

# Microsoft Project for Scrum, Kanban, and Hybrid Projects



## Harnessing the Power of MSP for Agile

David Geoffrey Litten  
MSP for Agile

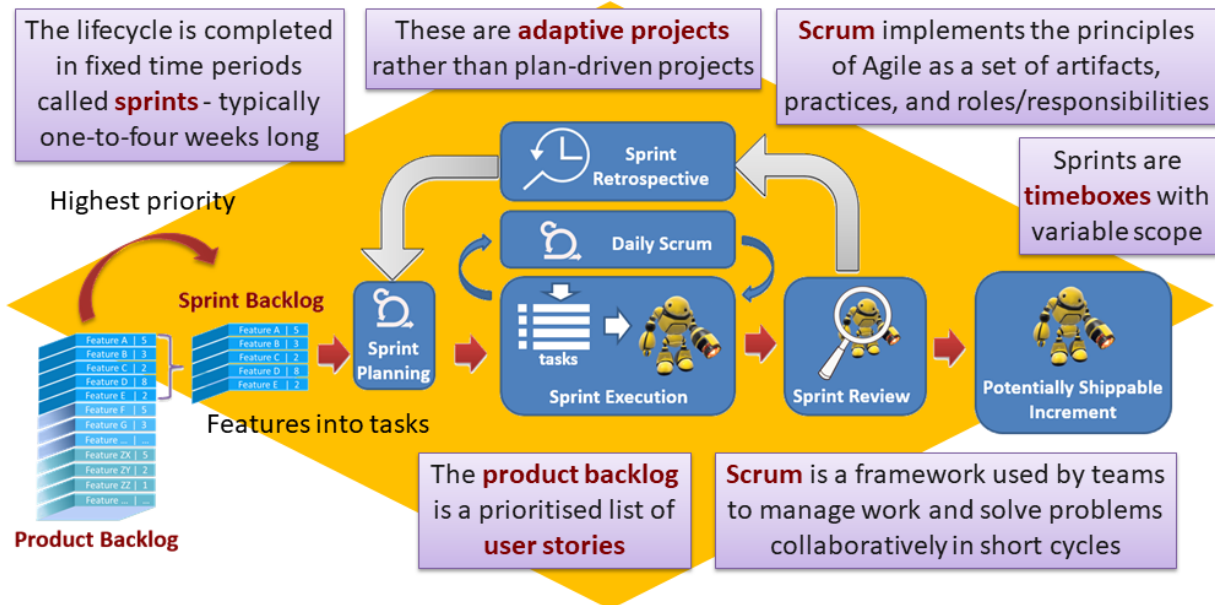
# MICROSOFT PROJECT 365 FOR SCRUM/KANBAN/HYBRID PROJECTS

## MODULE ONE

### NEW SCRUM OVERVIEW



## The Scrum Lifecycle





## SCRUM Changes - 2023

There have been updates and clarifications made to the latest Scrum Guide, and these should be reflected in the execution of **Scrum** within **Microsoft Project**

### The Scrum Master

Their primary purpose is to significantly improve team performance by helping everyone understand Scrum theory and practice within the Scrum Team/organization

This includes leading, training, and coaching the organization in its Scrum adoption



### The self-managing Scrum Team

There is just one team, the Scrum Team, focused on the same objective, with different sets of accountabilities for the **Product Owner**, **Scrum Master**, and **Developers**

**Development Teams** are self-managing Scrum Teams, choosing what to work on, who is going to do it, and how it will get done

The team self-manages to deliver on the commitments and to meet the goals



## The Daily Scrum

### The Daily Scrum

The purpose is to inspect progress toward the **Sprint Goal** and adapt the **Sprint Backlog** as necessary

It adjusts the upcoming planned work, and there are many ways to achieve that purpose

The entire Scrum Team is accountable for creating a valuable, useful Increment every Sprint - **The Scrum Master, Product Owner, and Developers**

**The Developers** can select whatever structure and techniques they want, providing their **Daily Scrum** focuses on progress toward the **Sprint Goal** and produces an actionable plan for the next day of work thus creating focus while improving self-management

There are many ways to achieve the **Daily Scrum** purpose

For example, why isn't the story at the top of the Backlog done? This focus can lead to a large increase in team performance





## The Sprint Review

### The Sprint Review

During the event, the Scrum Team, customers and stakeholders review what was accomplished in the Sprint and what has changed in their environment - based on this, attendees collaborate on what to do next

**The Product Backlog** may also be adjusted to meet new opportunities (part of "grooming")

**The Sprint Review** is a working session, and the Scrum Team should avoid limiting it to a presentation

**The Sprint Review** is the venue for customers, stakeholders, and the Scrum Team to discuss how they achieved the **Sprint Goal**, progress towards the **Product Goal**, and what problems have been overcome and what remain in their way



## Sprint Planning and Retrospective

### Sprint Planning

This answers: What can be delivered in the **Increment** in the upcoming Sprint, how the work will be achieved and why is this sprint valuable?

**The Product Owner** proposes how the product could increase its value and utility in the current Sprint

Only the **Product Owner** can abort a Sprint

The whole **Scrum Team** then collaborates to define a **Sprint Goal** that communicates why the Sprint is valuable to stakeholders

### The Sprint Retrospective

This scrum event has a focus on process improvements, team happiness, and cohesion, giving individual Scrum Teams flexibility in how they approach the **Sprint Retrospective**

**The Scrum Team** decides on how much time is needed to refine and understand **Product Backlog** Items

Sometimes these solutions are the removal of **impediments**, while others may be potential process improvements identified by the Scrum Team

Large improvements are addressed as soon as possible, and may be added to the **Sprint Backlog** for the **next Sprint**



# MICROSOFT PROJECT 365 FOR SCRUM/KANBAN/HYBRID PROJECTS

## MODULE TWO

### SCRUM COMMITMENTS



## SCRUM Artifacts and Commitments

There are just **three Artifacts** in Scrum, the **Product Backlog**, the **Sprint Backlog**, and the **Increment**, with each representing work or value - designed to maximize the transparency of key information

Each of these Artifacts has a corresponding commitment:

The commitment for the **Product Backlog** is the **Product Goal**

For the **Sprint Backlog**, it is the **Sprint Goal**

For the **Increment**, it is the **Definition of Done**

These commitments exist to reinforce empiricism and the Scrum values for the Scrum Team and their stakeholders while providing better focus on how to align teams on the goals and the concrete steps needed to make them a reality

A 3D illustration of a mummy character with a red eye, running towards the left. It is positioned on a yellow arrow pointing right.

|             |     |
|-------------|-----|
| Feature A   | 5   |
| Feature B   | 3   |
| Feature C   | 2   |
| Feature D   | 8   |
| Feature E   | 2   |
| Feature F   | 5   |
| Feature G   | 3   |
| Feature ... | ... |
| Feature ZX  | 5   |
| Feature ZY  | 2   |
| Feature ZZ  | 1   |
| Feature ... | ... |



## The Sprint Goal

### The Sprint Goal

This is the single objective for the Sprint with a team focus on:

What is the purpose of the Sprint?

What do all these things add up to?

What are we trying to accomplish?

Put simply it answers the most important question in Scrum, “why?”

**The Sprint Goal** is the Team’s commitment to what will be delivered by the **Sprint Backlog**, which is an intimate description of what that goal is

**The Sprint Goal** creates coherence and focus, encouraging the Scrum Team to work together rather than on separate initiatives



## The Product Goal

### The Product Goal

A Scrum Team commits to delivering something of value, this is the **Product Goal**

It has a clear boundary, known stakeholders, well-defined users, or customers

A product could be a service, a physical product, or something more abstract

**The Product Goal**, describes the future state of the product serving as a target for the Scrum Team to plan against

Each **Sprint Goal** is their commitment to getting closer to that

**Definition of Done** is their commitment to delivering quality and value in every **Product Backlog** Item they create

**The Product Goal** is in the **Product Backlog**

The rest of the **Product Backlog** emerges to define “what” will fulfill **The Product Goal**





## The Definition of Done

### The Definition of Done

This is a formal description of the state of the **Increment** when it meets the **quality measures** required for the product - the moment a **Product Backlog** item meets the **Definition of Done**, an Increment is born

It is the Team's commitment to quality and value - if something does not meet this definition, it can't be released and should never be demonstrated at **Sprint Review**

It gives the Scrum Team what standards they need to meet to be finished with a **Product Backlog Item**

The Team commits to reaching that **Product Increment** at the end of each Sprint



It gives you one of the greatest deliverables in Scrum: The work not done by showing Scrum Teams where to stop

The Scrum Team members have the courage to do the right thing, and to work on tough problems

Scrum Team members expect each other to be capable, independent people, and are respected as such by the people with whom they work



# MICROSOFT PROJECT 365 FOR SCRUM/KANBAN/HYBRID PROJECTS

## MODULE THREE

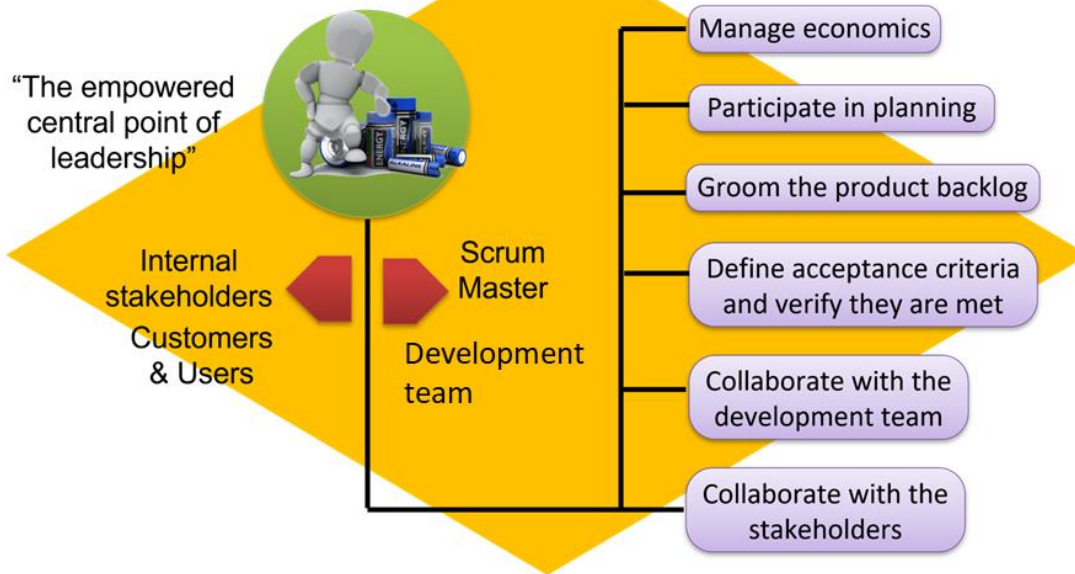
### SCRUM ROLES & RESPONSIBILITIES





## The Product Owner

### The Product Owner



## The Product Owner

Is ultimately responsible for delivery of the **product**

They define the **vision** of what they want to build and convey it to the team and the organization



Product Owner

They own the business and market requirements and **prioritize** all the work that needs to be done by creating and managing the **product backlog**

They decide **which features** to ship and **when** to ship

They work with the **team** and other **stakeholders** to make sure everyone understands the items in the **product backlog**

They accept or reject work completed in a **sprint** at the **sprint review**





## The Scrum Master

### The Scrum Master

“Helping everyone understand and embrace the scrum values, principles and practices”

“Provides coaching and leadership to the team and Product Owner”



Coach

Servant Leader

Process authority

Interference shield

Impediment remover

Change Agent



## The Scrum Master

**The servant leader** of the **Scrum team**, as coach helping to facilitate collaboration, remove impediments, enforce and safeguard the **Scrum** process, and protecting the team

### Main responsibilities:

Organize and facilitate the sprint rituals

Ensure that the **product owner** has a properly prioritized and groomed **backlog**

Ensures the team isn't pressured to over-commit to a **sprint**

Ensures scope isn't added to a **sprint**

Ensures the **Definition of Done** is adhered to

They do **not** assign tasks to team members and they are not responsible for the delivery of a project



Scrum Master





## The Team Members

The **Scrum team** is a self-organizing, cross-functional team typically comprised of **five to seven members**

Everyone on the project works together and helps each other

They are **not** bound to distinct roles like architect, programmer, designer, or tester

The whole team completes the set of work together

The **Scrum team** plans how much work they can complete each sprint and owns the **plan**



Development Team



Product Owner



Scrum Master



Scrum Roles

Development Team

# MICROSOFT PROJECT 365 FOR SCRUM/KANBAN/HYBRID PROJECTS

## MODULE FOUR

### PRODUCT ROADMAP, BACKLOG AND PLANNING



Projex Academy





## Sprint Planning - 1

Before a sprint starts, the **Scrum Master** facilitates the **sprint planning meeting** with the **scrum team** and the **product owner**

The **product owner** identifies the objectives of the upcoming sprint, and the team plans their work according to the objectives



Product Owner

**Sprint Planning consists of:**

**Sprint Capacity:** the team determines the capacity for the sprint, taking into account the number of days, number of team members, holidays, etc.

**Sprint Objectives:** the **product owner** identifies the sprint objectives and the product backlog is prioritized to these **user stories** and groomed

|             |     |
|-------------|-----|
| Feature A   | 5   |
| Feature B   | 3   |
| Feature C   | 2   |
| Feature D   | 8   |
| Feature E   | 2   |
| Feature F   | 5   |
| Feature G   | 3   |
| Feature ... | ... |
| Feature ZX  | 5   |
| Feature ZY  | 2   |
| Feature ZZ  | 1   |
| Feature ... | ... |



Sprint buffer

Capacity to work on product backlog items

This is the concept of **ideal days**

Personal time off  
Maintenance, support, etc.  
Sprint planning, review, retrospective, grooming



## Sprint Planning - 2

**Work Selection:** **Stories** or tasks are pulled from the top of the backlog into the **sprint** until the estimated **capacity** is reached

The **product owner** explains each story and answer questions from the team, updating the story as needed, until the **product owner** and the **Scrum team** have an agreed understanding of the **story** and **sprint scope**

**Breakdown:** the **Scrum team** discusses each story in detail, and plans how they will complete the story and meet the acceptance criteria and the **DoD**

The team produces a list of **subtasks** needed to complete the story, and this estimates is reviewed and updated if needed



Sprint Planning Meeting



Tasks



## Sprint Planning - 3

**Sprint Commitment:** the proposed initial **sprint scope** is reviewed once all the stories are broken down and estimates updated

**User stories** may be removed from the sprint and put back on the **product backlog** and/or additional stories may be added

Once done, **only** the **Scrum team** (not the **scrum master** or **product owner**) commits to completing the work in the sprint, and the **sprint** is started

The total amount of work or scope committed to for the sprint is measured in **story points**



Sprint  
Planning  
Meeting



# MICROSOFT PROJECT 365 FOR SCRUM/KANBAN/HYBRID PROJECTS

## MODULE FIVE

### SPRINTS AND KANBAN (TASK BOARD)





## Sprint Execution

### Sprint Execution

Once the sprint starts, the team executes on the **sprint backlog**

The team performs all the task work to get the features/**user stories** done

The development team self-manages to define and decide what order and manner the task work should be carried out

### Sprint Backlog

|           |   |
|-----------|---|
| Feature A | 5 |
| Feature B | 3 |
| Feature C | 2 |
| Feature D | 8 |
| Feature E | 2 |

### The Daily Scrum/Daily Standup

The **Daily Scrum** is a daily meeting limited to fifteen minutes

Each team member briefly reports their progress since yesterday, the plans for today, and anything impeding their progress



## Sprints

Increment?

Release?



Sprints organize work in iterations or cycles of up to 4 weeks duration

During the Sprint **Product Backlog Items** turn into **Increments** after they meet the **Definition of Done**

### Sprint



An **Increment** can be released now, or later - at any given time - **Releasing** means putting **value** in the hands of customers



## Task Boards (Kanban) - 1

Scrum is suited to projects for new/changed processes, products, or services

Scrum is **not** well-suited to highly interrupt-driven work (such as a Help Desk for example)

An alternative agile approach is to use **Kanban/Task Boards**

**Task Boards** visualizes how work flows through a system by limiting the work in progress (**WIP**), and measuring and optimizing the flow of work to suit your available **capacity**

Task Boards use a “**pull**” approach where work is only pulled when there is capacity to do it – thus preventing work bottlenecks

Limiting the number of **backlog items**, a team can work on at a given time helps increase focus while reducing context switching



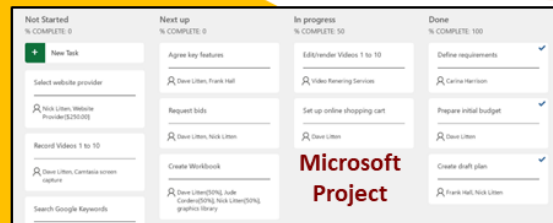
## Task Boards (Kanban) - 2

During the sprint, **team members pull work items** (user stories, tasks, etc.) from the top of the sprint **To Do** list to work on

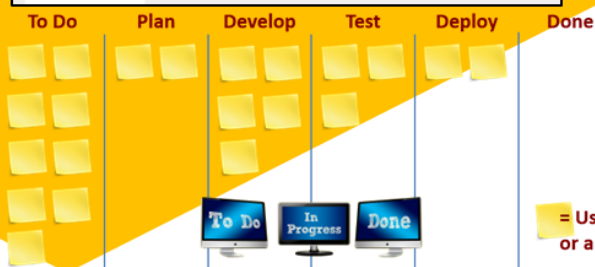
Development Team



Various team members will work on the various work items or their subtasks



The status of an item is updated when needed by moving it from one column to the next on the **Scrum Board** until it is done



= User Story or a Defect



## Sprint Burndown Chart

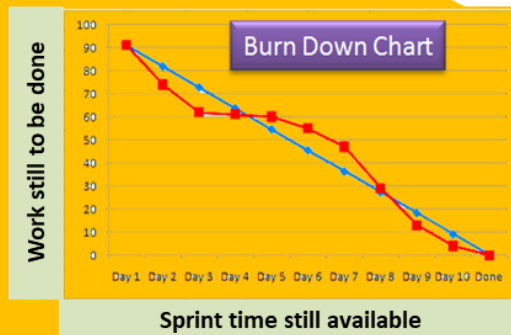
**Progress** is tracked using a **burndown chart** showing the amount of **work completed** and **remaining work** measured in **hours/story points**

Remaining story points are shown on the Y axis and the remaining time is shown on the X axis

A visual way of showing whether the team is on track to complete all the work by the end of the sprint



The burndown chart is updated when stories are completed

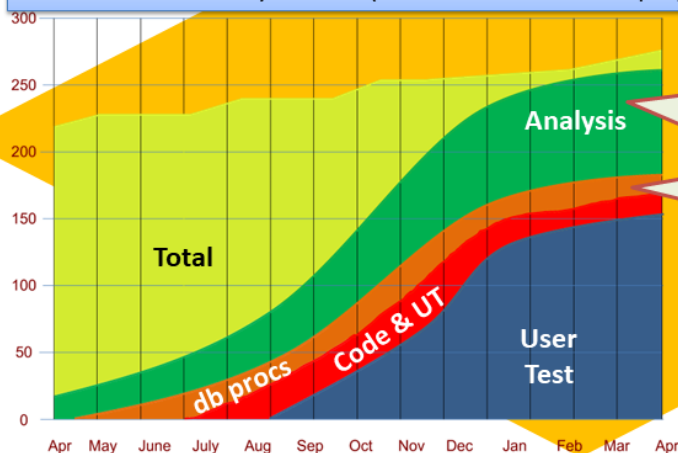


## Cumulative Flow Diagram

Here, the **WIP** has been broken down by activity and these stacked sequentially (each done by different groups)

To determine **bottlenecks**, look for areas that widen before the final activity is done (User Test in this example)

The **bottleneck** activity lies **below** the widening band



Widening area activity

Database processes shows a slower rate of progress and is the bottleneck

Bottleneck activity

CFD's are stacked area graphs showing features that are in progress, remaining, and completed over time

# MICROSOFT PROJECT 365 FOR SCRUM/KANBAN/HYBRID PROJECTS

## MODULE SIX

### SPRINT REVIEWS AND RETROSPECTIVES



## Sprint Review - 1

The **sprint review** gives everyone with input to the product development effort, an opportunity to inspect and adapt what has been built so far enable productive adaption to surface and be exploited



The outputs of the **sprint review** are a **groomed product backlog** and an updated **release plan**

The team presents completed work only, work that meets the **agreed-upon Definition of Done**

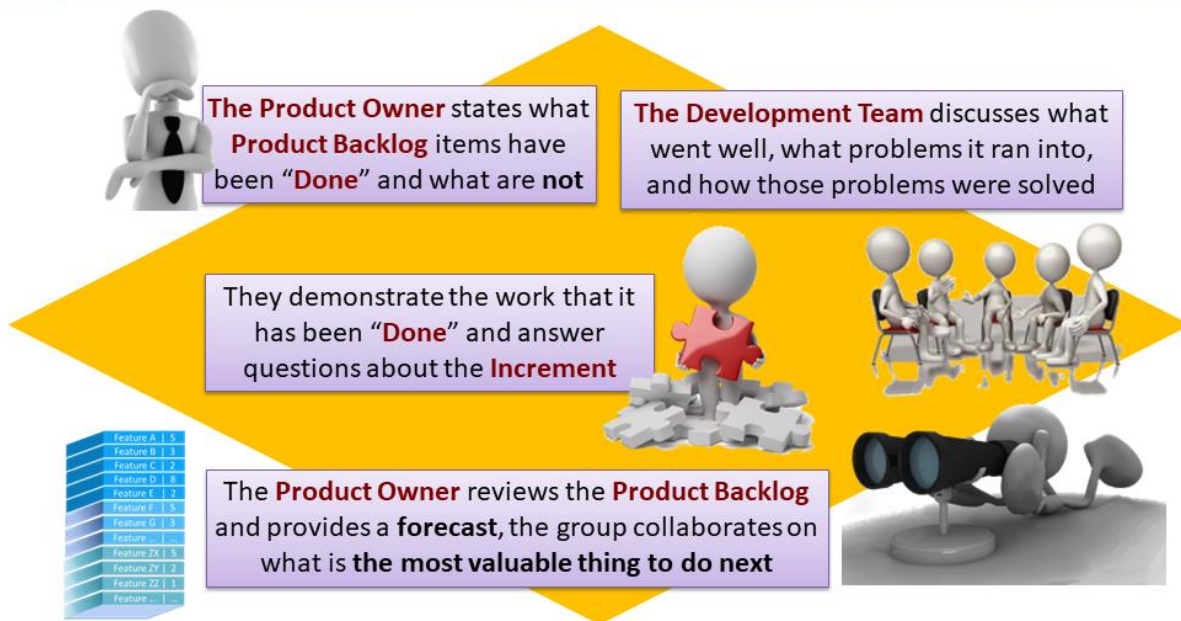
This is an informal meeting **not** a status meeting

It is the **product owner's** responsibility to determine if the work is done or not





## Sprint Review - 2



## Sprint Retrospective - 1





## Sprint Retrospective - 2

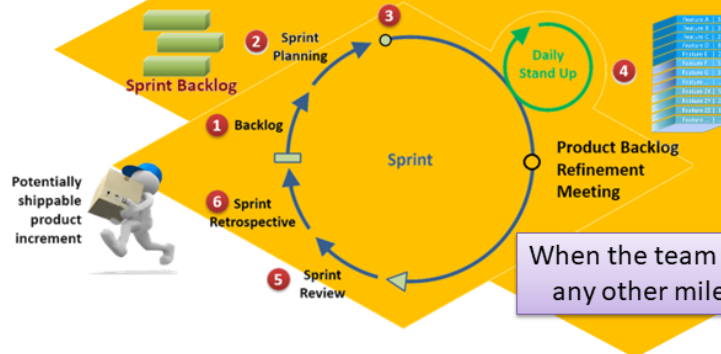
### Sprint Retrospective

The **retrospective** allows the team to **learn** about, **improve**, and **adapt** its **process**, help the team learn from its previous product and process work

### Retrospective key timing

Many teams use **iterations**—as it prompts a demonstration and a retrospective at the end. The team does not need iterations in order to **retrospect**

When the team completes a **release** or ships something, it does not have to be a large increment, it can be any release, no matter how small



When the team appears to be stuck and completed work is not flowing through the team

When more than a few weeks have passed since the previous **retrospective**

When the team reaches any other milestone



## Sprint Retrospective - 3

A **retrospective** is not about team blame, but to learn from previous work and make improvements

Teams must learn about their work product and work process, to plan their **retrospective** to gather data, process that data, and decide what to try next

**Retrospectives** looks at the **qualitative** (people's feelings) and **quantitative** (measurements) data, use them to **find root causes**, **design countermeasures**, and **develop action plans**

When selecting any **improvements or impediments**, the team decide how to measure the **outcomes** - so in the next time period, these will be **measured** to validate success or failure of each improvement

A **facilitator** from the team leads them through **ranking the importance** of each improvement item. Then the team chooses the appropriate number to work on for the next iteration (or adds work to the flow if flow-based)



# MICROSOFT PROJECT 365 FOR SCRUM/KANBAN/HYBRID PROJECTS

## MODULE SEVEN

### MICROSOFT PROJECT 365 AND SCRUM



## Microsoft Project for Sprints

Desktop Client

This training assumes you are using the Desktop Client (on-premises) version of Microsoft Project or for a cloud-based solution I assume you are using "Project Plan 3"



2010, 2013,  
2016, 2019

**Microsoft Project** includes approaches for plan-driven projects (waterfall), adaptive projects with evolving scope (Agile/Scrum), and hybrid projects that use both the above

Waterfall

The project scope is fixed, and you estimate how long it will take to accomplish that scope

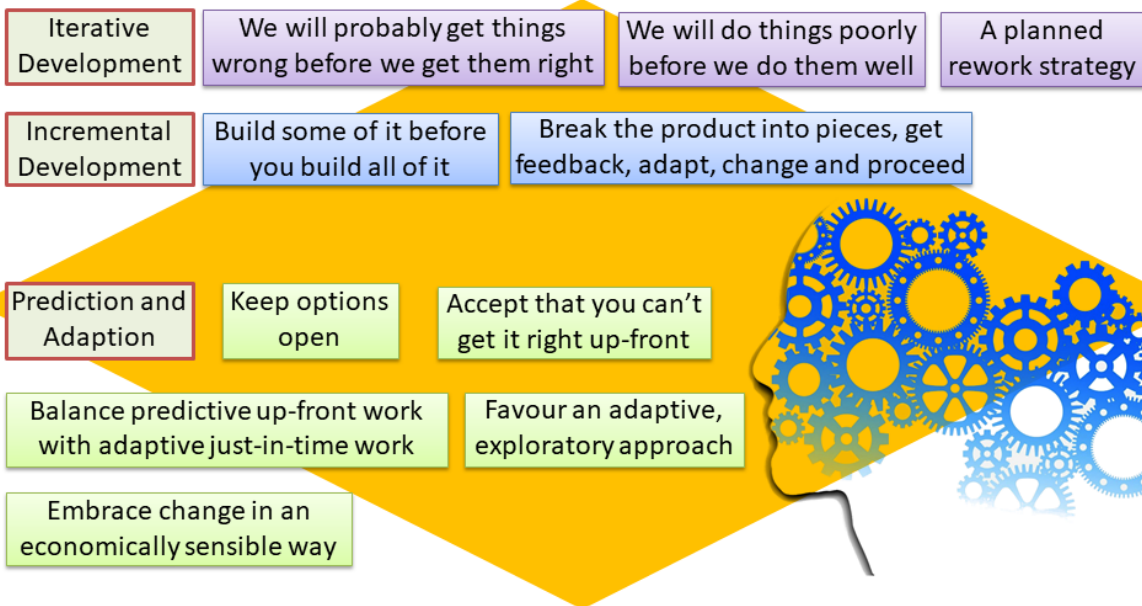
Sprints

You use fixed duration timeboxes (sprints), and you estimate how much work you can accomplish in a sprint

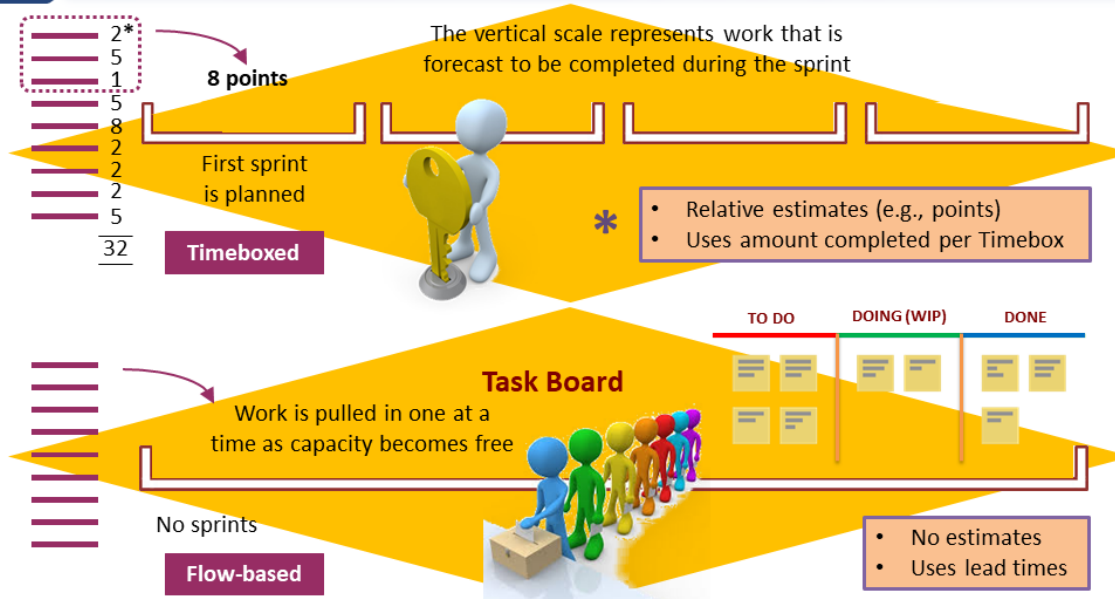




## Agile/Scrum Projects

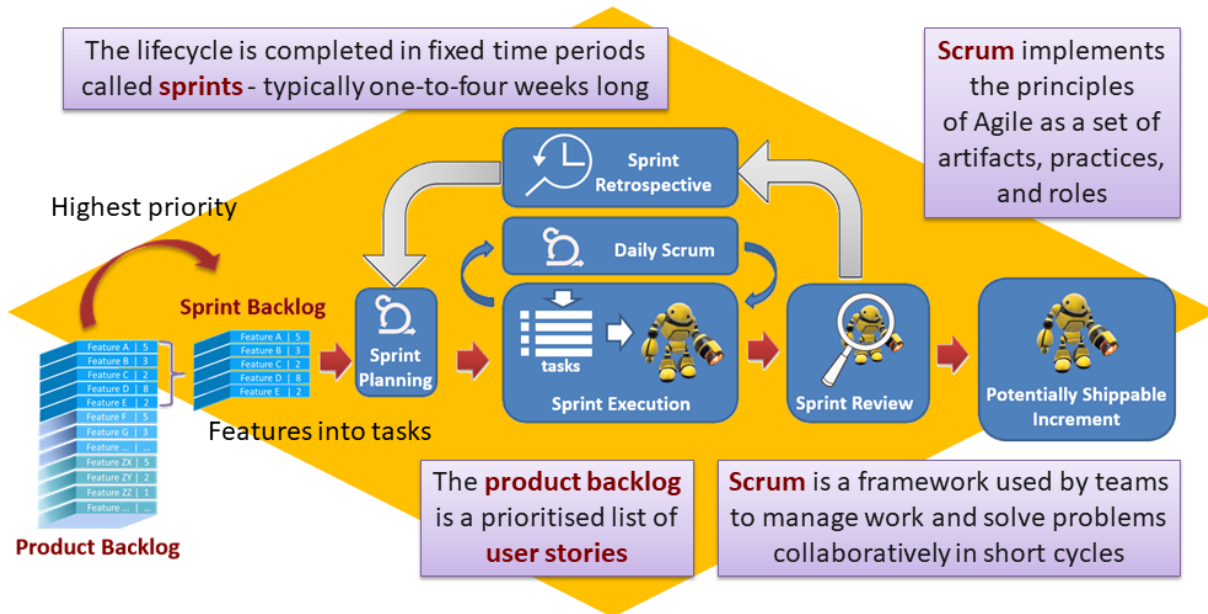


## Sprint versus Flow-based (Task Board) working

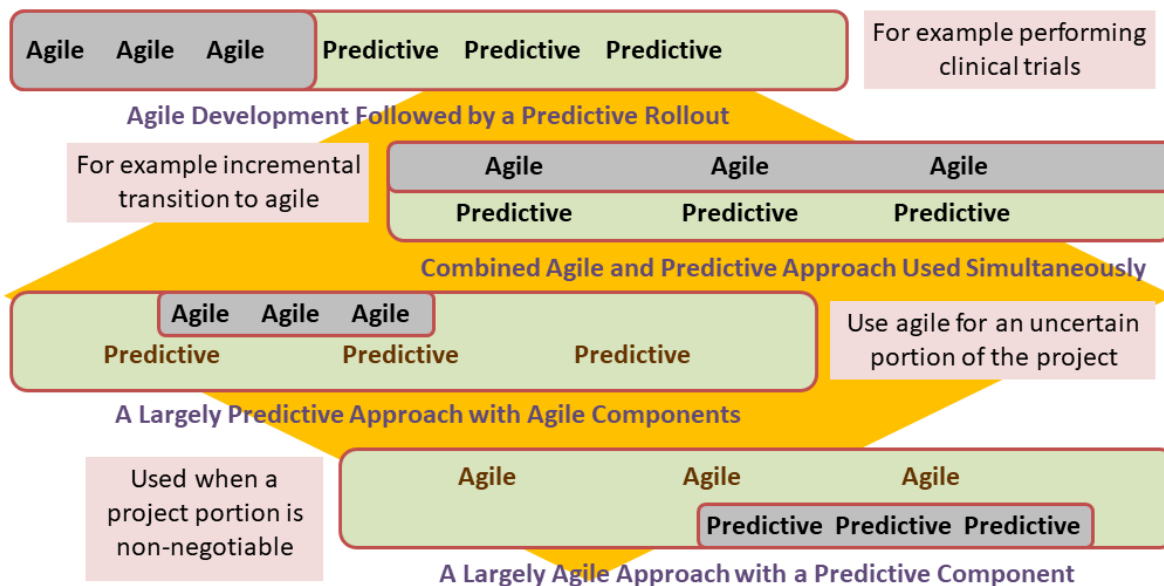




## The Scrum Lifecycle

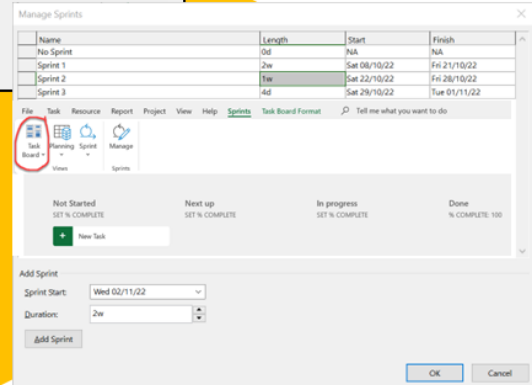
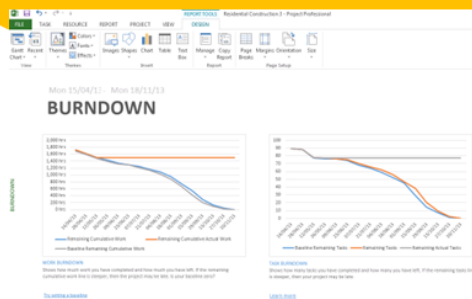
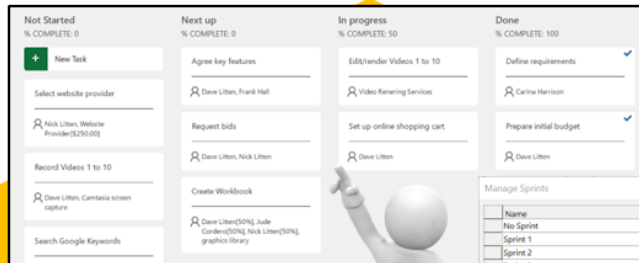


## Blending Agile/Scrum with Waterfall





## Let's Fire Up Microsoft Project 365!



# MICROSOFT PROJECT 365 FOR SCRUM/KANBAN/HYBRID PROJECTS

## MODULE EIGHT

### SETTING UP A SPRINTS PROJECT PART ONE

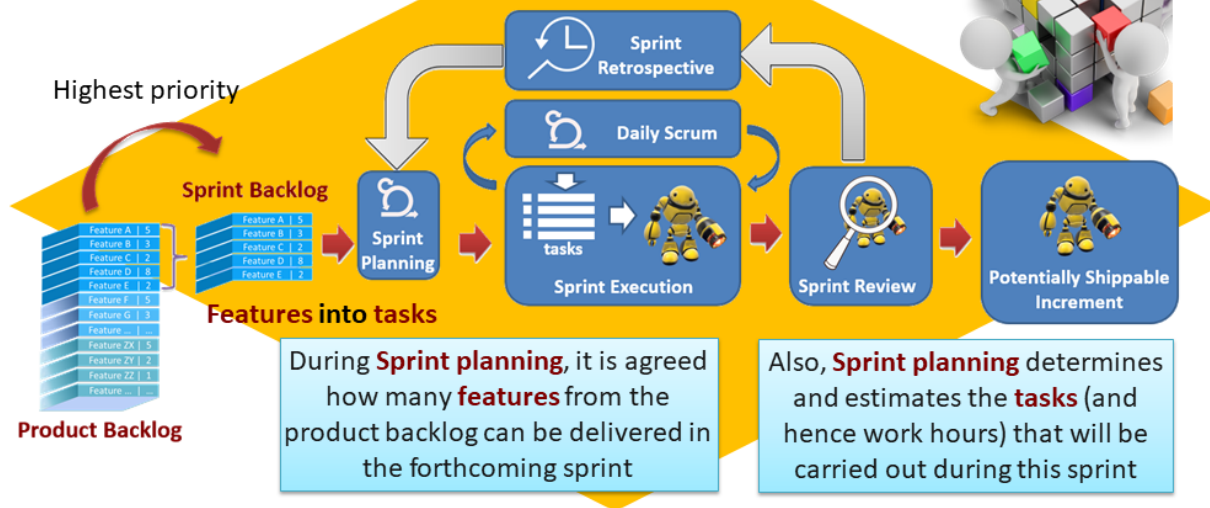




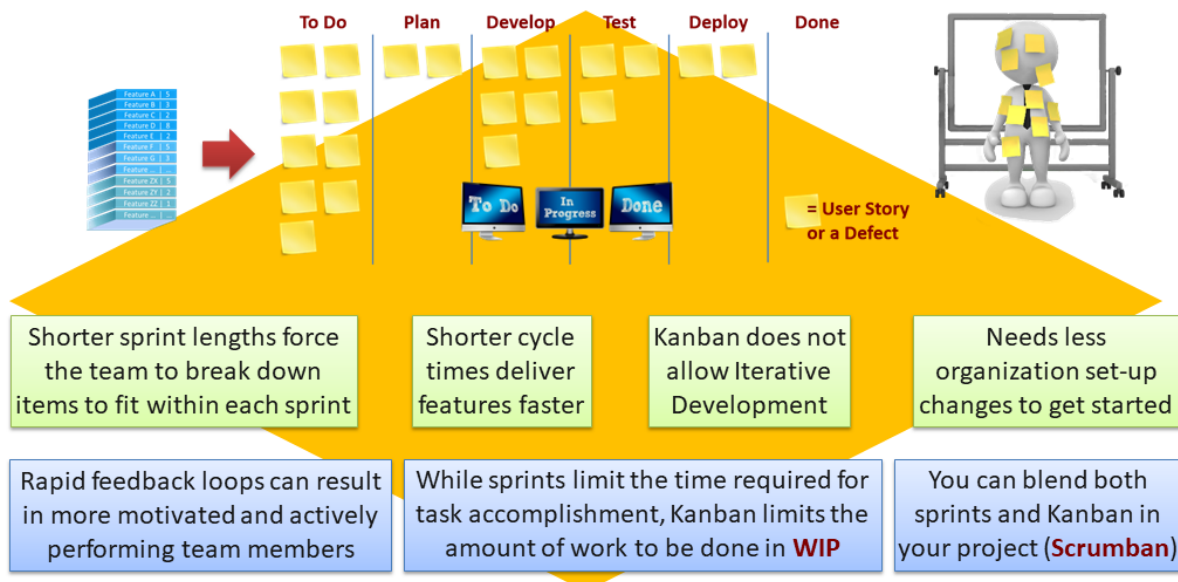
## A Reminder - Sprint Execution

Microsoft Project uses Sprints, Tasks, and Task Boards

User stories are one way of describing requirements, deliverables or features



## A Reminder – Task Board (Kanban)





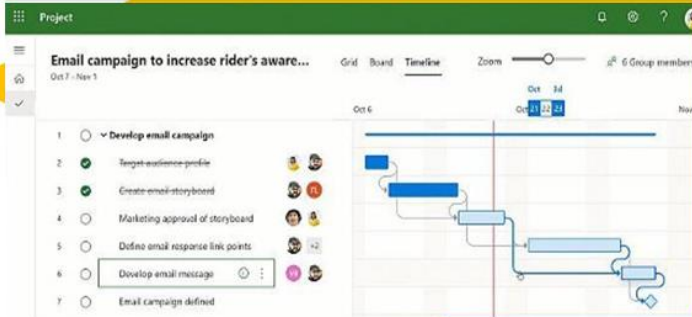
## Getting Started - 1

**Scrum** uses **sprints** to limit the time required for the accomplishment of a task, and **Kanban** limits the amount of work to be done in **WIP**

You can use a hybrid of both – called **flow-based sprint planning**

There is a lightweight version called **Project for the Web** - intended for non-project managers (not covered here)

**Kanban** uses Kanban boards for workflow display, while **Scrum** aims to limit the time required for the accomplishment of a task



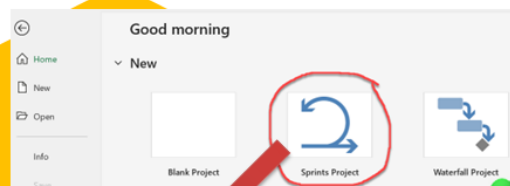
I'm using Microsoft Project Desktop Client



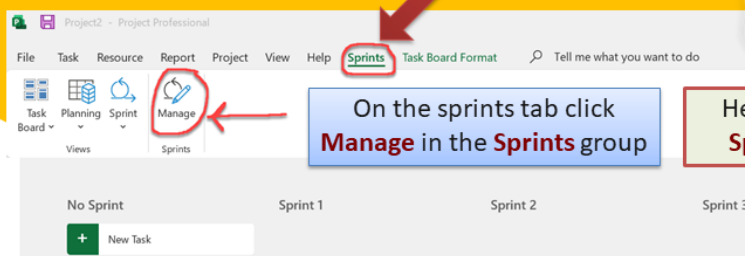
## Getting Started - 2

Project calls Kanban a **Task Board**, and Scrum is called **Sprint Planning**

Click on the **Backstage View** and chose **Sprints Project**



The **Sprints** tab on the Ribbon



On the sprints tab click **Manage** in the **Sprints** group

Here's the **Manage Sprints** dialog box





## Getting Started - 3

**Manage Sprints**

| Name      | Length | Start        | Finish       |
|-----------|--------|--------------|--------------|
| No Sprint | 0d     | NA           | NA           |
| Sprint 1  | 2w     | Sat 29/10/22 | Fri 11/11/22 |
| Sprint 2  | 2w     | Sat 12/11/22 | Fri 25/11/22 |
| Sprint 3  | 2w     | Sat 26/11/22 | Fri 09/12/22 |

**Add Sprint**

Sprint Start: Sat 10/12/22

Duration: 2w

**Sprint length is elapsed time**

**Give each sprint a more relevant name**

**Set each sprint length**

**Project will auto-schedule start and finish dates for remaining sprints based on their duration**

**Set first sprint start date**

**Add more sprints as needed**

**Press OK to save and exit**

**The dates between the finish of one sprint and the start of the next **do not** need to be consecutive**



# MICROSOFT PROJECT 365 FOR SCRUM/KANBAN/HYBRID PROJECTS

## MODULE NINE

### SETTING UP A SPRINTS PROJECT PART TWO





## Microsoft Project Options

1 New

2 Options

3 Sprints Project

Project Options

General

Display

Schedule

Proofing

Save

Language

Advanced

Customize Ribbon

Quick Access Toolbar

Add-ins

Trust Center

General options for working with Project.

User Interface options

ScreenTip style: Show feature descriptions in ScreenTips

Project view

Default view: Gantt with Timeline

Date format: Wed 28/01/09

Personalize your copy of Microsoft Office

User name: Dave Litten

Initials: DL

☐ Always use these values regardless of sign in to Office.

Office Background: No Background

Office Theme:

Start up options

☒ Show the Start screen when this application starts

I advise setting up your project options first before selecting a sprints project (although you can always come back to **options** at any time)



## Sprint Planning Sheet

The **Sprint Planning Sheet** holds data you entered elsewhere

Sprints as defined in **Manage Sprints** dialog box

**Sprint Planning Sheet**

This is used to identify named **sprints**, then **assign work** to them

**Board Status** column drop-down menu as identified in **Task Board** view

You can add or hide columns if you want a task to show up on a **Task Board**

|    | Name                 | Work                             | Board Status | Resource Names | Task Summary Name        | Deadline        | Show on Board |
|----|----------------------|----------------------------------|--------------|----------------|--------------------------|-----------------|---------------|
| 36 | Control Phase Sprint | DMAIC Cycle Complete             | 0 hrs        | Not Started    | Six Sigma DMAIC Cycle NA | Yes             |               |
| 3  | Define Phase Sprint  | Identify customer and CTQ issues | 8 hrs        | Next up        | Steve                    | Define Phase NA | Yes           |
|    | Define Phase Sprint  | Develop team charter             | 8 hrs        | Next up        | Carol                    | Define Phase NA | Yes           |
|    | Define Phase Sprint  | Define process maps              | 8 hrs        | Next up        | Dave                     | Define Phase NA | Yes           |
| 7  | Define Phase Sprint  | Review deliverables              | 8 hrs        | Next up        | Lorraine                 | Define Phase NA | Yes           |

Task Board view showing columns: Not Started, Next up, In progress, Done.

**Microsoft Project**

## Sprint Planning Board

Now that the Sprint durations have been set up correctly, it's simply a case of entering **tasks** directly onto the **Sprint Planning Board**

Here we can assign resources, modify the work value, and change sprints for tasks

**Filter/Search**

**Filter Button** displays tasks associated with one or more resources

**Search Button** refines the query to find tasks and resources

**Microsoft Project**

## Current Sprint Views

**Current Sprint Board** Shows active task cards for **current sprint** and their **category**

These views show the information you entered in the **Manage Sprints** dialog box and the **Task Board**

**Current Sprint Sheet** Shows task information for the current sprint

| Task ID | Task Name                        | Work  | Board Status | Resource Names | Task Summary    | Deadline |
|---------|----------------------------------|-------|--------------|----------------|-----------------|----------|
| 3       | Identify customer and CTQ issues | 8 hrs | In progress  | Steve          | Define Phase NA |          |
| 6       | Value stream mapping             | 8 hrs | In progress  | Don            | Define Phase NA |          |
| 5       | Process maps                     | 8 hrs | In progress  | Dave           | Define Phase NA |          |
| 4       | Develop team charter             | 8 hrs | Next up      | Carol          | Define Phase NA |          |
| 7       | Deliverables                     | 8 hrs | Next up      | Lorraine       | Define Phase NA |          |

# MICROSOFT PROJECT 365 FOR SCRUM/KANBAN/HYBRID PROJECTS

## MODULE TEN

### TASK INFORMATION AND USER STORIES PART ONE



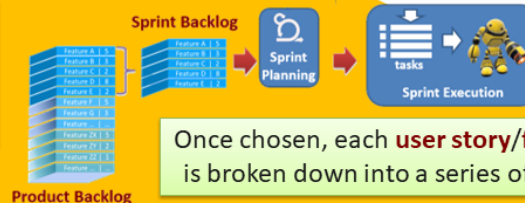
## User Stories/Functions and Tasks - 1

**User Stories** are the "requirements"

As a <user role> I want to <goal>, so that <benefit>

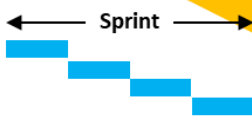
"As a typical user I want to see unbiased reviews of restaurants near an address so that I can decide where to go for dinner"

During Sprint planning, the **top priority user stories** on the product backlog, are considered for inclusion in the **current sprint**



Once chosen, each **user story/feature** is broken down into a series of **tasks**

Assuming a **4-week sprint** containing 4 tasks:



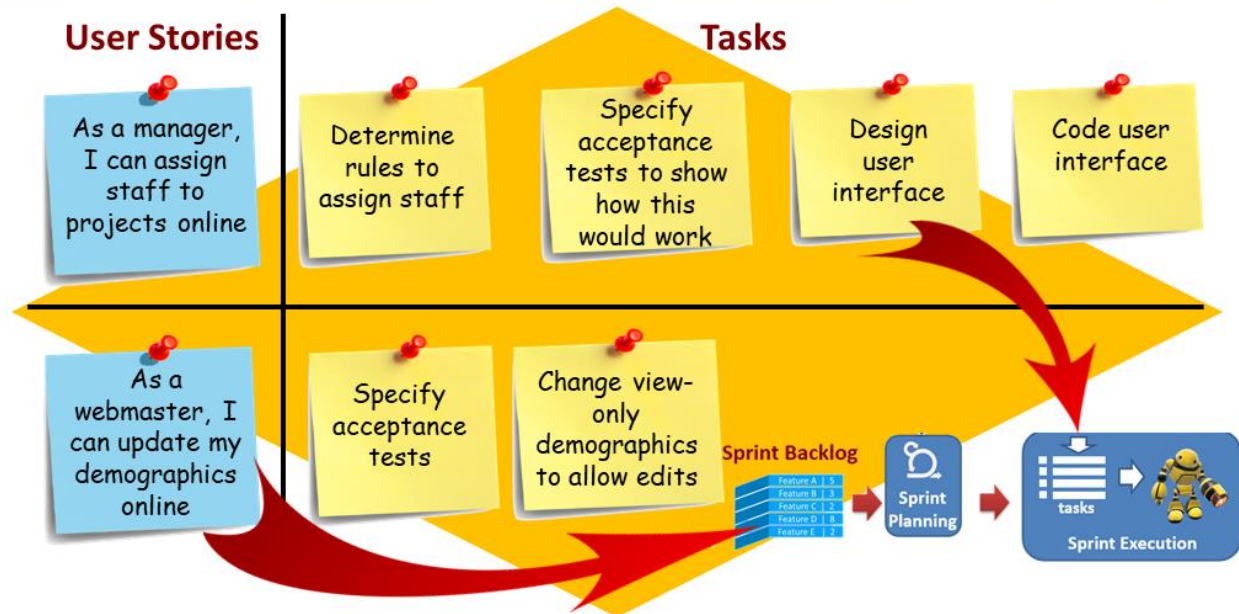
Do you care precisely **when** each task starts and finishes?

Or, since the team is **self managing**, tracking progress daily, the plan need only show all tasks in parallel?

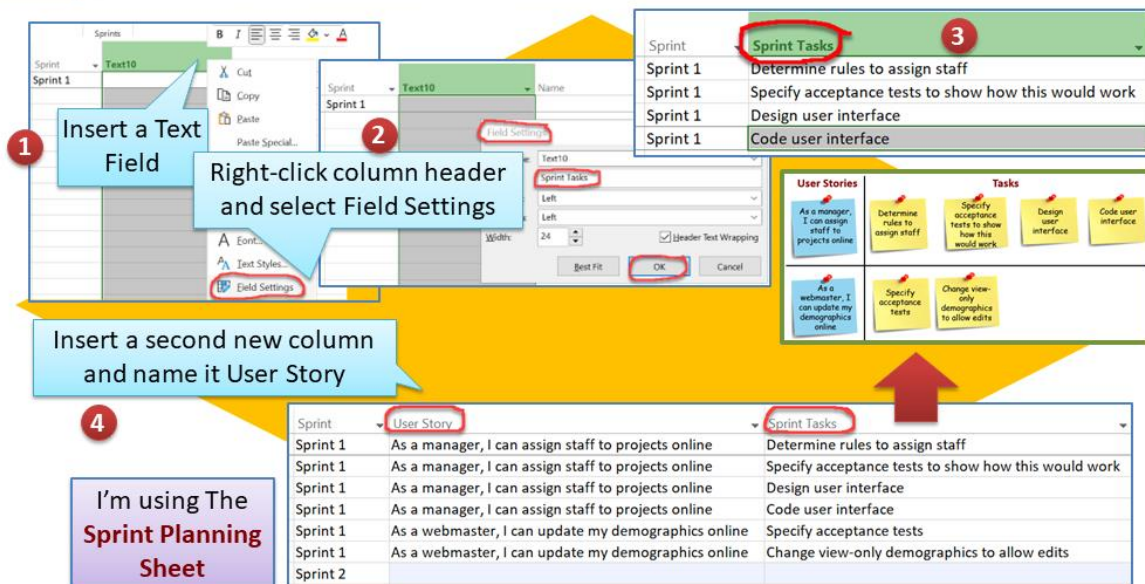




## User Stories/Functions and Tasks - 2



## Adding User Stories and Tasks to MSP





## Adding Information to Tasks

Double-click on any task name to open its **Task Information** dialog box

| 1 | Sprint | Name                 | Work                        |
|---|--------|----------------------|-----------------------------|
| 6 |        | Control Phase Sprint | DMAIC Cycle Complete 0 hrs  |
| 8 |        | Define Phase Sprint  | Identify customer and 8 hrs |
| 4 |        | Define Phase Sprint  | Develop team charter 8 hrs  |
| 5 |        | Define Phase Sprint  | Define process maps 8 hrs   |
| 7 |        | Define Phase Sprint  | Review deliverables 8 hrs   |
| 8 |        | Define Phase Sprint  | Map the value stream 8 hrs  |

As a <user role> I want to <goal>, so that <benefit>

The task **Notes** field can also be added as a column in any **Sheet View**!

Using the Notes field, you can add text (e.g., User Story) and paste objects in (such as a graphic or picture of the intended product)



## Adding Information to the Task Board

1

2

3

4

You can change what is displayed on the **Task Board Cards** by selecting **Task Board Format** tab, **Customize Cards** and choose which fields to display

NOTE: This information will be on **ALL Task Board Cards**

Additional Fields

| Field        | Selected |
|--------------|----------|
| Work         | ×        |
| Start        | ×        |
| Sprint Start | ×        |
| % Complete   | ×        |

Additional Fields

| Field        | Selected |
|--------------|----------|
| Work         | ×        |
| Start        | ×        |
| Sprint Start | ×        |
| % Complete   | ×        |

Task Board Format

Customize Task Board Cards

Base Fields

- ☐ Show Task ID
- ☒ Show Resources
- ☒ Show checkmark when 100% complete

Additional Fields

Add up to 5 fields to show on the cards.

Select Field

Select Field

% Complete

% Work Complete

Active

Actual Cost

Actual Duration

Actual Finish

Actual Overtime Cost

Actual Overtime Work

Actual Start

Actual Work

Additional Fields

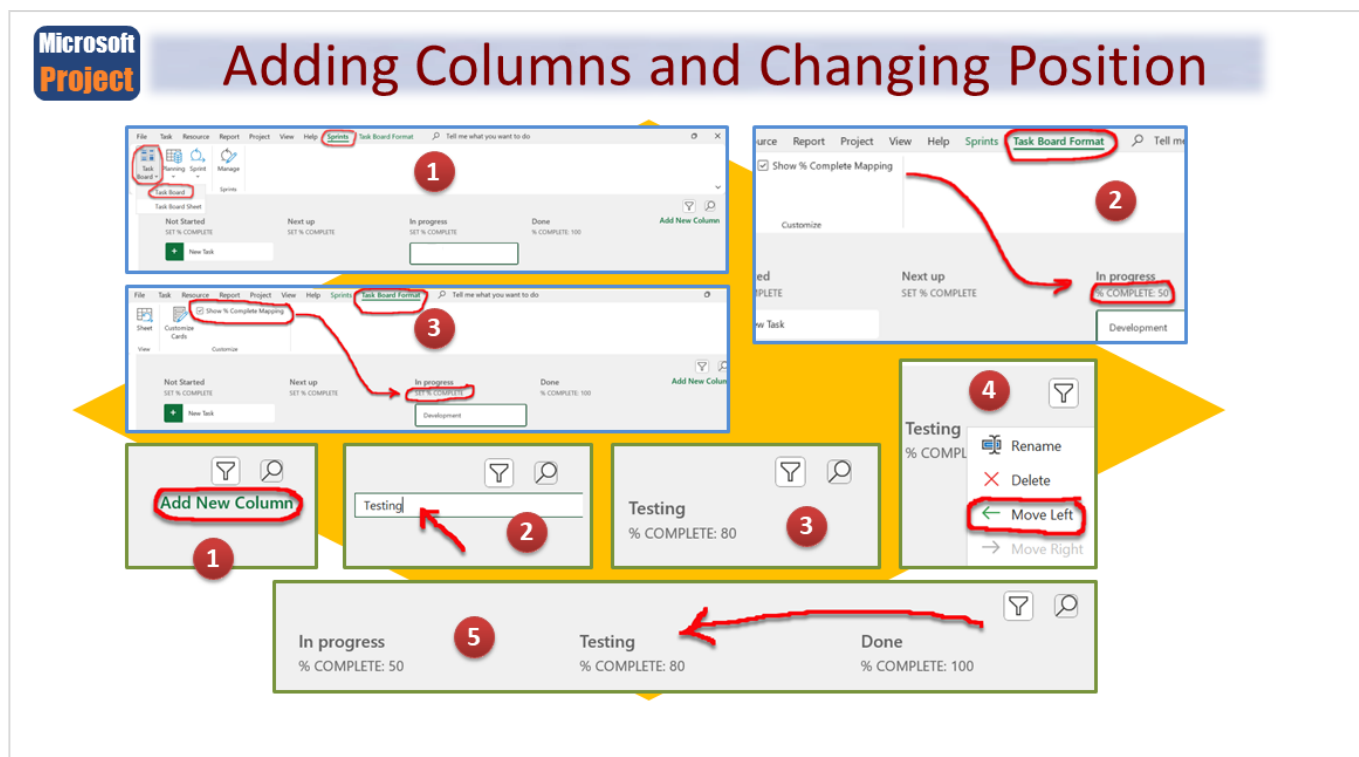
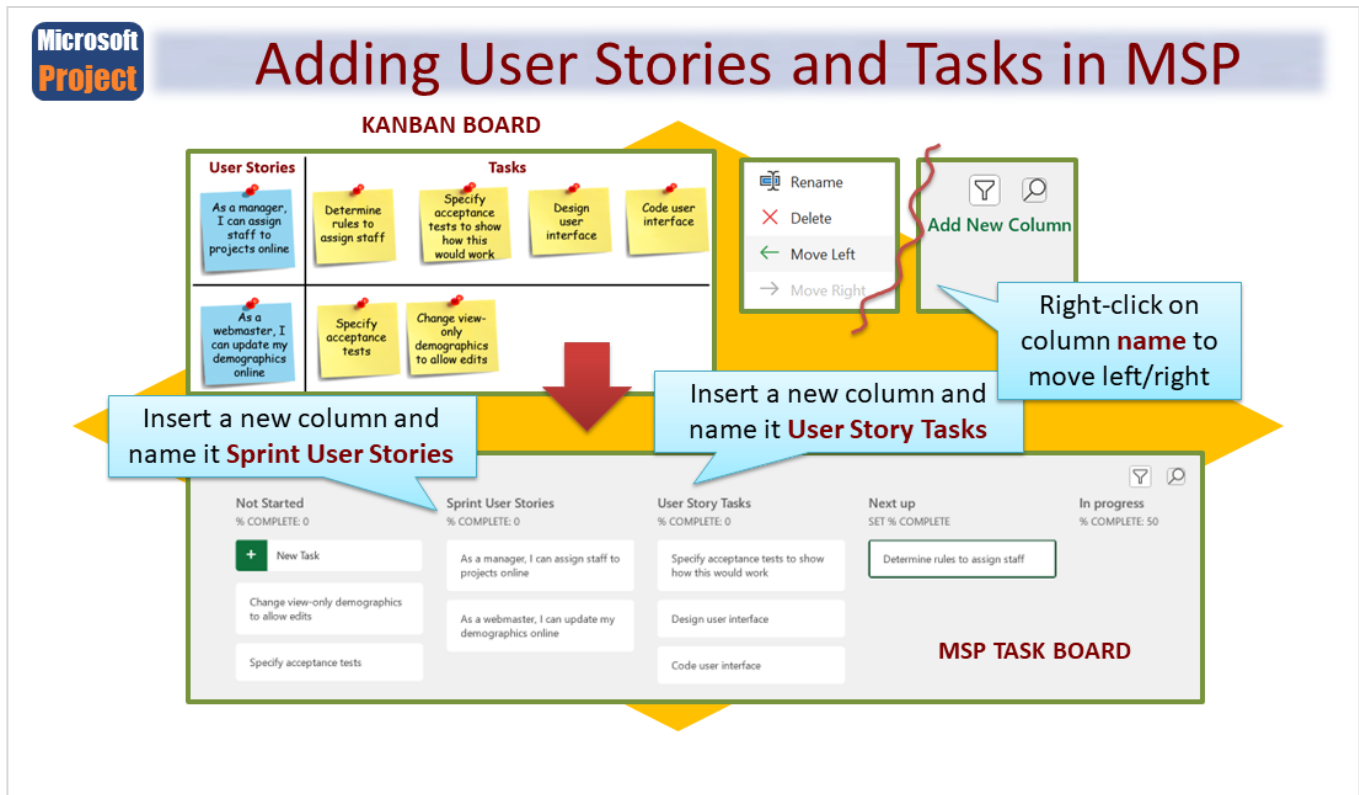
Add up to 5 fields to show on the cards.

Work

Start

Sprint Start

% Complete



# MICROSOFT PROJECT 365 FOR SCRUM/KANBAN/HYBRID PROJECTS

## MODULE ELEVEN

### TASK INFORMATION AND USER STORIES PART TWO



## Setting % Complete to Tasks

Select the **Task Board Format** tab

You will want to decide if moving tasks between columns should update the **% Complete** field for each task

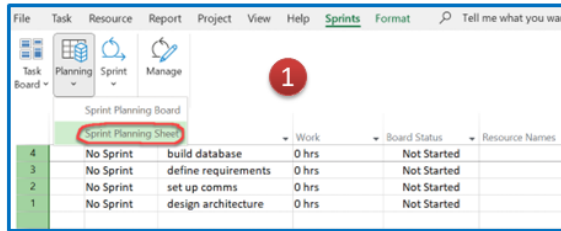
By default the **Done** column is set to 100%

If so, enter the **% COMPLETE** to be assigned under each column header

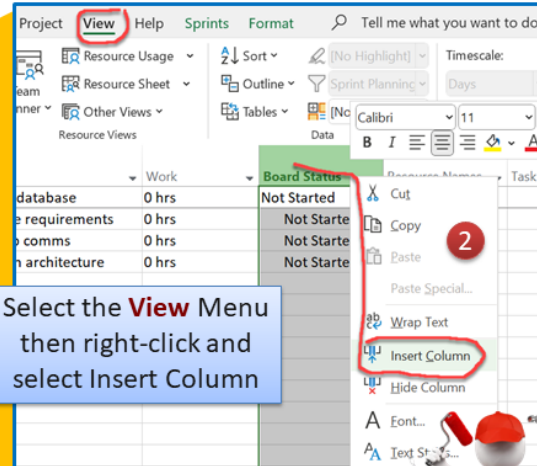
Microsoft Project interface showing the Task Board Format tab. The interface includes a ribbon with options like "Sheet", "Customize Cards", and "View". A red arrow points to the "Show % Complete Mapping" checkbox, which is checked. Below the ribbon, the task board is displayed with columns: "Not Started", "Next up", "In progress", and "Done". Each column has a "SET % COMPLETE" field. The "In progress" column shows "% COMPLETE: 50" and the "Done" column shows "% COMPLETE: 100". A task "Identify customer and CTQ issues" is shown in the "In progress" column. A red circle highlights the "SET % COMPLETE" fields under "Not Started" and "Next up". A blue figure is shown at the bottom left, interacting with white blocks.



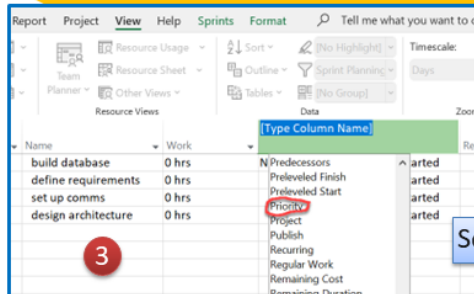
## Prioritizing Tasks - 1



Select the **Sprint Planning Sheet**  
(I will insert the Priority column)



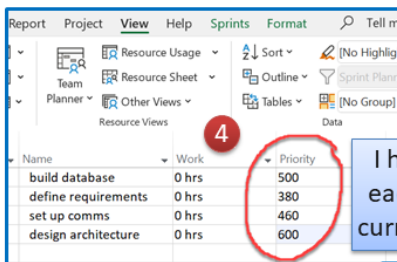
Select the **View** Menu  
then right-click and  
select **Insert Column**



Select the **Priority** field

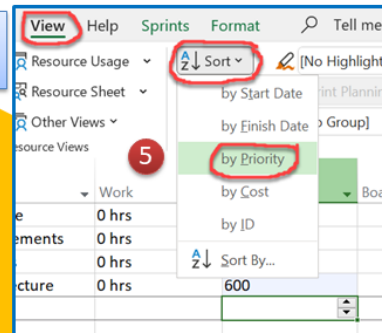


## Prioritizing Tasks - 2

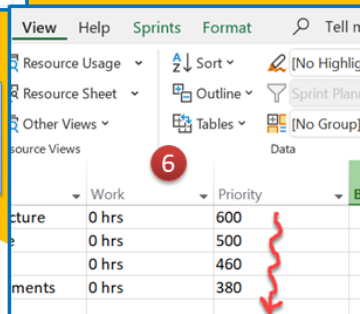


Select **View, Sort,**  
and **by Priority**

I have added priorities for  
each task, but they are **not**  
currently ordered by priority



Notice that now the tasks  
have been moved into  
descending priority order





## Prioritizing Tasks - 3

1

2

3

Here is another way to **Prioritize** ...

The screenshot shows the Microsoft Project interface. In the top-left corner, the 'View' menu is open, and the 'Sort' option is highlighted. A red circle with the number '1' is next to it. In the top-right corner, the 'Sort' dialog box is open, showing 'Sort by' set to 'ID' and 'Descending' selected. A red circle with the number '2' is next to the 'Sort' button. In the bottom-left corner, the 'Sort by' dropdown menu is open, showing various sorting options. A red circle with the number '3' is next to the 'Sort by' dropdown. A blue box with the text 'Here is another way to **Prioritize** ...' is in the bottom-left. A 3D character is in the bottom-right corner.



## More Views - 1

File Task Resource Report Project

Gantt Task Chart Usage Board Team Planner

Task Board

Built-In

✓ Sprint Planning Board

Task Board

Reset to Default

Save View...

More Views...

More Views

Views:

Multiple Baselines Gantt

Network Diagram

Relationship Diagram

Resource Allocation

Resource Form

Resource Graph

Resource Name Form

Resource Sheet

Resource Usage

Sprint Board

Sprint Planning Board

Apply

Cancel

The screenshot shows the Microsoft Project interface. In the top-left corner, the 'Task Board' view is selected. A red circle with the number '1' is next to the 'More Views...' button. In the top-right corner, the 'More Views' dialog box is open, showing a list of views. The 'Sprint Planning Board' view is selected. A red circle with the number '2' is next to the 'Apply' button. A 3D character is in the bottom-right corner.



## More Views - 2

There are other views to create and organize **Summary tasks** other than the **Gantt Chart View**

Here, we change from the **Sprints** tab to the **View** tab and select **Task Sheet**

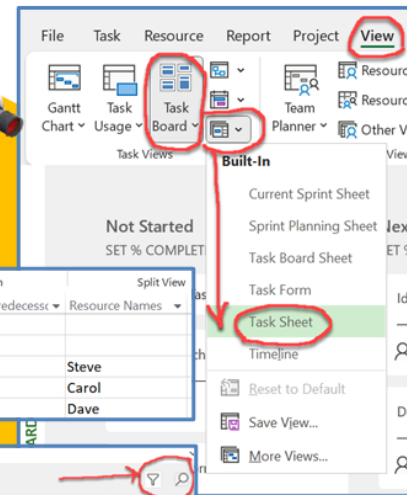
### Task Sheet

| Task Views | Task Name                        | Duration | Start        | Finish       | Predecessors | Resource Names |
|------------|----------------------------------|----------|--------------|--------------|--------------|----------------|
| Task Views | Task Name                        | Duration | Start        | Finish       | Predecessors | Resource Names |
|            | Six Sigma DMAIC Cycle            | 1 day?   | Mon 02/01/23 | Mon 02/01/23 |              |                |
|            | Define Phase                     | 1 day?   | Mon 02/01/23 | Mon 02/01/23 |              |                |
|            | Identify customer and CTQ issues | 1 day?   | Mon 02/01/23 | Mon 02/01/23 |              | Steve          |
|            | Develop team charter             | 1 day?   | Mon 02/01/23 | Mon 02/01/23 |              | Carol          |
|            | Define process maps              | 1 day?   | Mon 02/01/23 | Mon 02/01/23 |              | Dave           |

Again, we can now use **Filtering ...**

| Views                         | Sprints                          |
|-------------------------------|----------------------------------|
| Not Started<br>SET % COMPLETE | Next up<br>SET % COMPLETE        |
| New Task                      | Identify customer and CTQ issues |
| Select CTQ characteristics    | Save                             |

### Task Board View



# MICROSOFT PROJECT 365 FOR SCRUM/KANBAN/HYBRID PROJECTS

## MODULE TWELVE

### HYBRID PROJECTS





## Blending Agile with Waterfall Approaches

Agile Agile Agile

Waterfall Waterfall Waterfall

For example performing clinical trials

Agile Development Followed by a Waterfall Rollout

For example incremental transition to agile

Agile

Agile

Agile

Waterfall

Waterfall

Waterfall

Combined Agile and Waterfall Approach Used Simultaneously

Agile Agile Agile

Waterfall

Waterfall

Waterfall

Use agile for an uncertain portion of the project

A Largely Waterfall Approach with Agile Components

Used when a project portion is non-negotiable

Agile

Agile

Agile

Waterfall Waterfall Waterfall

A Largely Agile Approach with a Waterfall Component



## Inserting an Agile Project into Waterfall

You can insert tasks from project (the **subproject**) into another, by inserting an entire existing project into another

This is useful when various team members manage different phases of a larger project

It is also useful to insert **sprint-based** projects into **plan-driven** projects

**HYBRID Projects!**

It's a good idea to first **sort** your tasks by **start date** in the **Task Board Sheet** before inserting a project

Go to **View, Data, Sort, By Start Date**

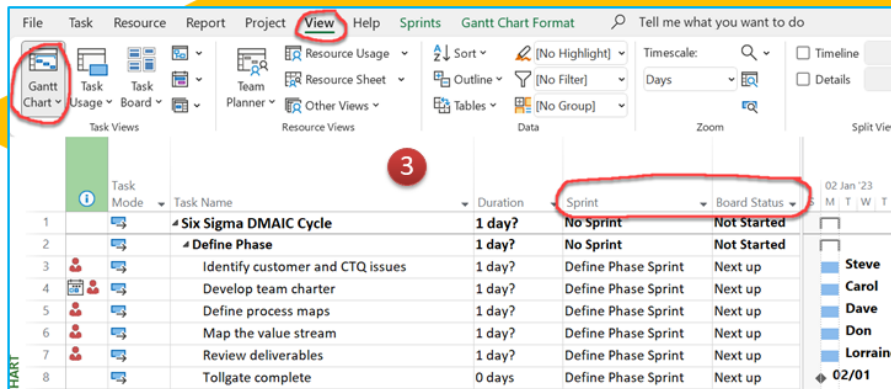
The screenshot shows the Microsoft Project interface. On the left, the 'Task Board Sheet' is visible, showing a list of tasks with columns for Name, Start Date, and Duration. A red box highlights the 'Task Board Sheet' tab. On the right, the 'View' menu is open, and the 'Sort' option is selected, showing a list of sorting criteria including 'by Start Date', 'by Finish Date', 'by Priority', 'by Cost', and 'by ID'. A red box highlights the 'Sort' option in the menu.



## Insert One Project Into Another - 2

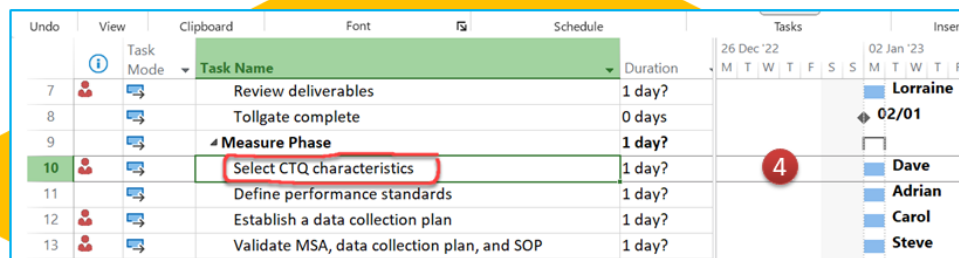
Be aware that **plan-driven** projects (that you will insert your **sprint project** into), do **not** have sprints in your master project

To see sprint information, insert the **Sprint column** and **Board Status column** in your **Gantt Chart view**



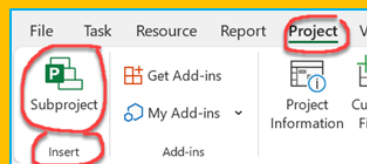
## Insert One Project Into Another - 3

In the **Gantt Chart View**, select the task in the **Task Name column** above where you want your **sub project** inserted



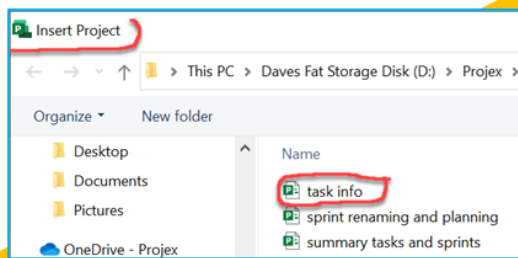
From the **Project Tab** in the **Insert** group, select **Subproject**

See over ...

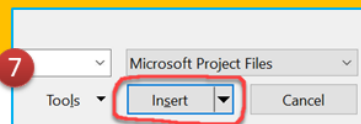




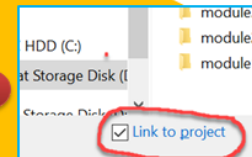
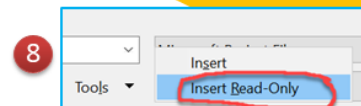
## Insert One Project Into Another - 3



From the **Project Tab** in the **Insert** group, select **Subproject**



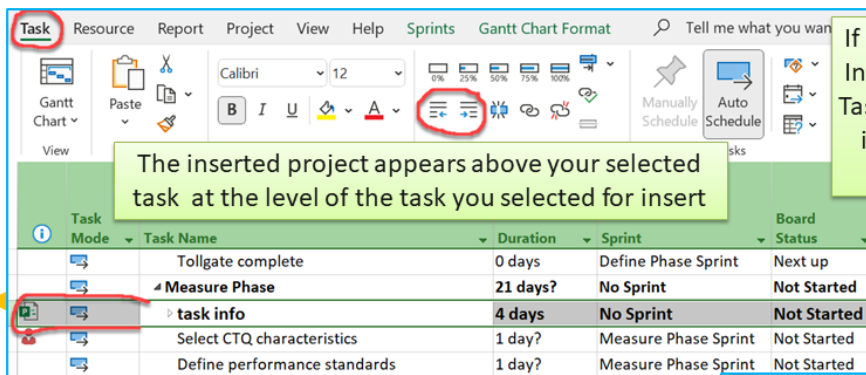
Click the drop-down button to the right of the insert button – click **Insert Read-Only** for others to just view the file, but not able to make changes



To reflect changes in the subproject, check the **Link To Project** field



## Insert One Project Into Another - 4

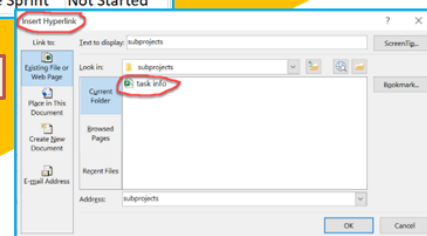


The inserted project appears above your selected task at the level of the task you selected for insert

If you need to, use the **Indent Task** or **Outdent Task** button to place the inserted tasks at the appropriate level

Inserting a hyperlink enables swift access to your subproject

Right-click on subproject name, choose **Link**, click on the subproject file, and click the **OK** button



## TRACKING A SPRINTS PROJECT



## Resource assignment and resource pools

[illegible]



## Using Filters for Focus

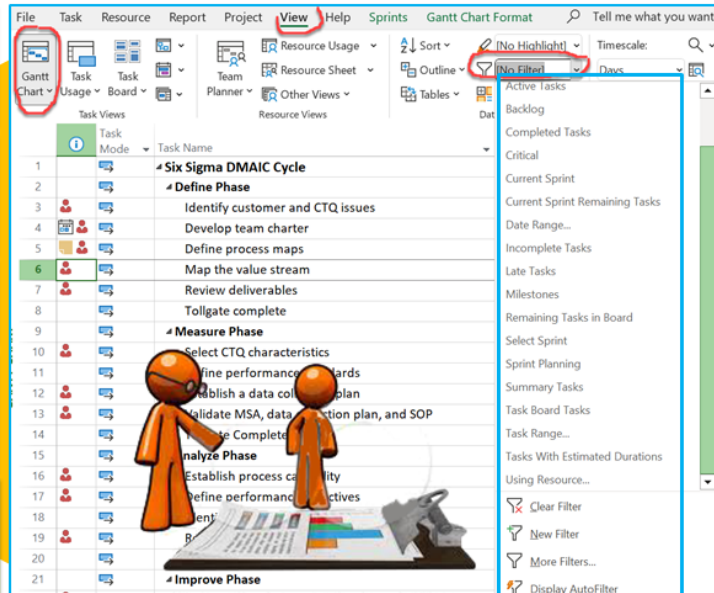
Filters allow you to see **only** the information that you need to see – particularly helpful for **Hybrid projects**

**Backlog.** Shows tasks that are active in the backlog – in other words, they are not Done yet

**Current Sprint.** Shows tasks in current Sprint regardless of status

**Current Sprint Remaining Tasks.** Shows tasks in the current Sprint that are not yet done

**Select Sprint.** When selected, a dialog box appears – you then type in the Sprint you want to see

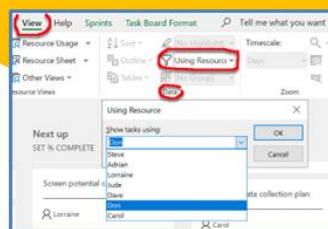


## Resource Work Value and Filters



Estimating or tracking and modifying **work value** is best done in the **Task Sheet** view

### Filters For Focus



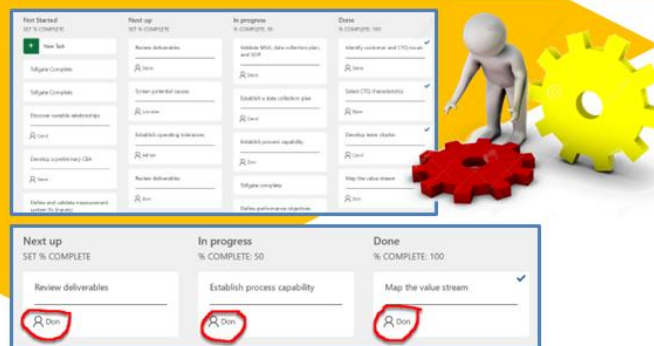
File Task Resource Report Project View Help Sprints Format Tell me what you want to do

Task Board Planning Sprint Manage

Task Board

Task Board Sheet

|   | Name                | Work                             | Board Status      |
|---|---------------------|----------------------------------|-------------------|
|   | Phase Sprint        | DMAIC Cycle Complete             | 0 hrs Not Started |
| 3 | Define Phase Sprint | Identify customer and CTQ issues | 8 hrs Next up     |
| 4 | Define Phase Sprint | Develop team charter             | 8 hrs Next up     |



## Grouping and Sorting

**Microsoft Project**

**Grouping**

You can also organize your data by grouping it – there are 3 types for Sprint Projects:

**Board Status**   **Priority**   **Sprint**

Go to **View** tab, **Data Group**, click the **Group By** button and choose your grouping method

**Sorting**

To sort, go to View tab, Data Group, and then click Sort

Select **Sort By** – there are 5 options useful for Sprints projects:

**Board Status**   **Priority**   **Sprint**   **Sprint ID**   **Show on Board**

**Data Group**

## Task Types

**Microsoft Project**

**Fixed Duration**   **Task Type** defines which task element remains constant when you make task changes

Task time is fixed no matter how many resources are changed for the task

**Fixed Work**   The number of resource hours assigned to the task determines its length

All **Fixed Work** tasks are **Effort-Driven**

**Fixed Units**   Resources are units, and once assigned to the task, they continue working even if the task duration changes

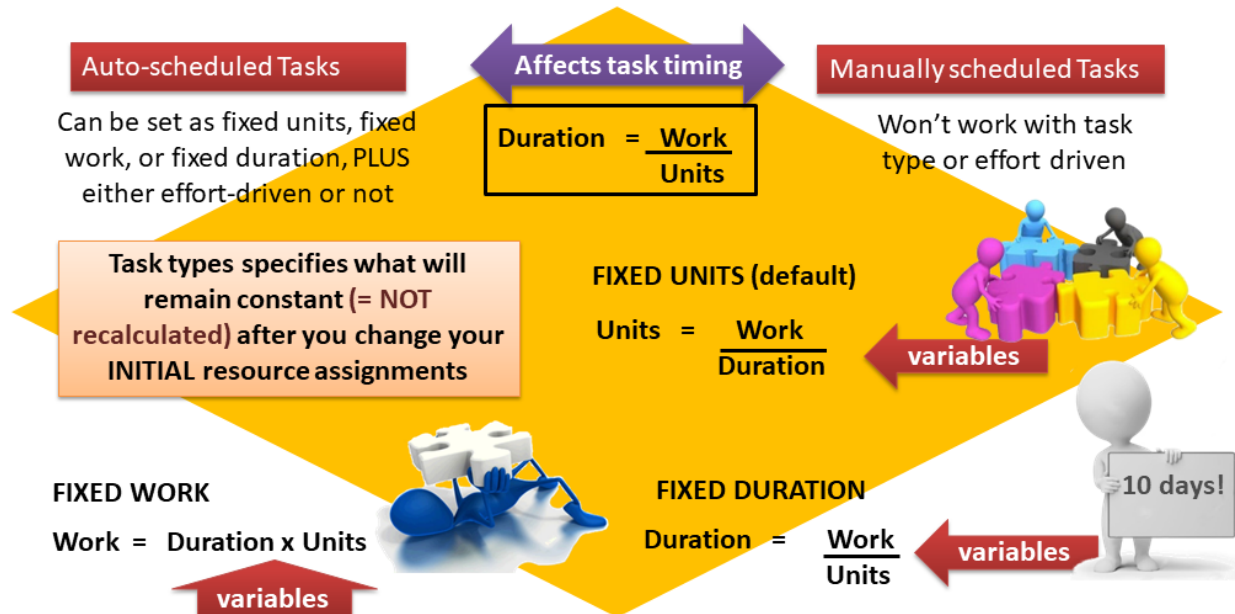
**Effort Driven**   **Effort = Work**. If you adjust resource assignments, duration may change, but work hours stays the same

Once the work amount is set on the task, changing the number of resources will share the work and adjust the task length

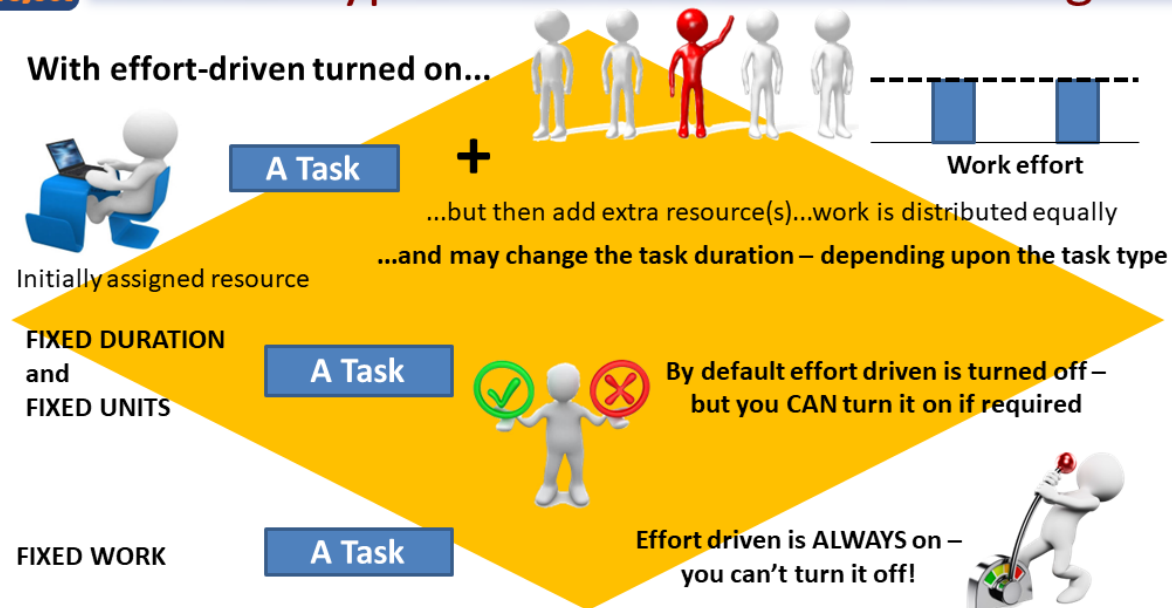
When you add or delete a resource assignment, work is distributed equally among resources



## Assignments and Task Timing



## Task Types and Effort-Driven Settings



# MICROSOFT PROJECT 365 FOR SCRUM/KANBAN/HYBRID PROJECTS

## MODULE FOURTEEN

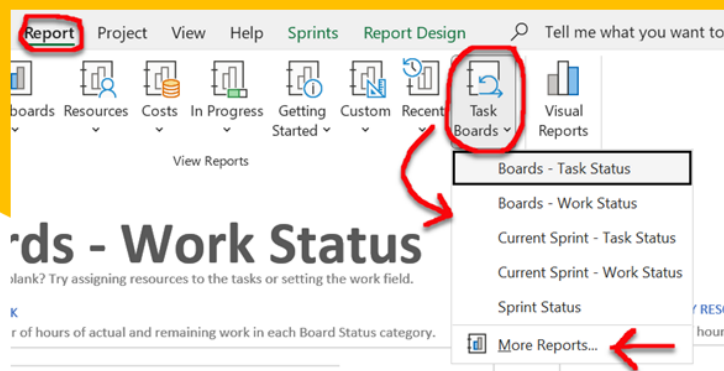
### REPORTING A SPRINT PROJECT



## Agile Project Reports

**Burndown and Burnup Charts** are fundamentally progress related reports

To have progress reported, we must set the **status date**, which can be done by going to the **Project tab > Status group > Status Date: command**

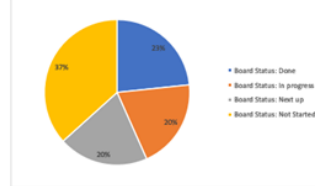




# Task Board Reports - 1

**TASKS BY BOARD STATUS**

Shows the percentage of tasks in Boards in each Board Status category.



**REMAINING TASKS**

Shows the change in number of tasks in Task Boards over time.



**REMAINING TASKS BY RESOURCE**

Shows how many remaining tasks are currently assigned to each resource. Doesn't count tasks that are 100% complete.



**REMAINING TASKS**

The list of all tasks in Task Boards that aren't 100% complete.

| Task Summary Name | Name                                               | Resource Name | Board Status |
|-------------------|----------------------------------------------------|---------------|--------------|
| Define Phase      | Tollgate complete                                  |               | In progress  |
| Measure Phase     | Establish a data collection plan                   | Carol         | In progress  |
| Measure Phase     | Validate MSA, data collection plan, and SOP        | Steve         | In progress  |
| Measure Phase     | Tollgate Complete                                  |               | Not Started  |
| Analyze Phase     | Establish process capability                       | Don           | In progress  |
| Analyze Phase     | Define performance objectives                      | Dave          | In progress  |
| Analyze Phase     | Identify variation sources                         | Adrian        | In progress  |
| Analyze Phase     | Review deliverables                                | Steve         | Next up      |
| Analyze Phase     | Tollgate Complete                                  |               | Not Started  |
| Improve Phase     | Screen potential causes                            | Lorraine      | Next up      |
| Improve Phase     | Discover variable relationships                    | Carol         | Not Started  |
| Improve Phase     | Establish operating tolerances                     | Adrian        | Next up      |
| Improve Phase     | Develop a preliminary CBA                          | Steve         | Not Started  |
| Improve Phase     | Review deliverables                                | Don           | Next up      |
| Improve Phase     | Deploy implementation plan                         | Jude          | Next up      |
| Improve Phase     | Tollgate Complete                                  |               | Next up      |
| Control Phase     | Define and validate measurement system Xs (inputs) | Jude          | Not Started  |
| Control Phase     | Determine process capability                       | Adrian        | Not Started  |
| Control Phase     | Implement process control                          | Carol         | Not Started  |
| Control Phase     | Review deliverables                                | Dave          | Not Started  |
| Control Phase     | Obtain process owner signoff                       | Steve         | Not Started  |
| Control Phase     | Tollgate complete                                  |               | Not Started  |
| Control Phase     | DMAC Cycle Complete                                |               | Not Started  |

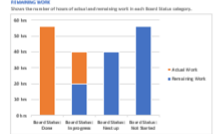
BOARDS - TASK STATUS



# Task Board Reports - 2

**Boards - Work Status**

Shows the number of hours of actual and remaining work in each Board Status category.



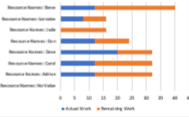
**REMAINING WORK OVER TIME**

Shows the number of hours of work that have been completed and the number of hours left.



**REMAINING WORK BY RESOURCE**

Shows the number of hours of actual and remaining work assigned to each resource.



**REMAINING TASKS**

The list of all tasks in Task Boards that aren't 100% complete.

| Task Summary Name | Name                                               | Resource Name | Board Status | Remaining Work |
|-------------------|----------------------------------------------------|---------------|--------------|----------------|
| Define Phase      | Tollgate complete                                  |               | In progress  | 0 hrs          |
| Measure Phase     | Establish a data collection plan                   | Carol         | In progress  | 4 hrs          |
| Measure Phase     | Validate MSA, data collection plan, and SOP        | Steve         | In progress  | 4 hrs          |
| Measure Phase     | Tollgate Complete                                  |               | Not Started  | 0 hrs          |
| Analyze Phase     | Establish process capability                       | Don           | In progress  | 4 hrs          |
| Analyze Phase     | Define performance objectives                      | Dave          | In progress  | 4 hrs          |
| Analyze Phase     | Identify variation sources                         | Adrian        | In progress  | 4 hrs          |
| Analyze Phase     | Review deliverables                                | Steve         | Next up      | 8 hrs          |
| Analyze Phase     | Tollgate Complete                                  |               | Not Started  | 0 hrs          |
| Improve Phase     | Screen potential causes                            | Lorraine      | Next up      | 8 hrs          |
| Improve Phase     | Discover variable relationships                    | Carol         | Not Started  | 8 hrs          |
| Improve Phase     | Establish operating tolerances                     | Adrian        | Next up      | 8 hrs          |
| Improve Phase     | Develop a preliminary CBA                          | Steve         | Not Started  | 8 hrs          |
| Improve Phase     | Review deliverables                                | Don           | Next up      | 8 hrs          |
| Improve Phase     | Deploy implementation plan                         | Jude          | Next up      | 8 hrs          |
| Improve Phase     | Tollgate Complete                                  |               | Next up      | 0 hrs          |
| Control Phase     | Define and validate measurement system Xs (inputs) | Jude          | Not Started  | 8 hrs          |
| Control Phase     | Determine process capability                       | Adrian        | Not Started  | 8 hrs          |
| Control Phase     | Implement process control                          | Carol         | Not Started  | 8 hrs          |
| Control Phase     | Review deliverables                                | Dave          | Not Started  | 8 hrs          |
| Control Phase     | Obtain process owner signoff                       | Steve         | Not Started  | 8 hrs          |
| Control Phase     | Tollgate complete                                  |               | Not Started  | 0 hrs          |
| Control Phase     | DMAC Cycle Complete                                |               | Not Started  | 0 hrs          |

BOARDS - WORK STATUS

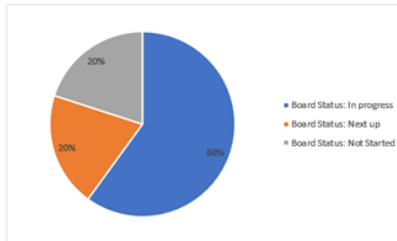


## Task Board Reports - 3

### CURRENT SPRINT - TASKS STATUS

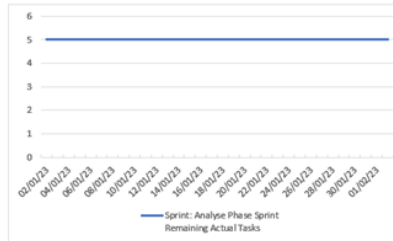
**TASKS BY BOARD STATUS**

Shows the percentage of this sprint's tasks in each Board Status category.



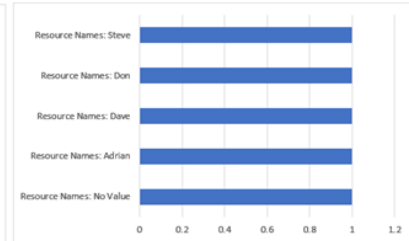
**REMAINING TASKS**

Shows the change in number of this sprint's tasks over time. For best results, update the chart's date range to match the sprint.



**REMAINING TASKS BY RESOURCE**

Shows how many remaining tasks are currently assigned to each resource for this sprint. Doesn't count tasks that are 100% complete.



**REMAINING TASKS**

The list of all the sprint's tasks that aren't 100% complete.

| Task Summary Name | Name                          | Resource Names | Board Status |
|-------------------|-------------------------------|----------------|--------------|
| Analyze Phase     | Establish process capability  | Don            | In progress  |
| Analyze Phase     | Define performance objectives | Dave           | In progress  |
| Analyze Phase     | Identify variation sources    | Adrian         | In progress  |
| Analyze Phase     | Review deliverables           | Steve          | Next up      |
| Analyze Phase     | Tollgate Complete             |                | Not Started  |

CURRENT SPRINT - TASK STATUS



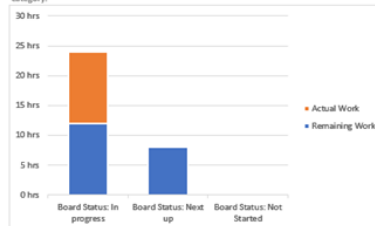
## Task Board Reports - 4

### CURRENT SPRINT - WORK STATUS

Are these charts blank? Try assigning resources to the tasks or setting the work field.

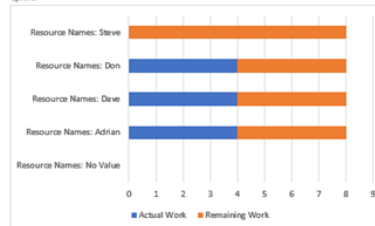
**REMAINING WORK**

Shows the number of hours of actual and remaining work in this sprint in each Board Status category.



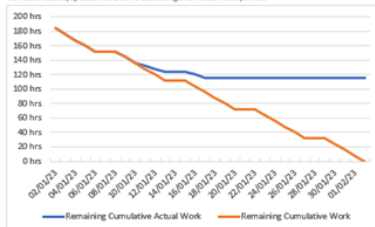
**REMAINING WORK BY RESOURCE**

Shows the number of hours of actual and remaining work assigned to each resource for this sprint.



**REMAINING WORK OVER TIME**

Shows the number of hours of work that have been completed and the number of hours left. For best results, update the chart's date range to match the sprint's.



**REMAINING TASKS**

The list of the current sprint's tasks that aren't marked 100% complete.

| Task Summary Name | Name                          | Resource Names | Board Status | Remaining Work |
|-------------------|-------------------------------|----------------|--------------|----------------|
| Analyze Phase     | Establish process capability  | Don            | In progress  | 4 hrs          |
| Analyze Phase     | Define performance objectives | Dave           | In progress  | 4 hrs          |
| Analyze Phase     | Identify variation sources    | Adrian         | In progress  | 4 hrs          |
| Analyze Phase     | Review deliverables           | Steve          | Next up      | 8 hrs          |
| Analyze Phase     | Tollgate Complete             |                | Not Started  | 0 hrs          |

CURRENT SPRINT - WORK STATUS



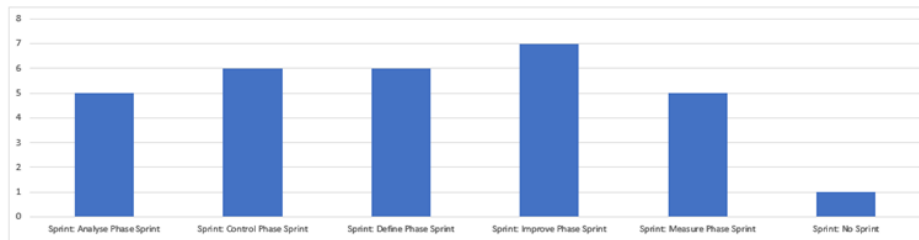


## Task Board Reports - 5

### Sprint Status

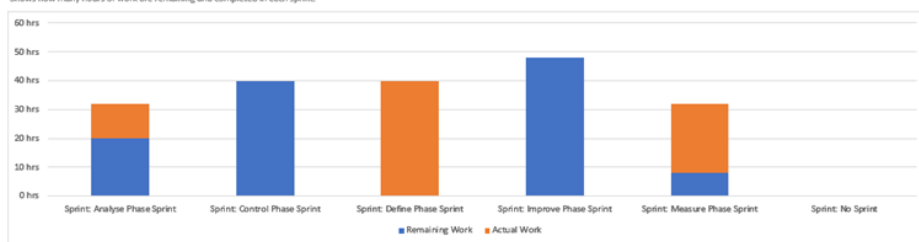
#### TASKS PER SPRINT

Shows how many tasks are in each sprint. Use these charts to figure out how many tasks are normally completed in a sprint.



#### WORK PER SPRINT

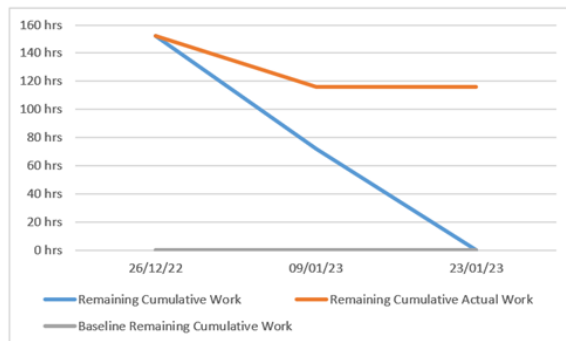
Shows how many hours of work are remaining and completed in each sprint.



## Dashboard Reports - 1

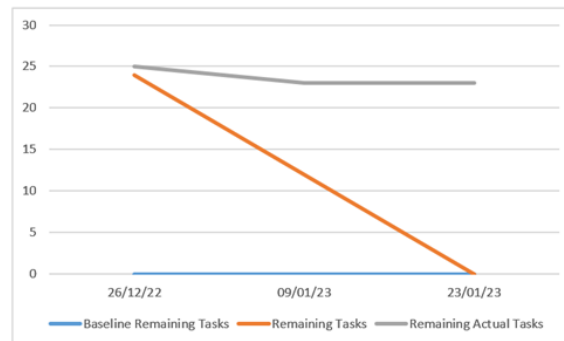
Mon 02/01/23 - Thu 02/02/23

### BURNDOWN



#### WORK BURNDOWN

Shows how much work you have completed and how much you have left. If the remaining cumulative work line is steeper, then the project may be late. Is your baseline zero?



#### TASK BURNDOWN

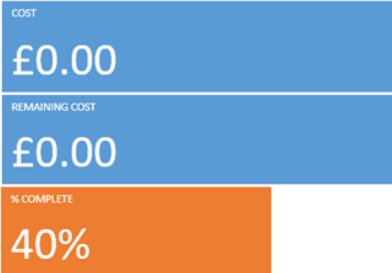
Shows how many tasks you have completed and how many you have left. If the remaining tasks line is steeper, then your project may be late.



## Dashboard Reports - 2

### COST OVERVIEW

MON 02/01/23 THU 02/02/23



COST OVERVIEW

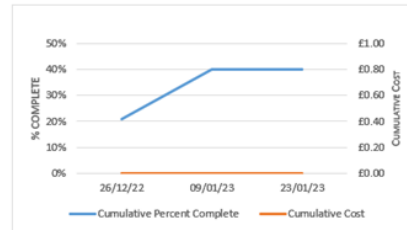
#### COST STATUS

Cost status for top level tasks.

| Name          | Actual Cost | Remaining Cost | Baseline Cost | Cost  | Cost Variance |
|---------------|-------------|----------------|---------------|-------|---------------|
| Define Phase  | £0.00       | £0.00          | £0.00         | £0.00 | £0.00         |
| Measure Phase | £0.00       | £0.00          | £0.00         | £0.00 | £0.00         |
| Analyze Phase | £0.00       | £0.00          | £0.00         | £0.00 | £0.00         |
| Improve Phase | £0.00       | £0.00          | £0.00         | £0.00 | £0.00         |
| Control Phase | £0.00       | £0.00          | £0.00         | £0.00 | £0.00         |

#### PROGRESS VERSUS COST

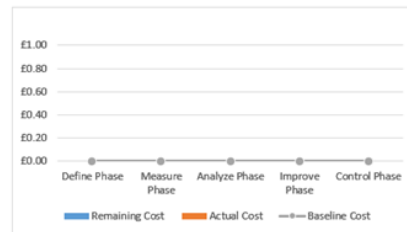
Progress made versus the cost spent over time. If % Complete line below the cumulative cost line, your project may be over budget.



#### COST STATUS

Cost status for all top-level tasks. Is your baseline zero?

[Try setting as baseline](#)



## Dashboard Reports - 3

### PROJECT OVERVIEW

MON 02/01/23 THU 02/02/23



PROJECT OVERVIEW

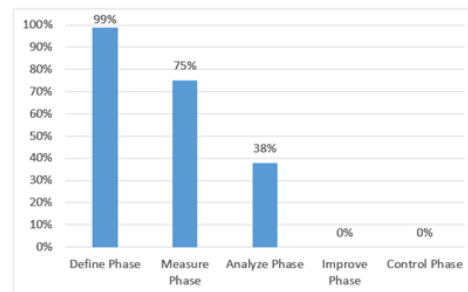
#### MILESTONES DUE

Milestones that are coming soon.

| Name                 | Finish       |
|----------------------|--------------|
| Tollgate complete    | Fri 06/01/23 |
| Tollgate Complete    | Thu 12/01/23 |
| Tollgate Complete    | Wed 18/01/23 |
| Tollgate Complete    | Thu 26/01/23 |
| Tollgate complete    | Thu 02/02/23 |
| DMAIC Cycle Complete | Thu 02/02/23 |

#### % COMPLETE

Status for all top-level tasks. To see the status for subtasks, click on the chart and update the outline level in the Field List.



#### LATE TASKS

Tasks that are past due.

| Name                             | Start        | Finish       | Duration | % Complete | Resource Names |
|----------------------------------|--------------|--------------|----------|------------|----------------|
| Tollgate complete                | Fri 06/01/23 | Fri 06/01/23 | 0 days   | 50%        |                |
| Establish a data collection plan | Wed 11/01/23 | Wed 11/01/23 | 1 day?   | 50%        | Carol          |



## Dashboard Reports - 4

% Work Complete

40%

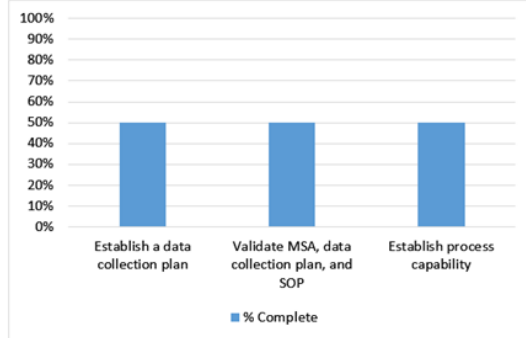
Mon 02/01/23 - Thu 02/02/23

### UPCOMING TASKS

UPCOMING TASKS

#### REMAINING TASKS

Status of remaining tasks that are due this week



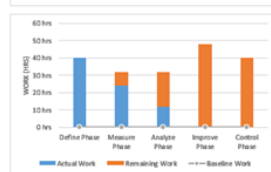
#### TASKS STARTING SOON

Status of tasks starting in the next week

| Name                                        | Resource Names | Start        | Finish       | Work  |
|---------------------------------------------|----------------|--------------|--------------|-------|
| Establish a data collection plan            | Carol          | Wed 11/01/23 | Wed 11/01/23 | 8 hrs |
| Validate MSA, data collection plan, and SOP | Steve          | Thu 12/01/23 | Thu 12/01/23 | 8 hrs |
| Establish process capability                | Don            | Fri 13/01/23 | Fri 13/01/23 | 8 hrs |



## Dashboard Reports - 5



RESOURCE STATS  
Shows work stats for all your resources.

### WORK OVERVIEW

% Work Complete

40%

Remaining Work

116 hrs

Actual Work

76 hrs

Mon 02/01/23 - Thu 02/02/23



REMAINING AVAILABILITY  
Shows remaining availability for all work resources.