



**Rutgers University  
Information Technology (IT)  
Project and Portfolio Management (PPM)  
Tool Assessment Report**

*Provided by the IT PPM Committee Tool Assessment Working Group*

*December 1, 2020*

*Version 1.0*

## Executive Summary

In January 2020, the Information Technology Project and Portfolio Management (IT PPM) Committee formed a working group to review and recommend an enterprise IT PPM tool for Rutgers. As the working group was getting underway and beginning to review enterprise tools, the COVID-19 pandemic began. Given the significant financial impact to Rutgers caused by the pandemic, the working group altered their course. Rather than continuing a review of relatively large and expensive enterprise tools, the working group decided to review tools that are currently available and already in use at Rutgers, and that can be adopted at a relatively low cost by RU departments.

This report provides a review of three IT PPM tools:

- Microsoft Planner
- Smartsheet
- Microsoft Project Online.

Each of the three tools described in this document offers low-cost or no-cost user licenses. Two of the tools (MS Project Online and Smartsheet) provide for a wide range of project management needs. MS Planner provides a more limited range of functionality.

This report provides background on the IT PPM Committee Working Group, describes the Working Group process, provides an analysis of the three tools, and suggests how this analysis can be used by departments as a foundation for further evaluation and decision-making.

## Purpose

The purpose of this document is to provide a high-level assessment of certain project management tools readily available at Rutgers in order to assist departments in their decision making regarding PPM tool selection. This document is *not* meant to be an exhaustive analysis of the PPM tools or an in-depth review of each tool's functionality. Nor is this document meant to provide a recommendation for the selection of any specific tool. Rather, this document is meant to provide a synopsis of the tools under review as a starting point for a more comprehensive analysis of tool functionality against departmental requirements.

## Overview

The Rutgers University Information Technology Leadership Council (ITLC) is comprised of Rutgers IT leaders and is sponsored by the Rutgers Chief Information Officer. The ITLC's charge is to foster collaborative and unified improvements to Rutgers' diverse technology environment in order to enable and drive the overarching mission of the University. The ITLC looks to achieve this through regular monthly meetings and working groups and committees that facilitate open discussion on IT strategies, policies, processes, tactics, and solutions. The IT PPM Committee is the ITLC committee

responsible for helping to foster collaboration and unified improvements in the area of IT project and portfolio management.

The IT PPM committee's charge is threefold:

- to promote IT PPM across Rutgers and facilitate the adoption of IT PPM practices that contribute to positive work outcomes and advanced competencies
- to assess PPM methodologies and tools with an eye on practices that advance collaboration, communication, knowledge sharing, and stakeholder engagement
- to work closely with a variety of stakeholders and other committees in order to help identify areas of mutual interest, and to ensure coordination of efforts.

The IT PPM committee's goals are:

- to assess Rutgers IT PPM maturity, and formulate a vision and roadmap for further maturation
- to promote the adoption of standardized IT PPM methodologies and tools across the university
- to recommend structures and processes that allow greater collaboration, competency development, and knowledge sharing among Rutgers IT PPM professionals
- to recommend structures and processes that allow the IT PPM discipline to evolve, to adhere to best practices, and to continuously improve over time
- to explore opportunities to leverage a standardized IT PPM platform.

As mentioned earlier, the IT PPM Committee spawned a working group to review and assess IT PPM tools for university-wide use. The working group included the following IT PPM professionals:

Name	Department/Unit
Tom Regan	Institute for Health, RBHS
Mylene Pablo	Rutgers School of Dental Medicine, RBHS
Laura Zoubek	OIT Enterprise Infrastructure NOA
Matt Wilk	DCS Digital Classroom Services (DCS) - NB
Tim DiVito, Co-Chair	RU-Camden IT
Frances Haies, Co-Chair	OIT PMO

The working group began by generating a list of IT PPM requirements that were considered important to the Rutgers community. The working group was preparing to share these requirements with key stakeholders when the COVID-19 pandemic began. In light of the pandemic and the subsequent financial position of the university, the working group decided to change course and limit their assessment to cost-effective tools currently in-use at Rutgers as a way to minimize costs. With this in mind, the working group assessed three tools - Microsoft Planner, Microsoft Project Online, and Smartsheet. Among other assessment activities, the working group engaged Smartsheet

and Microsoft for demonstrations of their respective tools, and obtained trial licenses of each product to gain further understanding of product functionality and performance.

## Identified Needs

The working group compiled a list of detailed requirements based upon experiences at Rutgers as well as industry standards (i.e. Project Management Institute knowledge domains).

(See the attached *Systems Requirement Matrix* for an at-a-glance comparison summary of the three PPM tools under review).

### ***Project Management***

The tool must provide the basics for day-to-day IT project management needs (e.g. development of project plans and schedules, task management). This is a fundamental requirement since many users will be looking to use a PPM tool for this purpose.

### ***Program & Portfolio Management***

This functionality provides the organization with an understanding of groupings of related projects and the impacts to organizational resource utilization, organizational budgets, dependencies between projects, necessary integrations between projects, and communication to executive management on project programs and project portfolios.

### ***System Technology Requirements***

This category is focused on the back-end requirements to deliver the tool per University norms and standards. This includes technical requirements such as single sign on, authentication/authorization, and other security measures.

## PPM Tool Overview

### ***Microsoft Planner***

Microsoft Planner is a simple, task management application that is already available at Rutgers through Office365 at no additional cost. Planner is a web-based tool that can be accessed through a browser, or mobile app. Planner can be integrated with Microsoft Teams if Teams is already being used for chat and file sharing.

Planner allows the project manager and project team to create project plans with detailed tasks. Each task can be assigned to a person or team for basic accountability and can be organized into different buckets (groups) to support Kanban boards. Tasks can have due dates, notes, checklists, file attachments and progress and priority settings. Progress of individual tasks or the entire project plan can be tracked with easy to use reports and graphics.

Microsoft Planner is not as powerful as most traditional project management applications. That being said, its focus on tracking tasks makes it extremely easy to use and a great choice for small teams or for project managers that want to integrate with MS Teams.

For more information on Microsoft Planner, visit <https://www.microsoft.com/en-us/microsoft-365/business/task-management-software>

### ***Smartsheet***

Smartsheet is a flexible cloud-based platform that allows organizations to manage multiple business activities through planning, tracking, collaboration, and automation features. Smartsheet scales well across any size organization or project and is quick to implement and easy for project teams to use.

Project teams can use Smartsheet permission levels with basic and advanced features to enable both licensed and non-licensed users to collaborate on workspaces, sheets, forms, reports, and dashboards. The Smartsheet mobile client is also available to help align business in real time from anywhere.

Additional Smartsheet benefits include:

- *Solution Center*: Provides customizable template sets, integrations, premium add-ons, and accelerators to jumpstart team activities.
- *Center of Excellence*: Training and product certification for Rutgers University licensed users.
- *Pro Support and Pro Service Desk*: Includes options for enhanced customer support and one-on-one coaching sessions or engagements.

For more information on Smartsheet platform capabilities, visit:

<https://www.smartsheet.com/platform>

### ***Microsoft Project Online***

Microsoft Project Online is a flexible online solution for project & portfolio Management and everyday work. Project Online provides project management capabilities for planning, prioritizing, and managing projects and project portfolios and can be accessed on almost any device. Project Online can be used by administrators, portfolio managers, viewers, project managers, functional resource managers, team leads and project team members. Team member functionality for Project Online is available through a Project Online Essentials subscription. Project Online is built on the SharePoint platform, and it stores data in the SharePoint data repository. Team members with Project Online Essentials can perform the following Project Online functions:

- Use a web-based interface
- Update tasks, issues, and risks
- Submit timesheets
- Share documents and collaborate with Microsoft Teams or Skype for Business users

For more information on Microsoft Project Online, visit: <https://it.rutgers.edu/software-portal/microsoft-project-online/>

## Findings & Results

Each of the three tools reviewed has strengths and weaknesses. Each tool could prove effective for an organization dependent on that organization's size, scope of work, and types of projects undertaken. The following matrix presents a brief review of the three tools:

Microsoft Planner	Microsoft Project Online	SmartSheet
<b>Additional Features</b>		
N/A	N/A	Smartsheets rapidly implements improvements and adds new enhancements
<b>Product Benefits</b>		
Microsoft Planner is not as powerful as most traditional project management applications. That being said, its focus on tracking tasks makes it extremely easy to use and a great choice for small teams or for project managers that want to integrate with Microsoft Team.	Project Online is a powerful project and portfolio management tool which can integrate with O365 suite of products. However, due to complexity of the highest tiered product there is a significant learning curve to obtain the full breathe of functionality. With the full license package you will be able to manage all your project management knowledge domain needs per PMI PMBok	SmartSheet is a leading competitor in the project and portfolio management software market. If too offers a complete package to manage your projects and portfolio. SmartSheet offers an integrated template set. SmartSheet offers additional custom sheets to satisfy your ad hoc data management needs. This product can also satisfy all your project management knowledge domain needs per PMI PMBok.
<b>Data Accessibility - Reports &amp; Dashboards</b>		
Task based and date-based reports are easily accessible using the tool.	Predefined reports and dashboards. Has functionality to build custom reports and dashboards and to leverage Power BI.	Customizable and predefined templates, template sets, reports, portals, and dashboards.
<b>Ease of Use</b>		
Planner is easy to use with no special software required to install. Planner's limited feature-set makes it easy to teach to other staff that have little or no experience with project management applications.	Microsoft Project is an enterprise productivity application it requires moderate to advanced knowledge to exploit it fully. Having said, the Microsoft Project product line includes tools for users who have little or no project management and portfolio skills, or Microsoft Project skills, to use it efficiently and productive	Easy to use and implement using templates and template sets, however training is recommended to utilize all capabilities

<b>Integration</b>		
Anyone at Rutgers with a valid Office365 license can view or manage projects. Planner can also easily be integrated with Microsoft Teams. Planner can also be integrated with Microsoft Flow for some advanced workflow automated.	Integration with tools in the Microsoft ecosystem still needs to be confirmed. Additional vetting required.	60+ Application Integration/Connectors ranging from Basic to Premium levels. Users can take advantage of existing integrations to RU resources such as BOX, Google Drive, Google For Microsoft, and OneDrive.
<b>Resource Management</b>		
N/A	People resource management, material resource management, enterprise resource management.	People resource management, material resource management, enterprise resource management.
<b>Security</b>		
Single Sign-on (SSO) HIPAA compliant	Single Sign-on (SSO) HIPAA compliant	Single Sign-on (SSO) Meets RU IT Risk, Policy, and Compliance Requirements
<b>Support</b>		
Limited – Microsoft provides a few Quick Start Guides and there are a few training videos available online via LinkedIn Learning.	Limited as is. Backend support from OIT. User can buy support from Microsoft; they can dovetail off the University support agreement. They can buy support from vendor. Free video training – YouTube, LinkedIn Learning, etc.	Pro Support, Pro Service Desk, enhanced customer support, one-on-one coaching sessions or engagements
<b>Task Management</b>		
Task management in Microsoft Planner is very powerful as it is its main feature.	Microsoft Project has a project hub, task acceptance, dependency task triggering, task management functionality, file storage	Robust task management which allows a team to enter task time, status, dependencies & resources, w/roll ups to the overall project level. Has task alerts. Managing task dependencies is not super intuitive which makes it a bit of a challenge. It has additional features at task level that Microsoft Project doesn't have, such as use of visual color indicators on task health (traffic light buttons).
<b>Technical Requirements</b>		
Standard browser or mobile application	Client or browser.	Standard browser or mobile application
<b>Training</b>		
Limited – Microsoft provides a few Quick Start Guides and there are a few training videos available online via LinkedIn Learning.	Can buy training from vendor. Can use University training resources. Free video training - YouTube, LinkedIn Learning, etc.	Instructor-led training, enhanced customer, On-demand learning, Certification

## Estimated Costs

The following costs should be viewed as estimates, subject to change. These estimates are based on data collected during the review period (Summer 2020).

### ***Microsoft Planner***

Microsoft Planner is free to all Rutgers Faculty and Staff. It is accessible through O365 Groups or Teams

### ***Microsoft Project Online***

Project Online is available through two subscriptions: *Project Plan 3* and *Project Plan 5*. Project Online features interact with data in the Project Online SharePoint data store. Team member functionality for Project Online is available through a *Project Online Essentials* subscription as an add-on subscription.

#### ***Project Essentials Plan 1 (\$0 per person)***

Project Essentials allows users to use a web-based interface, on premise, to update tasks, issues and risks, submit timesheets and share documents and collaborate with Teams.

#### ***Project Plan 3 (\$70 per person per year (pro-rated)) and Project Plan 5 (\$125 per person per year (pro-rated))***

Project Plan 3 and Project Plan 5 share many features in common but Project Plan 5 is more feature rich. Both plans have project, task, and time management features, collaboration features, demand management features, resource, program and portfolio management features, reporting features, customization and integration features, and security, user and service management features. However, within some of these features, Plan 5 offers more than Plan 3. For example, within the project/task/time management feature, Plan 5 includes functionality for non-working time setup. Plan 3 does not provide this.

For an overview of Microsoft Project services, a detailed description of subscriptions, features across applications and subscriptions and service considerations, see:

<https://docs.microsoft.com/en-us/office365/servicedescriptions/project-online-service-description/project-online-service-description#overview>

#### ***Project Online Desktop Client (included with Project Online Plan 3 and Plan 5)***

Microsoft Project Online desktop client is a project management program that features automated scheduling, project resource management, and built-in reporting. The Project Online desktop client can be used as a standalone application or it can connect to Project Online. Project Online desktop client is the subscription version of the Project Professional desktop client and is available in Project Plan 3 and Project Plan 5 subscriptions for no cost.



### ***Microsoft Project Professional 2016 (\$126 - perpetual)***

Microsoft Project Professional 2016 is designed to assist in developing schedules, assigning resources to tasks, tracking progress, managing budgets, and analyzing workloads. However, it should be noted that this version of Project will not function with the "Click to Run" version of Office installed from Connect. This version would need to be uninstalled and then Microsoft Office 2016 would need to be downloaded and installed.

### ***Smartsheet***

Smartsheet plan and user types determine account capabilities. Sharing permissions are separate from user types and provide flexible access options to sheets and other account resources.

#### ***Licensed User*** - Cost \$300 per year (pro-rated)

The number and capability of Licensed Users vary by account type. Licensed Users are part of a Business or Enterprise, individual or 30-day free trial account.

Capabilities that involve creating, owning, administering, or driving a process, program, or project in Smartsheet require a paid license. For example, Licensed Users can create, own, and publish sheets, templates, dashboards, forms, and reports. They can also create and edit automation and request backups.

#### ***Unlicensed User*** - No Cost

Unlicensed Users are Free Users that are part of a Business or Enterprise account. Unlicensed Users can't create or own sheets but can access sheets and collaborate according to sharing permission levels.

For full detail and information on all Smartsheet plans, user types, and sharing permission levels please visit:

<https://help.smartsheet.com/articles/520100-user-types>

Licenses can be obtained through the Rutgers software portal. For additional information regarding available Rutgers Smartsheet Plan account types and licensing options, contact the University Software team or visit the website at <https://software.rutgers.edu>.

## **Suggested Next Steps**

In order to most effectively use the information presented in this document, one needs to first understand the IT project and portfolio management needs of their organization. There is much to be considered when choosing the tool that will work best for any given organization. It is suggested

that, as one continues to assess the best IT PPM tool for their department, one take advantage of training and free trial versions of the IT PPM tool where available.

If an organization is just getting started with project management activities and is not initially in need of program and portfolio management, Microsoft Planner could be a good start for task management, team collaboration and the use of Agile methods. Planner provides pre-built, out of the box project metrics. It is integrated with the Rutgers O365 suite and is readily available.

Smartsheet and MS Project Online are comparable robust project management platforms which provide both project and portfolio management functionality. Because Smartsheet licenses include training and support, the Smartsheet option could prove to be an easier implementation for organizations that have not used a project management platform in the past. Microsoft Project Online is one of the major project management applications in use, so this could be a good fit for those organizations that have previous MS Project experience, and/or organizations that collaborate with other entities that already use MS Project.

No matter which tool(s) a department chooses to consider, the Rutgers IT PPM Community of Practice (COP) can be an excellent source of collaboration, guidance, and feedback. The COP is made up of PPM professionals with varying degrees of experience with the three tools discussed in this document. The COP can assist by sharing "real life" experiences and recommendations that can help an organization make the best choice for their project management needs. The COP has established an O365 Team site with a channel devoted to member discussion and collaboration on PPM Tools. The reader is encouraged to visit the PPM Tool Discussion thread at:

[https://teams.microsoft.com/\\_#/school/conversations/PPM%20Tool?threadId=19:4e877e0214294a6e81aae4f4f8cfdcf4@thread.skype&ctx=channel](https://teams.microsoft.com/_#/school/conversations/PPM%20Tool?threadId=19:4e877e0214294a6e81aae4f4f8cfdcf4@thread.skype&ctx=channel)

To join the Rutgers IT PPM COP or gain access to the Community's O365 group or Team, please email the COP Co-Chairs, Frances Haies and/or Stephanie Reed at: [pmc\\_chairs@connect.rutgers.edu](mailto:pmc_chairs@connect.rutgers.edu).

For any questions or comments regarding the content of this document please feel free to contact the IT PPM Committee Co-Chairs, Joe Percoco ([percoco@rutgers.edu](mailto:percoco@rutgers.edu)) and/or Erin Bauzyk ([bandileh@oit.rutgers.edu](mailto:bandileh@oit.rutgers.edu)).

## PPM Tool Assessment – System Requirements Matrix

Microsoft Planner	SmartSheet	Microsoft Project		
✘	✔	✔	Scope Management	Project Goal setting, Project relationship to Strategic Objectives, Success Criteria or statements, measures and metrics, high level achievements
✔	✔	✔	Time, Schedule, Task Management	Ideally, time management should include task dependencies, critical path analysis, baseline management, work breakdown structures and resource leveling. For Agile methods: Stories and story boards, sprints and tasks.
✘	✔	✔	Budget, Cost Management	Budget management should include the ability to track project budgets by task, by vendor. Should include the ability to track disbursements, cash flows. Integration with Oracle financials or at least the ability to assign a field to cross reference to an oracle financial project, account, etc.
✘	✔	✔	Risk Management	Risk management should include the ability to manage mitigation plans, resources assigned to monitor, ownership. Ability to classify by likelihood of occurrence and severity of impact.
✘	✔	✔	Issue Management	Issue description, ownership, resolution tracking including escalation paths, status tracking and cross referenced to an identified risk on the risk registry/list
! Limited	✔	✔	Resource Management	Project resources, roles, governance structure (i.e.: steering committees and sponsors). Ability to track resource dedication (hours, days, tasks, %, etc.)
✘	✔	✔	Quality Management	This PPM system must be IT focused with the capability of SDLC framework including Requirements management, Test plans, Test Script management, Quality Objectives as well as Audit tracking, approvals, etc.
✘	✔	✔	Communication Management	Communication plans including Ability to share information, alerts, notifications. Status reporting. RACI Chart capabilities
✘	✔	✔	Stakeholder Definition and Management	Ability to house information to understanding effected resources, departments, groups. Ability track key stakeholders with an integration to communication management, resource management, training management.
✘	✔	✔	Integration Management	System should integrate with other applications via APIs. Must be able to integrate with authentication services. Native integration capabilities with other university systems is nice to have such as O365, ticketing systems, Jira (or other bug tracking/issue tracking systems).
✘	✔	✔	Change Management	The system must be able to baseline all information related to scope, time and budget with ability to escalate and have approval queues. Other workflows such as scale (& scope) of change and the ability to form different set of escalation and approval paths is ideal.
✘	✔	✔	Collaboration, Knowledge Sharing &/or Workflows	System must be web based (cloud architecture). The system should be able to share any information in a variety of ways including but not limited to email notifications, system notifications or alters. Workflows related to scope, time and budget management are critical. Ability for outside users to be granted access to collaborate and contribute content is a must.
✘	✔	✔	Document Management	Each project must have a document repository with the ability to tie into workflows. Documents should be able to be organized in a logical fashion with minimal limits on type of documents, naming conventions and file size. Permissions should be able to be managed on a by project basis. Document locking or check in check out features are ideal. Documents should be able to be collaborative in nature without the need to download locally for editing purposes.
! Limited	✔	✔	Project Reporting, Status Management	Ideals the system should have a flexible, easy interface for creating custom reports for projects. Dashboards and detailed reports alike. System should have a default report structure.
! Limited	✔	✔	Authorizations, Access Controls	Project owner should have the ability to control access at a variety of levels including at a minimum the ability to read only, edit individual areas such as scope, time and budget items. Authentication should include integration with an approved university mechanism (CAS, Shibboleth, ). System should have the ability to allow access to outside individuals as well (vendors, consultants, etc...)
! Limited	✔	✔	Reporting, Dashboards	Application must have the ability to strategically manage a group of projects. This may include a dashboard showing project prioritization, processes used by different projects and any other key performance metrics that can be set by a portfolio or project manager. Reports should be made available with different defined partners.