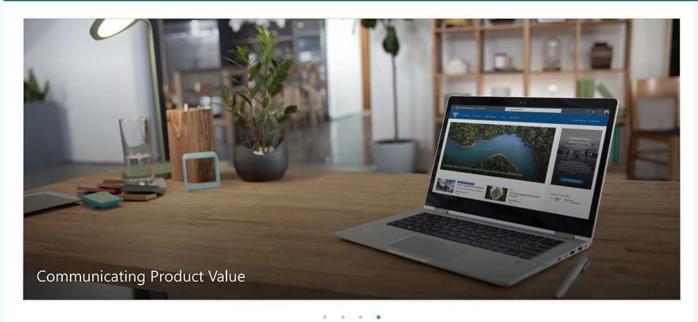
All Microsoft ~















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#### New 401K Packets Available Now

Please stop by the HR offices to pick up the new 401K packets. These packets contain all the information y...

Katie Swanson August 28



#### The importance of branding at Contoso

At the heart of branding at Contoso is the promise that is made by us to our customers. The brand pro...

Katie Swanson August 28

#### Redmond, WA

7:59 PM Saturday, 9/21/2019

#### Singapore, Singapore

10:59 AM 15h ahead Sunday, 9/22/2019

4:59 AM 9h ahead Sunday, 9/22/2019



#### Communicating Product Value

Successful product growth and engagement is fundamentally linked to whether customers underst...

Katie Swanson August 28



#### Taking flight: Student mentorship opportunities at Contoso

Contoso partners with local schools. Local school dis...

Katie Swanson August 28

#### Recommended viewing









#### My news



Strategic communication: How to develop strategic massagi... Joni Sherman 4 days ago





August Town Hall Highlights



Customer Showcase: Amanda Brady, Connecticut wilderness



In the Design Studio with Carlos Slattery

∨ See more



Mark 8 Roadmap



Communications





Communications How apps can make corporate communications easier

Lee Gu 5 days ago



Communications Singapore trip report

Miriam Graham 5 days ago



My recent documents

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IR Handbook

personal > ... > Documents



Over Budget Areas personal > ... > Documents



Contoso 2019 Medical Benefits



Contoso Quad Customer Script



Bl Improvement personal > ... > Documents



Audit of Small Business Sales August personal > ... > Documents



See all



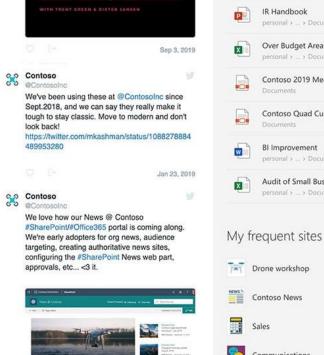
Drone workshop

Contoso News

Sales

Communications

Conversations across Contoso View all in Yammer Contosol @Contosolnc Nice @Contosolnc PowerShell example for the ⅍ Leadership Connection #SharePoint root site swap. Worked beautifully new, modern (demo) communication site now at Adele Vance the root. Last reply Aug 26 watch @Microsoft's Trent Green demo our 2019 Product Pricing - updated doc below 9 root site swap at recent #SPC19: youtu.be/mnh5QxyZ6Z0?t= https://m365x377533-... https://twitter.com/SharePoint/status/11689413 13284288512 my.sharepoint.com/personal/a delev m365x377533 onmicros □ YouTube @YouTube Like 2 5 Reply 1 ... ∨ See more What's New and What's Next: Lee Gu: Thanks Adele Vance- I made a few updates per our meeting notes ₩ Leadership Connection Lee Gu Aug 26 Contoso Eagle launch and the future - July 2018 This year at Drone MAX Paris I had the opportunity to give the keynote address on advancements in dron... Like S Reply ... ∨ See more ☆ Leadership Connection **Patti Fernandez** Aug 26 The Leadership Team met last week to finalize strategic objectives for the upcoming fiscal year. We will





Like 5 Reply

share these with the entire company during th...



The Leadership Team met last week to finalize strategic objectives for the upcoming fiscal year. We will share these with the entire company during th...



Like 5 Reply

∨ See more

☆ Leadership Connection



#### Patti Fernandez

Due to the great feedback from last year's company meeting, I wanted to include another ke...

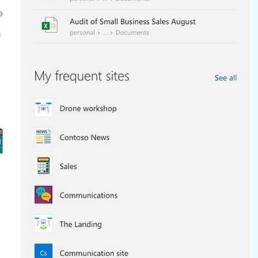
- Engineering
- IT
- Research & Development

Like 5 Reply ---

∨ See more







#### My recommendations



Contoso 2019 401k Enrollment Guide

MOD Administrator Edited Apr 26, 2019



Contoso 2019 Life Insurance

Edited Apr 26, 2019

MOD Administrator



Contoso Parenting Resources



MOD Administrator



Contoso 2019 Medical Benefits



MOD Administrator











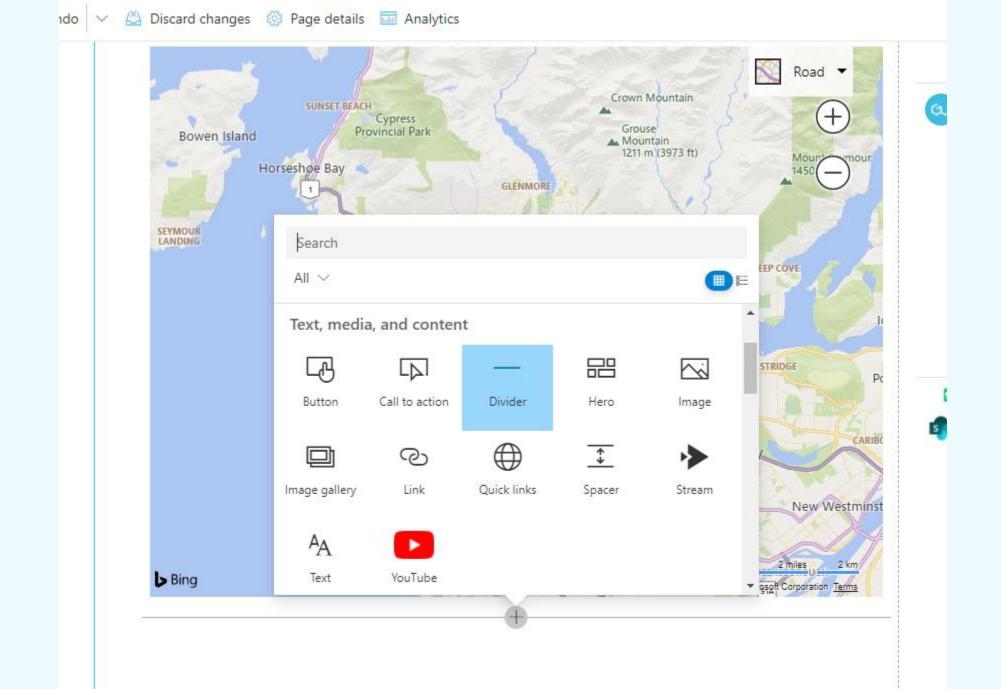


## More Out of the Box

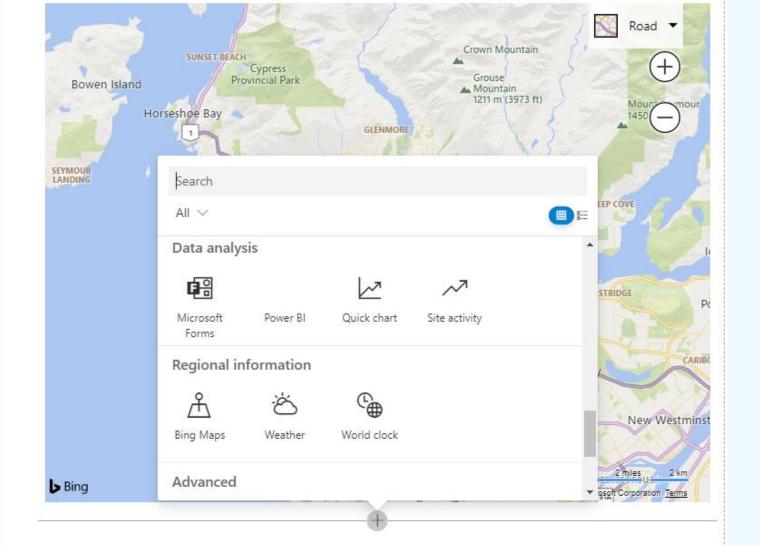
Common functions and features







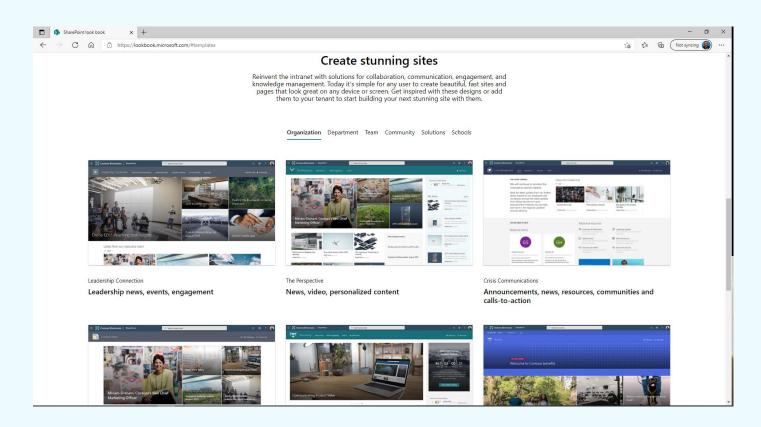






## **SharePoint Lookbook**

http://Lookbook.Microsoft.com



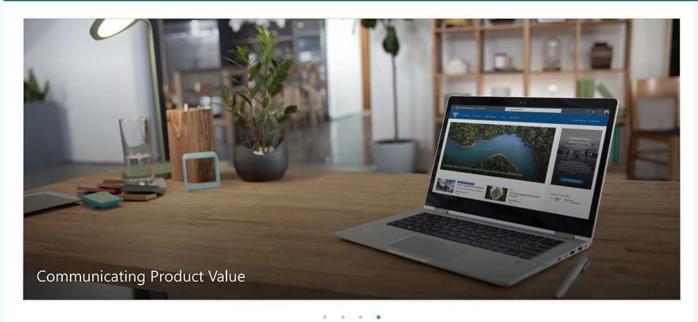
















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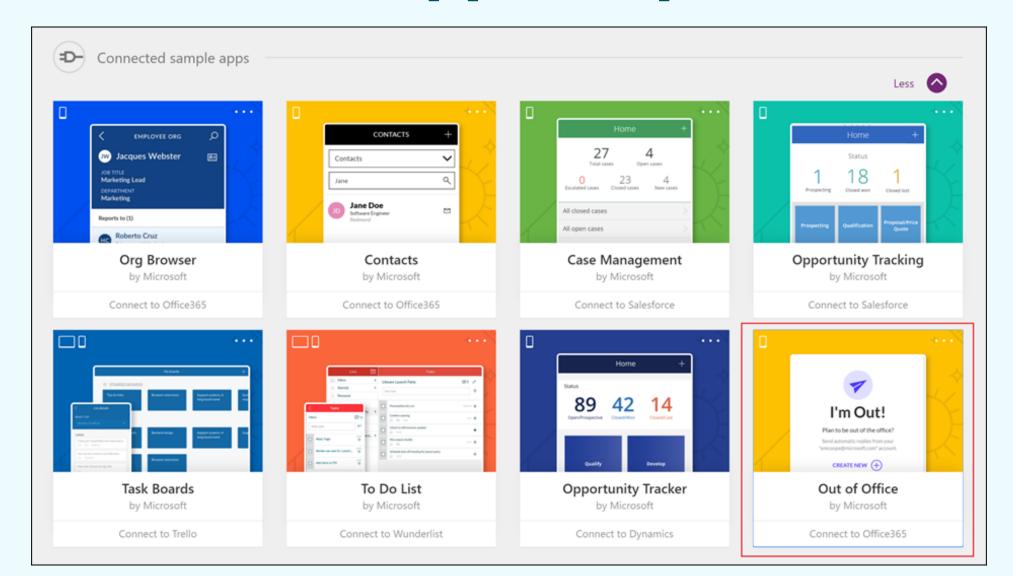
# More Commoditized Solutions

Common functions and features



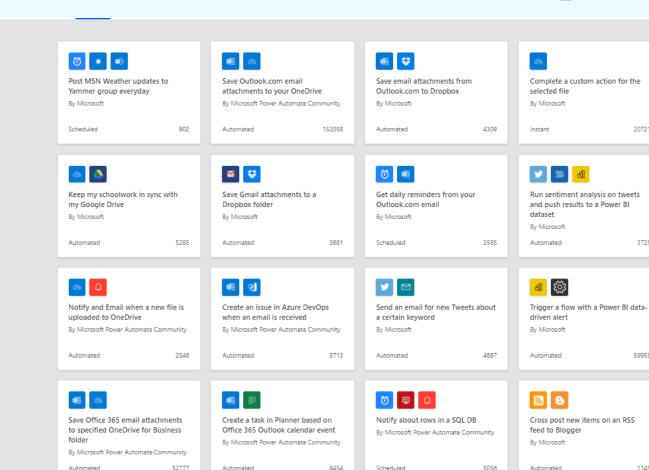


## **Power Apps Templates**





## **Power Automate Templates**



**6** 6

Send an email when a new message

By Microsoft Power Automate Community

is added in Microsoft Teams

Notify me and store the response

when a student completes a guiz

By Microsoft



20721

3725

59955

1145

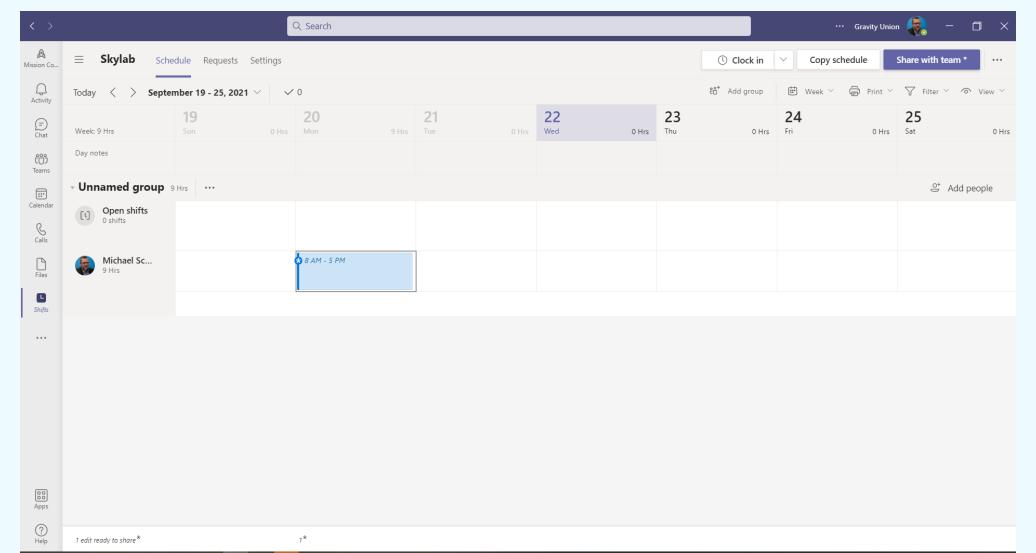
Create a task in Planner from Microsoft Forms and post message

Send OneDrive files to an email

By Microsoft



## **Prebaked solutions**



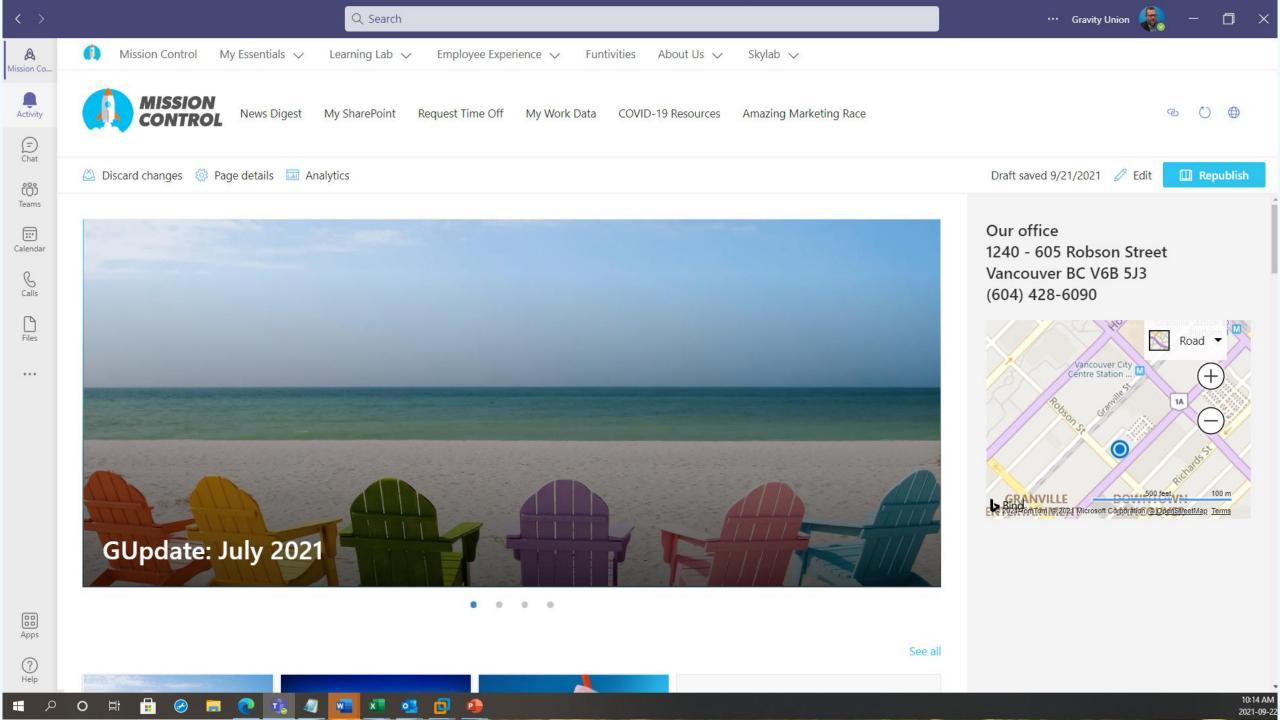


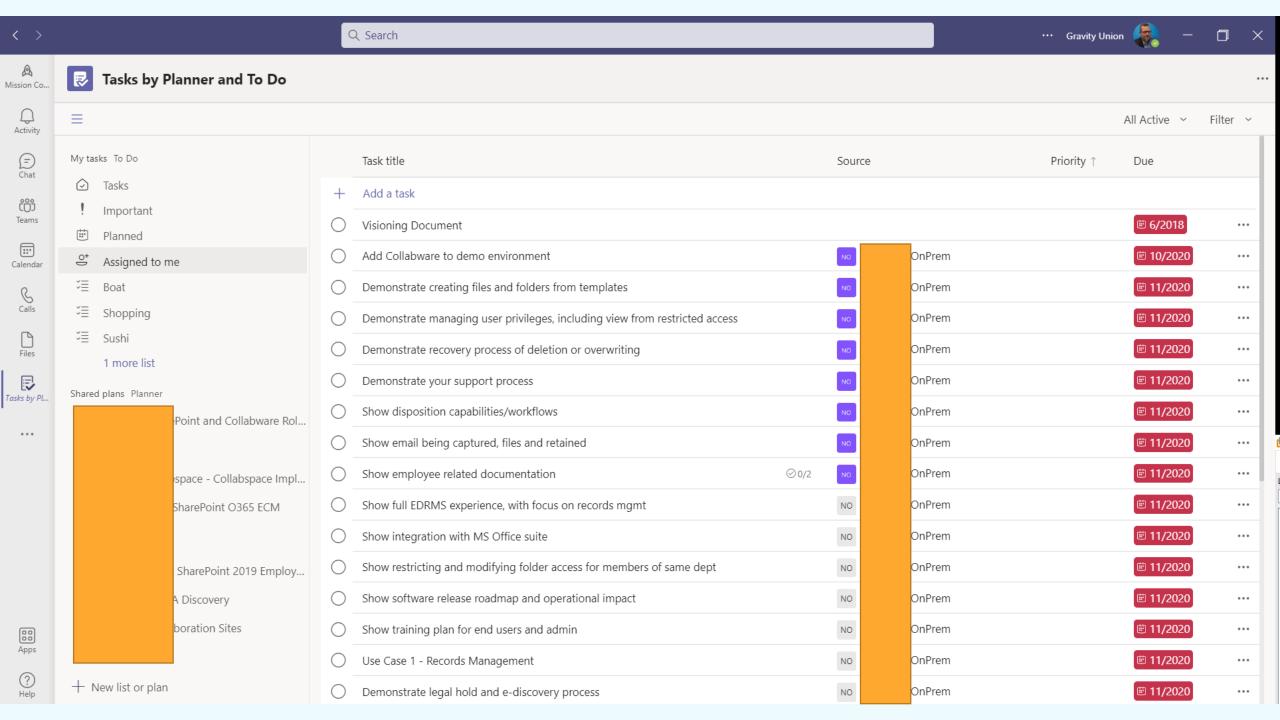
# More Complimentary Applications

Various M365 solutions working together



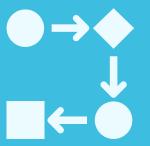






## **Power Platform**

Low Code (lower effort) Applications, Workflow, Integration and Reporting



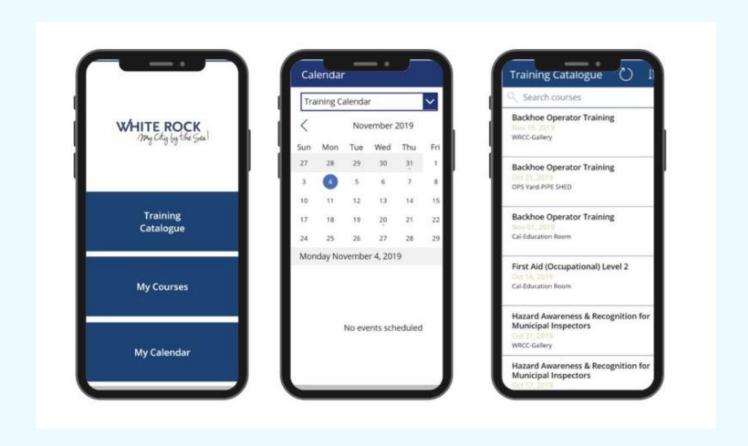


## **Power Apps**

- Low code development
- Quick turn around for custom applications (mobile and desktop)



## **Power Apps**





#### **Power Bl**



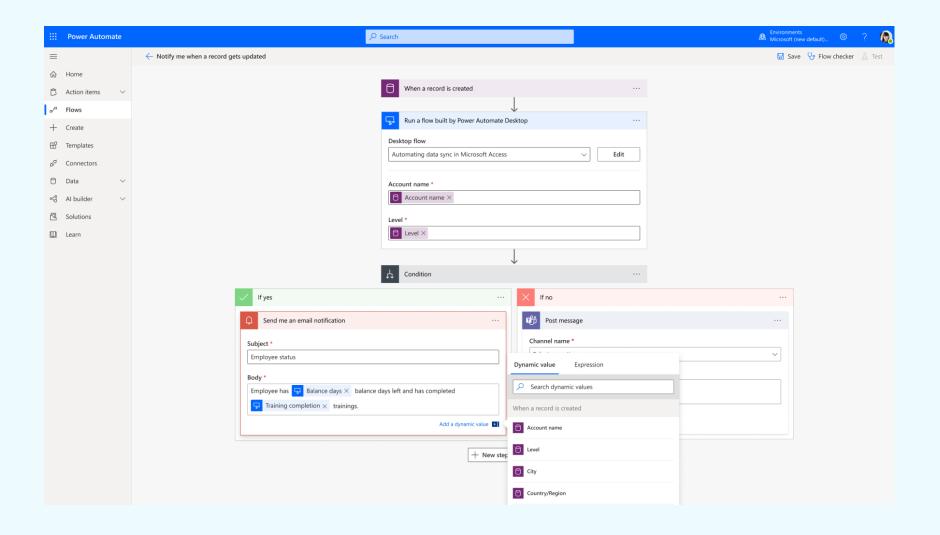


#### **Power Automate**

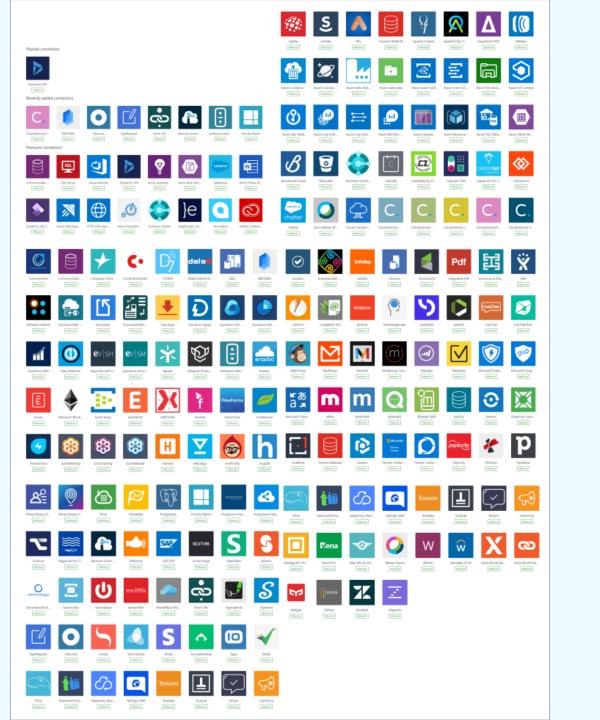
- Robust workflows and automation
- Integration with line of business systems



#### **Power Automate**









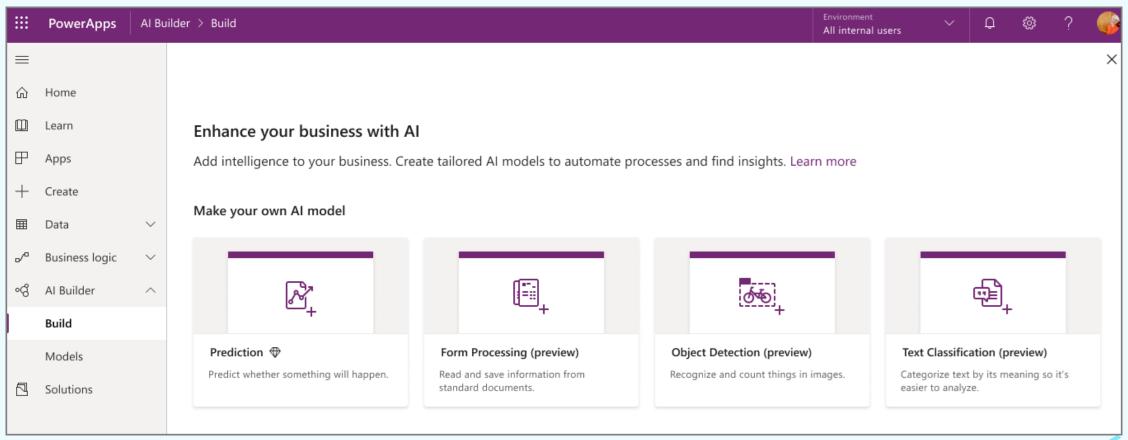
## Artificial Intelligence

Common functions and features



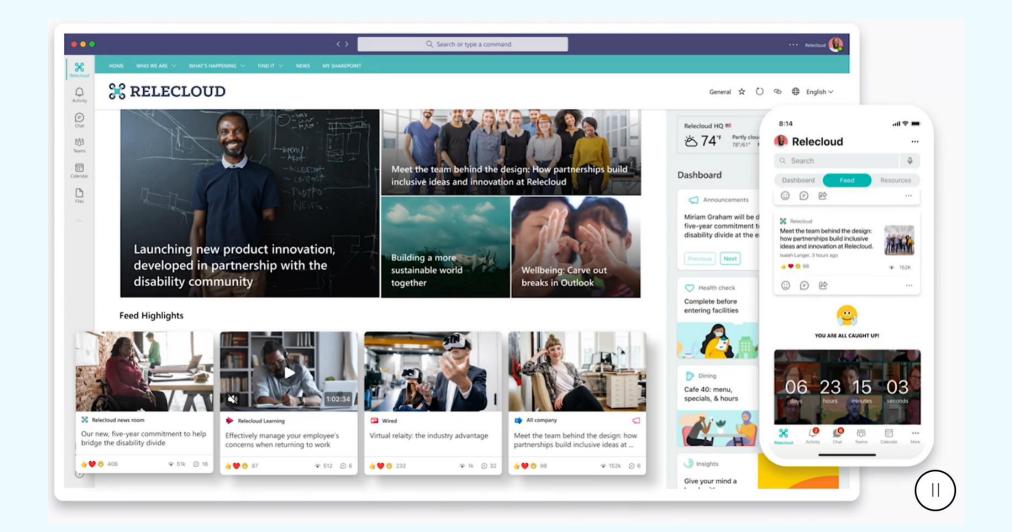


### **Al Builder**



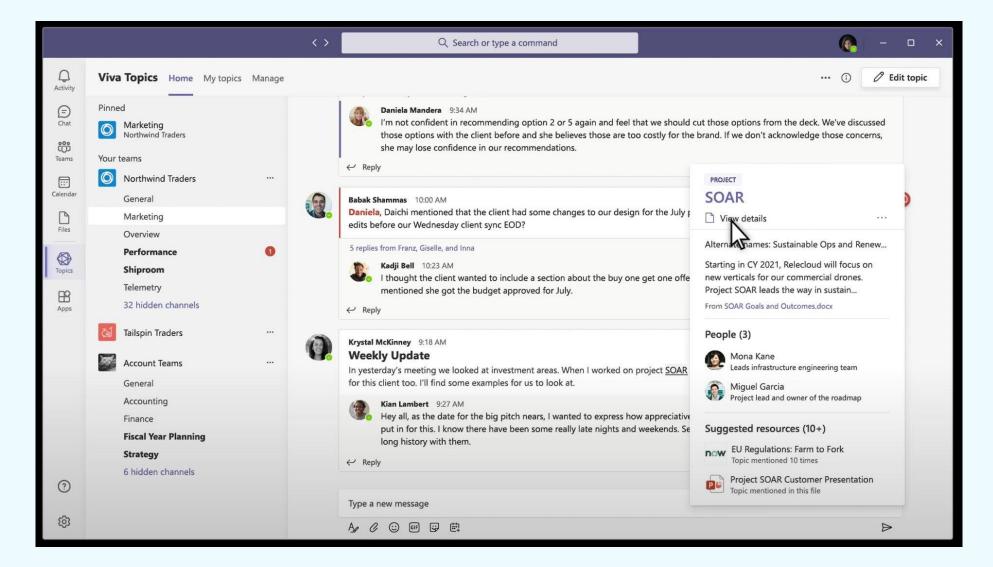


#### **Viva Connections**



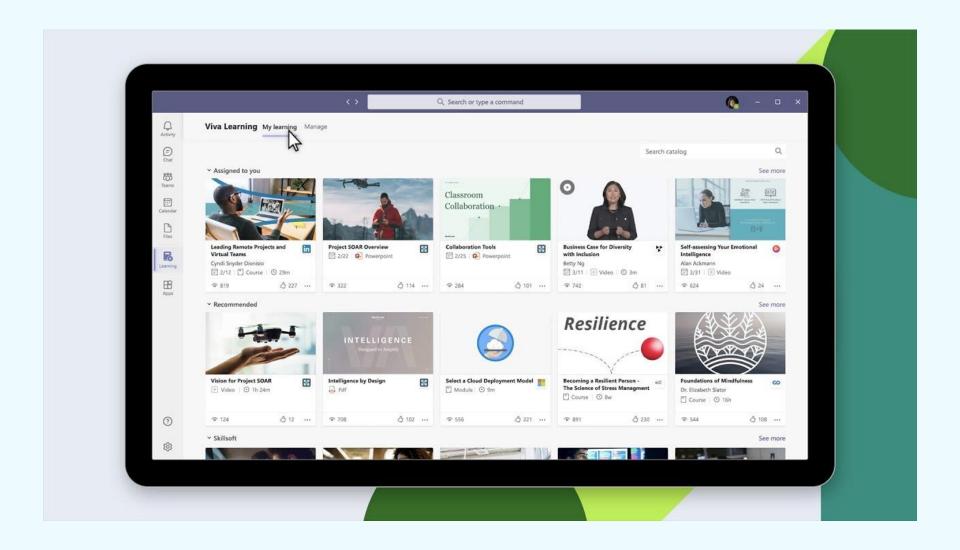


## **Viva Topics**





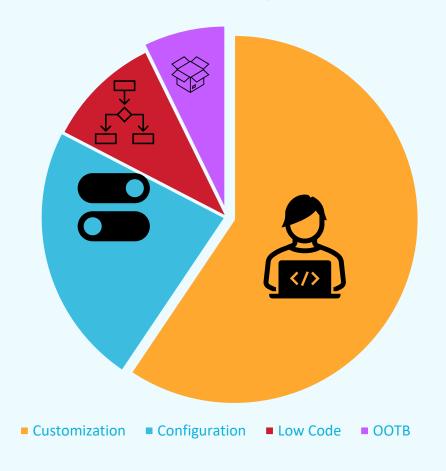
## **Viva Learning**





## **SharePoint (vOld)**

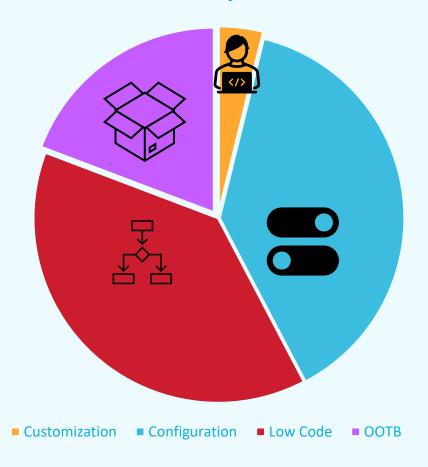
SP On Prem Projects





## **M365**

#### M365 Projects





## Not every M365 workload needs development processes

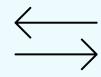


Exchange



One Drive











SharePoint



**Power Platform** 

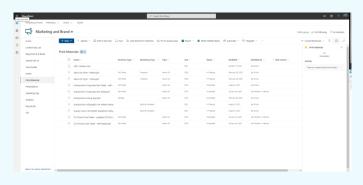




UNION



## Within SharePoint



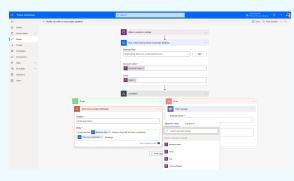
**Collaboration Portals** 



Needs less formal development processes



**Employee Portals** 



**Power Platform** 







# Running Lean and Agile M365 projects



## A Brief history of how SharePoint (M365?) on premises projects were run

The year was 2009.....

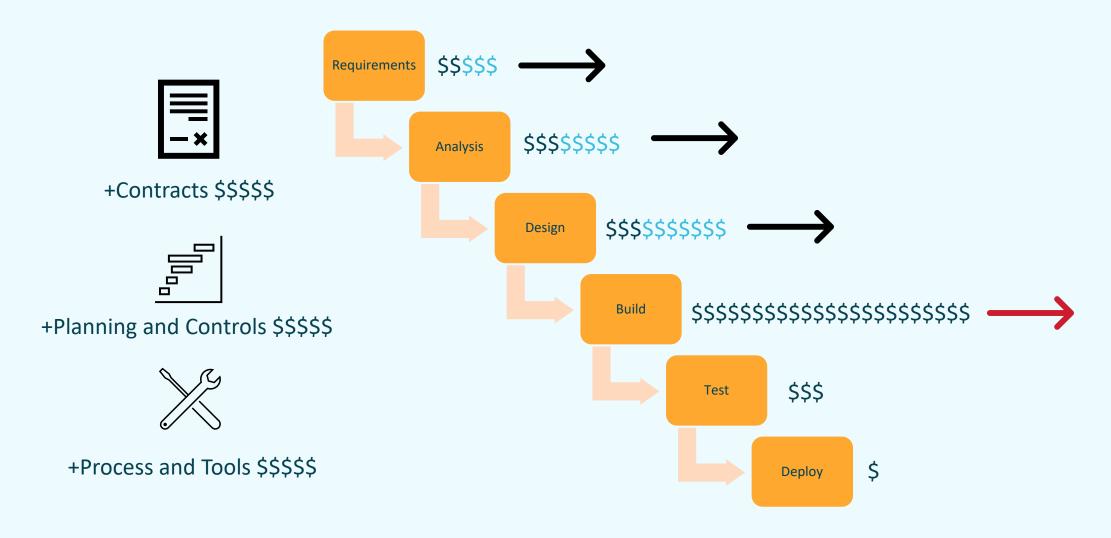


#### **SharePoint vOld**

- SharePoint was a bare bones platform
- Much of the functionality we needed was missing
- Look and feel was "rough" and often needed customization (html, CSS, JavaScript)
- SharePoint custom development was VERY slow and Expensive
- Needed to be developed using custom software development methodologies
- Things that were configurable were defined via code and or CAML



## **SharePoint Waterfall Projects**



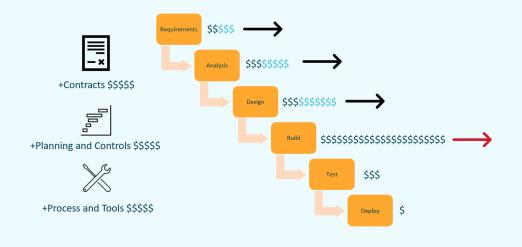


## **SP On Prem Environments**





## **Example: Weather Web Parts**



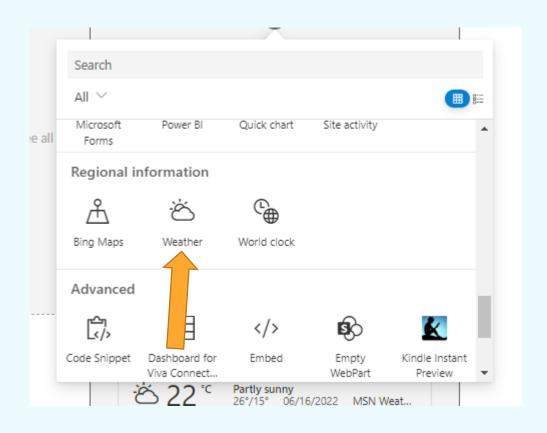


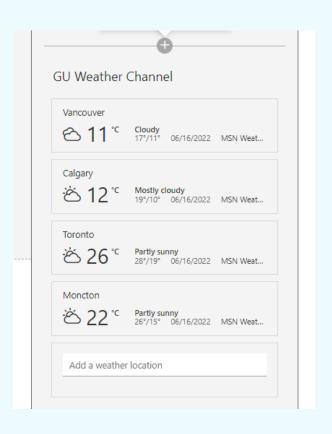


160-320 hours?!



## **SPO Weather Web Parts (today)**









## Lean and Agile M365



## First a story...

There once was a project...



## M365 migration project

- Migrating 500 users
- 5 TB of content
- SPO with records management
- 3-4 Million dollar budget

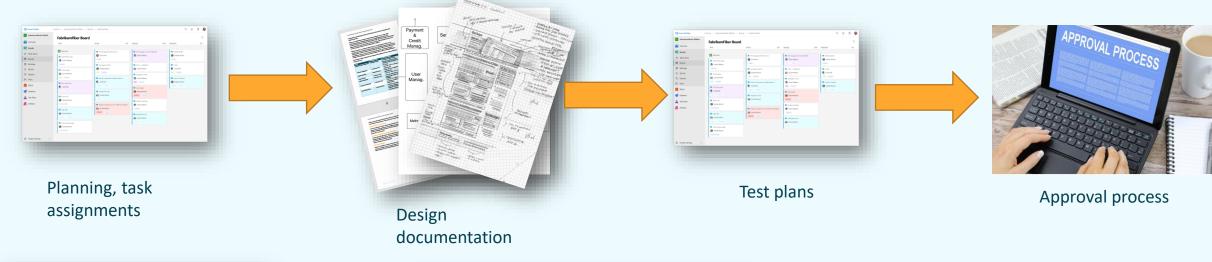


## Example

- Needed to create a document library
- Needed (OOTB)
  - 1 content type with 2 site columns
  - 1 document library



## Non lean and agile project 16 hours over 4 days....







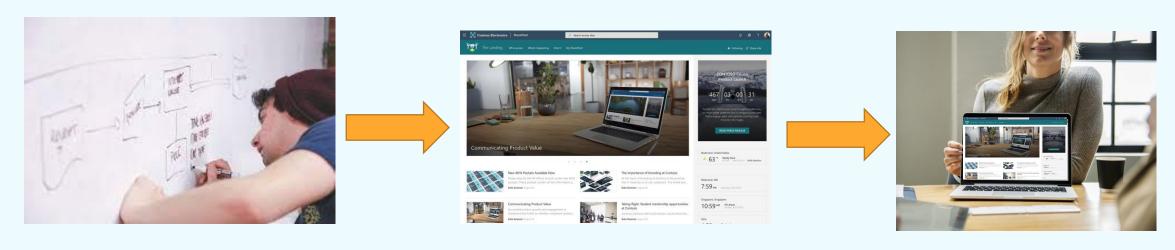




Multiple environments



## 1. Lean and Agile... 5 minutes



requirements prototype Demo



## Non lean and agile project

- 3-4 Million dollar project
- **80-90% when to administrative overhead** (documentation, processes, tools, approvals)
- 10-20% went to the solution
- Low quality solution that didn't provide much value 8
- Little of the cool stuff (AI, Power Apps, Power BI, Power Automate)
- "We didn't have the budget"



## 1. Minimize documentation

Create just enough to get you to the next step and help create a shared understanding

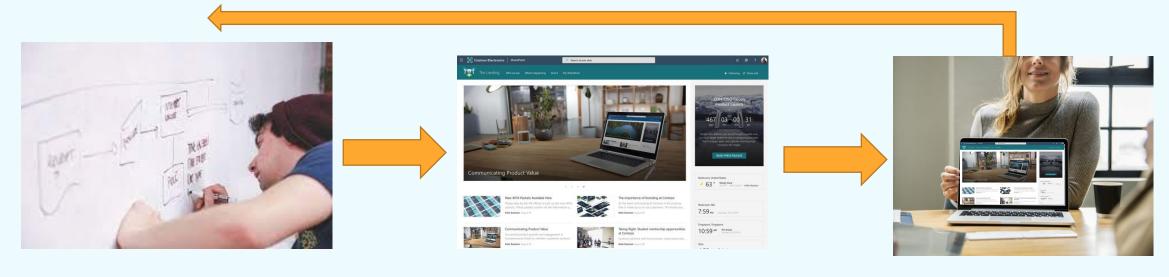


#### Minimize documentation

- Documentation was needed to hedge the risk of building out the wrong solution when developing expensive custom software
- **Documentation can now be more expensive than building out the solution in the first place**
- Why spend 16 hours documenting, design, reviewing and approving requirements when it only takes one hour to build?
- Our goal is to get something in front of end users as quickly as possible we need just enough documentation to get us there.



### 1. Minimize documentation



requirements

prototype





# 2. Build it out in production

If it's a new solution



#### **Build it directly in production**

- Most SharePoint and Teams solutions especially when it's a brand new solution can be built out in production with little to no risk
- Little custom code, little risk of performance impacts, undesired behavior
- Lots of exceptions (test things out in dev\test) like custom solutions, integration code, records management, Power Platform (sometimes)
- Tools like ShareGate can be used to easily move content from one environment to another



## 3. Iterate the solution

Focus on minimal viable products

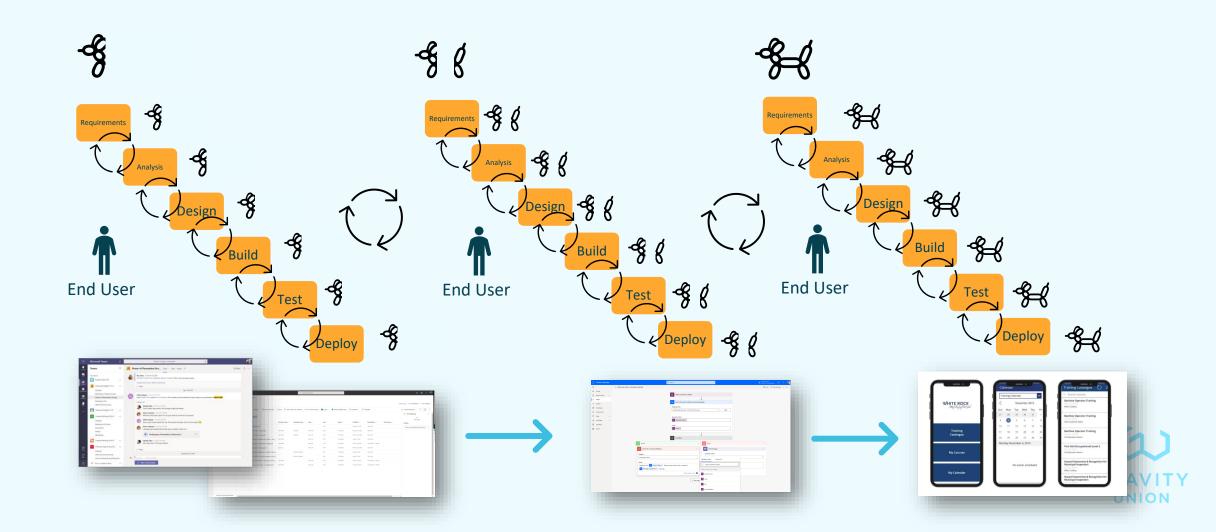


#### Iterate the solution

- Go department by department (or area by area)
- Focus on foundational elements (grass roots movements) document management and collaboration
- Then add workflows
- Then add Power Apps and reporting
- Let the dust settle in between each iteration before building on top of it to avoid redoing work (workflows, reporting, Power Apps etc.)



### Iterating the Solution



## 4. Engage the end user

If it's a new solution

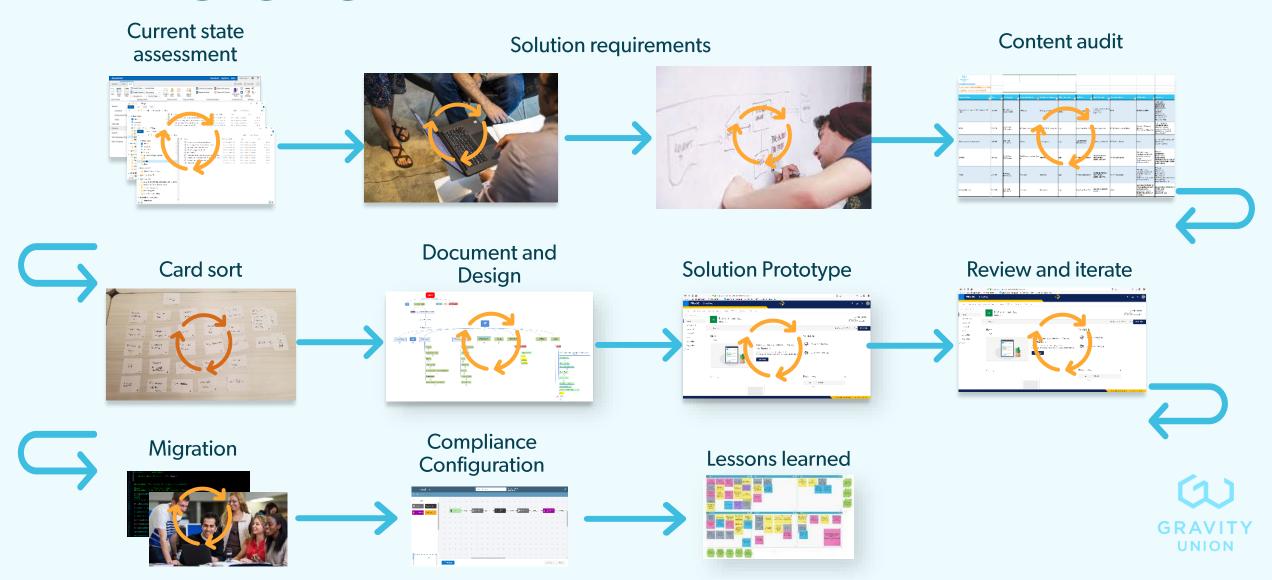


#### **Engage the end user**

- The more involvement the better
- Bring them along for the whole journey



#### **Engaging the end user**



## 5. Be open to change

Development is much cheaper!



#### Be open to change

- Users often don't know what until they can see it
- Forcing them to sign off creates significant delays
- Configuring the solutions is relatively cheap
- Communicate that at any point they can change their mind
- Helps foster engagement and collaboration



## 6. Streamline your process

Challenge heavy processes and procedures that are getting in the way



#### Streamline your processes

- As much as possible remove formal approvals, stage gates etc.
- Project governance was put in place to hedge risk of development costs
- Solution development cost is now minimal
- Do we need three levels of approval?



# 7. Use lightweight tools

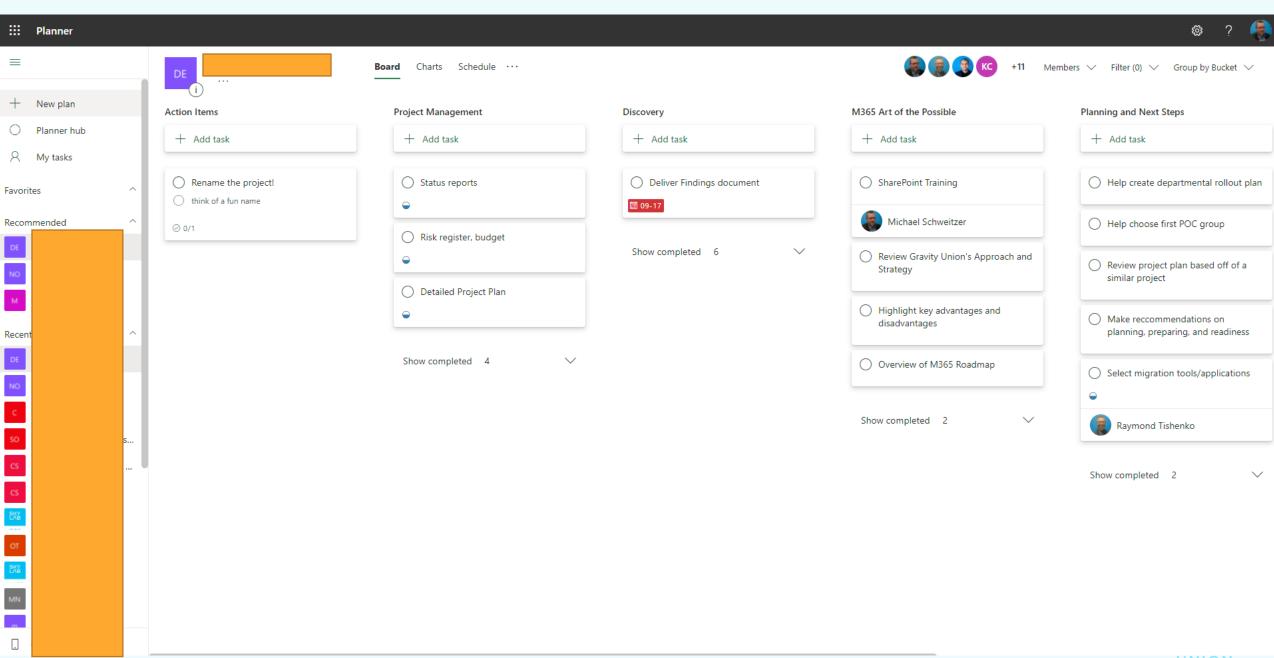
Tools should help not hinder



#### Use lightweight tools

If you're spending more time using tools than delivering value then we have a problem





# 8. Pre-bake big decisions

Development is much cheaper!



#### Work through big decisions up front

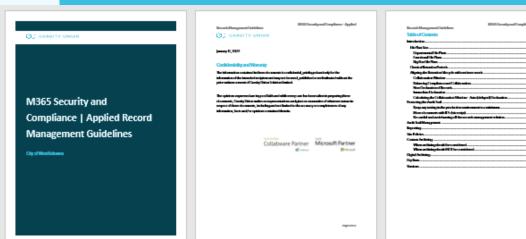
- Many decisions can be made up front to streamline design and configuration
- Will minimize approvals and red tape



## Examples

We've documented all our lessons learned and best practices to share with all our future clients:

- Information Architecture
- Security
- Privacy
- Applied Record Management (either M365 or Collabspace)
- Migration
- Change Management (training, communication and Support)
- Governance (roles, responsibilities, guidelines, procedures)



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## Thank you!

