



# CSE5PM

# Workshop 4

Semester 1, 2024

# Project Management Tools

# Project Integration Management



# PM Tools

## Supplier

- **Slack** for team communications
- **Jira** for project management
- **Google Drive** for project asset storage
- **Confluence** for project documentation
- **Google Hangouts** for remote meetings

## Organisation

- **Email** for communicating briefing documents to board
- **Outlook and intranet** for staff communication updates
- **Password protected One Drive** for internal project documentation (such as contract information)
- **Microsoft Teams** for internal project coordination of stakeholders

# Atlassian tools for Project Management

- Confluence – for Project Documentation
- JIRA – for managing sprints, project-tasks, etc.
- BitBucket – for source control
- Slack – Chat service for team communication

# Jira

Agile development was originally imagined for clustered teams, or teams physically located together in the same office. In keeping with the idea that "the most efficient and effective method of conveying information to and within a development team is face-to-face conversation". However, this is not always feasible. This is why we use Jira.

Jira is an agile tool that helps remote agile teams track and manage their progress within their project. You can access Jira through <https://latrobecomsci.atlassian.net/jira/projects>

# Confluence

Confluence is a very popular and powerful tool used in the industry for documentation and collaboration.

It provides a wiki-like space where you can create pages, insert attachments, edit permissions and link between different spaces to allow for even easier navigation.

Confluence will be great for you to use since it is linked to JIRA and you can attach your issues/tasks/bugs/etc. so you can comment on and discuss them.

This means you can refer directly to charts, user stories and tasks... Think how much easier it will be to use this for your System Maintenance Documentation!

<https://latrobecomsci.atlassian.net/wiki/home>

# Jira

- Backlog

There are three types of actions you can choose when creating your backlog of tasks:

- Story (this is where you state a problem to be solved in the project, written from the user's perspective)
- Task (this may be an issue, or simply something on the project to-do list)
- Bug (something already identified in the project planning that requires fixing)

All elements in the backlog should contribute towards project objectives/outcomes

Once you have your list of tasks, drag the ones you want to complete in the first sprint. Usually a sprint lasts two weeks (this can be changed).

Once ready, select 'start sprint'.

# Jira

- Sprint

In the sprint section, you will see all tasks.

Drag a task into the section 'in progress'. Once this task is completed, drag the task to the 'done' section.

You may not be able to complete all tasks. All tasks that are not completed will be dragged back into the product backlog at the completion of the sprint. These will roll over to sprint 2 (or you can pop them into backlog)

Avoid leaving too many tasks behind.

Too many leftover tasks suggests poor planning.

Burndown Chart summaries will show your sprint efficiency.

- **Assigning tasks**

Each task can be assigned to a project team member. You can also prioritise these tasks for the team member.

You can also put comments, and save these.

Files can be attached to the task. For example, you can add the completed task as an attachment for team members to review the work.

- **Creating Projects**

For the level of access on this cloud version, you will only be able to create one project.

# Jira

- Connecting through to Confluence
- Connecting spaces in Confluence back to Jira

Click on add an item to this project. From here you can select add pages which will connect you to Confluence resources and templates.

Click through to Confluence. From here you can create a Space.

The space enables you to create and store project documentation. You can select a template to help with this. Team members can be assigned to spaces for tasks to be completed.

You can create as many spaces as you like.

Jira has a section called project pages. These also contain templates.

This is a good space for associated tasks such as project meetings.

# Jira

- Integration with Bitbucket / github

Jira enables you to connect with bitbucket / github to share code and/or place repeatable code in the one place. Other team members can be provided access to this space for review or for adoption.

- Adding team members to your account

Select the People tab.

Add the emails for your team members. They will receive an email with a link to your team.

# Bit Bucket

Bitbucket is a web-based version control repository hosting service owned by Atlassian, for source code and development projects that use either Mercurial (or Git).

Source control (or version control) is the practice of tracking and managing changes to code. Source control management (SCM) systems provide a running history of code development and help to resolve conflicts when merging contributions from multiple sources.

Most popular source control system is Git.

Git is an open-source distributed source code management system. Git allows you to create a copy of your repository known as a branch. Using this branch, you can then work on your code independently from the stable version of your codebase. Once you are ready with your changes, you can store them as a set of differences, known as a commit. You can pull in commits from other contributors to your repository, push your commits to others, and merge your commits back into the main version of the repository.

# Slack

Slack is a cloud-based team collaboration tool. It offers chat rooms (channels) organized by topic as well as private groups and direct messaging. All content inside Slack is searchable, including conversations, links, files, and people.

## Key features of Slack

- Organised conversations
- Searchable history
- Work with external partners
- Apps and integrations
- Security

# Workshop Practice

Tutor to guide on practice of:

**Confluence**

**JIRA**

# **Project Integration Management**

**Why is Project  
Management Integration  
so important?**

# Case Study: Nick as PM

Nick Carson recently became project manager of a critical biotech enterprise at his Silicon Valley company. This project involved creating the hardware and software for a next generation (next-gen) DNA-sequencing instrument used in assembling and analysing the human genome.

Several companies were competing to build smaller, faster sequencing instruments that would reduce the costs and improve the quality of data analysis in this rapidly changing field. The biotech project was the company's largest endeavour, and it had tremendous potential for future growth and revenue.

Unfortunately, there were problems managing this large project. It had been under way for three years and had already gone through three different project managers.

Nick had been the lead software developer on the project before top management made him the project manager. The CEO told him to do whatever it took to deliver the first version of the product in four months and a production version in nine months.

Negotiations for a potential corporate buyout with a larger company influenced top management's sense of urgency to complete the project.

# Case Study: Nick as PM

Highly energetic and intelligent, Nick had the technical background to make the project a success.

He delved into the technical problems and found some critical flaws that kept the next-gen DNA-sequencing instrument from working.

Nevertheless, he was having difficulty in his new role as project manager. Although Nick and his team got the product out on time, top management was upset because Nick did not focus on managing all aspects of the project. He never provided them with accurate schedules or detailed plans of what was happening on the project.

Instead of performing the work of project manager, Nick had taken on the role of software integrator and trouble-shooter.

Nick, however, did not understand top management's complaints— he delivered the product.

# Case Study: Nick as PM

1. What do you think the real problem was with Nick's top managers?
2. Was Nick a good project manager? Why or why not?
3. What should top management have done to help Nick?
4. What could Nick have done to be a better Project Manager?

# Task: Project Charter

A project charter is a document that formally recognizes the existence of a project and provides direction on the project's objectives and management. It authorizes the project manager to use organizational resources to complete the project.

Many projects fail because of unclear requirements and expectations, so starting with a project charter makes a lot of sense. If project managers are having difficulty obtaining support from project stakeholders, for example, they can refer to the agreements listed in the project charter.

## Task:

**Create a possible charter that Nick could have created for completing the next-gen DNA-sequencing instrument project.**

(Sample project charter and essential components of charters were discussed in Lecture 4).

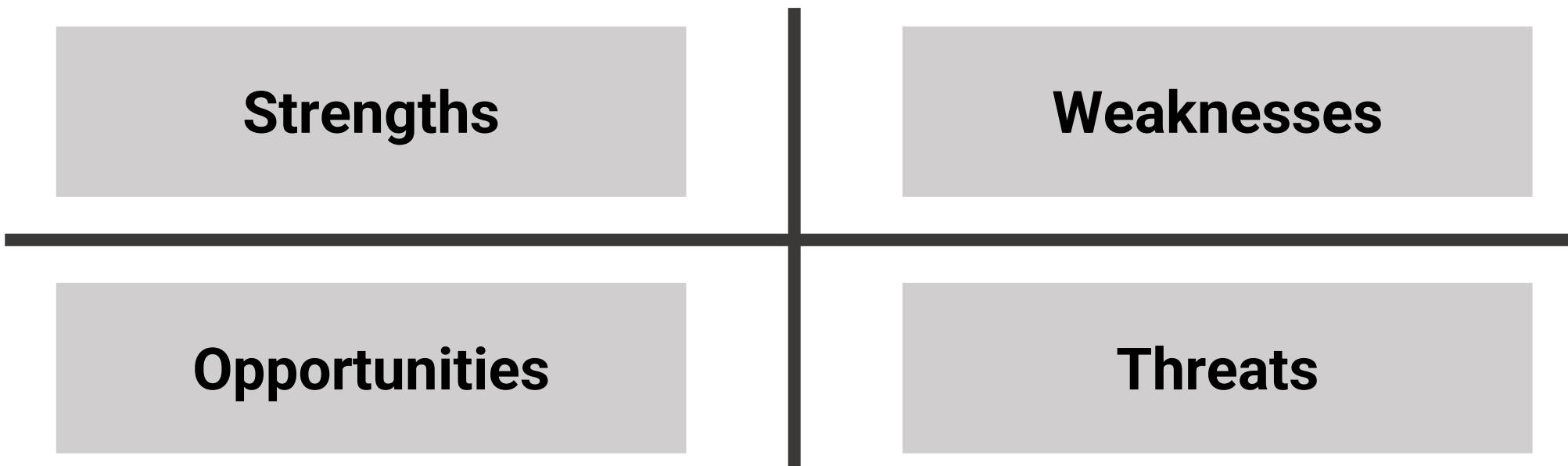
# Mind Map / SWOT Analysis

Strategic planning involves determining long-term objectives by analysing the strengths and weaknesses of an organization, studying opportunities and threats in the business environment, predicting future trends, and projecting the need for new products and services.

# Mind Map / SWOT Analysis

An example (as discussed in Lecture 4):

For example, a group of four people who want to start a new business in the film industry could perform a SWOT analysis to help identify potential projects. They might determine the following based on a SWOT analysis:



# SWOT Analysis

## Strengths:

1. As experienced professionals, we have numerous contacts in the film industry.
2. Two of us have strong sales and interpersonal skills.
3. Two of us have strong technical skills and are familiar with several filmmaking software tools.
4. We all have impressive samples of completed projects.

## Weaknesses:

1. None of us have accounting or financial experience.
2. We have no clear marketing strategy for products and services.
3. We have little money to invest in new projects.
4. We have no company Web site and limited use of technology to run the business.

## Opportunities:

1. A potential client has mentioned a large project she would like us to bid on.
2. The film industry continues to grow.
3. There are two major conferences this year where we could promote our company.

## Threats:

1. Other individuals or companies can provide the services we can.
2. Customers might prefer working with more established individuals and organizations.
3. There is high risk in the film business.

# From SWOT Analysis to Project Identification

The SWOT analysis is an identification tool.

Once you have identified your strengths, weaknesses, opportunities and threats, you need to assess which of these are critical for addressing in order to achieve success.

You could:

- **Build** on your strengths
- **Address** your weaknesses
- **Capitalise** on the opportunities
- **Nullify** the threats

You don't need to do them all. However, keep in mind that sometimes you might.

The tool helps you identify each so you can consider and rank in terms of what is most important to you and your success, and which ones you should prioritise.

# From SWOT Analysis to Project Identification

For the group of four starting out in the film industry, they might identify and prioritise the following projects:

1. Find an external accountant or firm to help run the business.
2. Hire someone to develop a company website, focusing on our experience and past projects.
3. Develop a marketing plan.
4. Develop a strong proposal to get the large project the potential client mentioned. Plan to promote the company at two major conferences this year.