PROJECT CANVAS

The tool for doing projects

Explanatory Manual

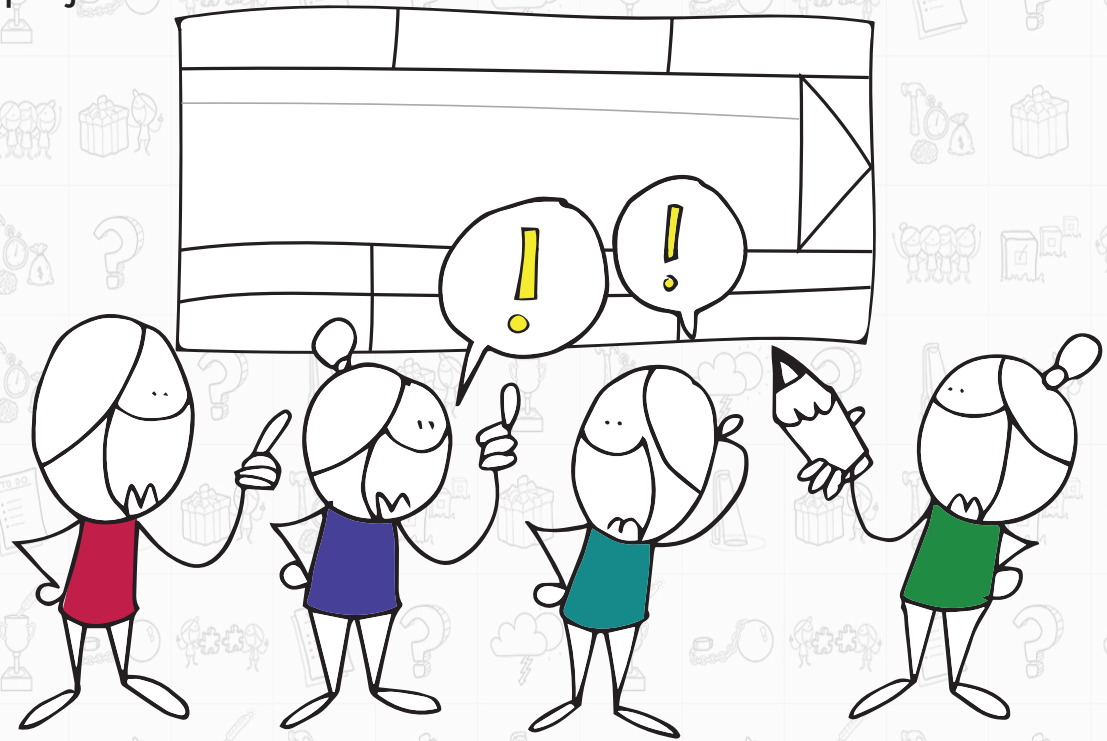


TABLE OF CONTENTS

INTRODUCTION

Projects are an essential part of business today. Managing projects in effective ways is important for all industries and is also the main focus of a number of academic initiatives.

This manual will explain the concept of Project Canvas and how it can be used to do projects. Project Canvas is a convenient tool for communicating within the project team, for decision making, and is thereby also a way of managing progress in the appropriate manner.

Unforeseen obstacles are always a part of the project management process, and they can affect resources, time and quality. Therefore, the success of a project is closely linked to the team's ability to plan, adjust and react to changing circumstances. Project Canvas is created in order to help all members of a team obtain a clear overview of a project. In other words: To be on the same page.

WHAT IS A PROJECT?

Before explaining Project Canvas, let us establish the definition of a project. "A project" can indeed be many things, from building a bridge to running a marathon. Projects can share many characteristics while still remaining unique. According to the Oxford Dictionary, a project is defined as:

"An individual or collaborative enterprise that is carefully planned to achieve a particular aim."

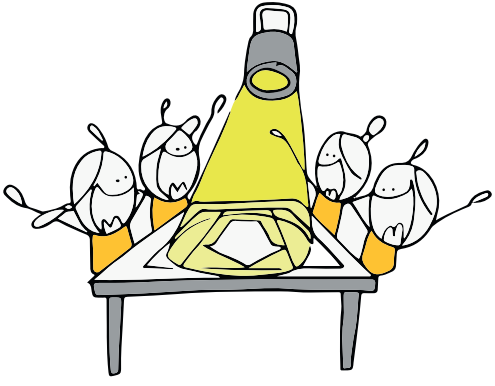
As projects are complex and emergent undertakings, we have developed four complementary perspectives for understanding and managing projects: purpose, people, complexity, and uncertainty

Characteristics	Descriptions
Temporal	Projects are temporary undertakings with a limited lifecycle defined by a start and end date. Thus, they are "made to die" after delivering the intended results
Unique	Project are unique (at least in some respect) because some factors will always be different, such as the context, team, stakeholders and/or the result.
Purposeful	Projects are inherently about change. They change the status quo by specific results and objectives, delivering benefits e.g. documented in a business case.
Temporary organisation	Projects are realized by a temporary organization (a team) put together for realizing the purpose of the projects.
Constrained	Projects are constrained by various factors like Time, Resource, Scope and the wider context such as stakeholders, norms and regulations.
Deliberately managed	Projects are deliberately managed (by different mindsets and tools) through the lifecycle in order to realise the intended purpose.

PURPOSE

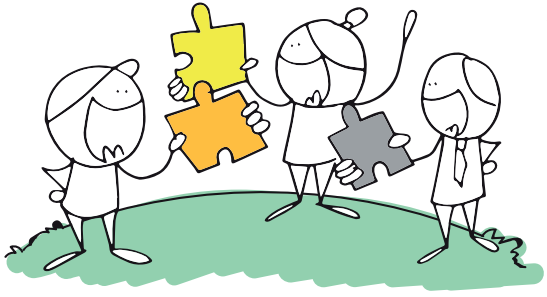
Why are we doing this project?

Purpose is the raison d'être of a project. Projects are vehicles of change; they transform status quo into something new. Therefore, 'the Purpose Perspective' asks: "Why are we doing this project?" and "what are we doing?". Purpose is about envisioning the future, by establishing a shared understanding of what the project wants to achieve together with project team and other stakeholders. From the 'purpose perspective', project management is about the entrepreneurial spirit with the drive to turn ideas into reality, and the diplomacy to engage and in-spire people to work towards the project vision.



PEOPLE

Whom are we doing this for?

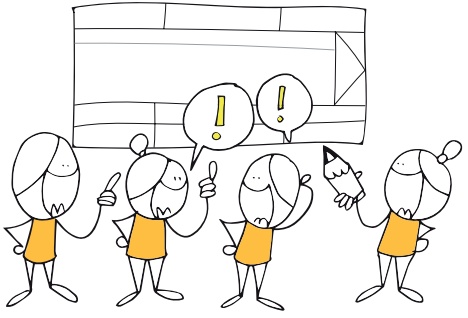


Projects are made by people and for people! That is why 'the People Perspective' asks the questions "Whom are we doing this for?" and "Who is doing it?". It sees project management as a collection of individuals, with their own identities, expert knowledge, interests, feelings, personalities, friendships, etc. It is actually debat-able to what extend we can 'manage' people - like marionettes in a puppet show. Yet, it is widely recognized that project managers can influence, enable, nurture, etc. - not only project stakeholders, but also him or herself. Looking at projects from a People Perspective help us see and cope with the human intricacies in projects.

COMPLEXITY

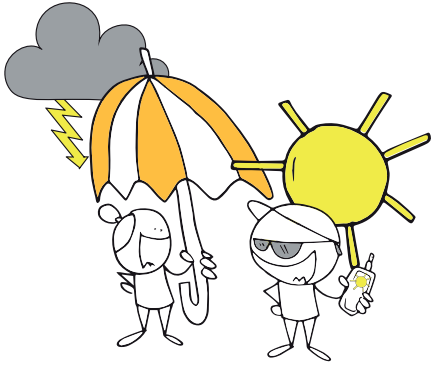
How, where and when are we doing it?

When exploring the project from the complexity perspective, we are examining how to realise the purpose. Thus, we ask: "How, where and when are we doing it?" From the complexity perspective, project management is about breaking down the purpose into smaller pieces of work that can be delegated and constantly integrated. Managing from the complexity perspective is about integrating a large number of interdependent technologies, processes, people, interests, organisations, information, expertise, etc. so that they, together, work towards and achieve the project purpose. Managing the complexities of projects is the classic area of project management; it involves work breakdown structures, schedules, contracts, division of work, etc.



UNCERTAINTY

What if? and What now?



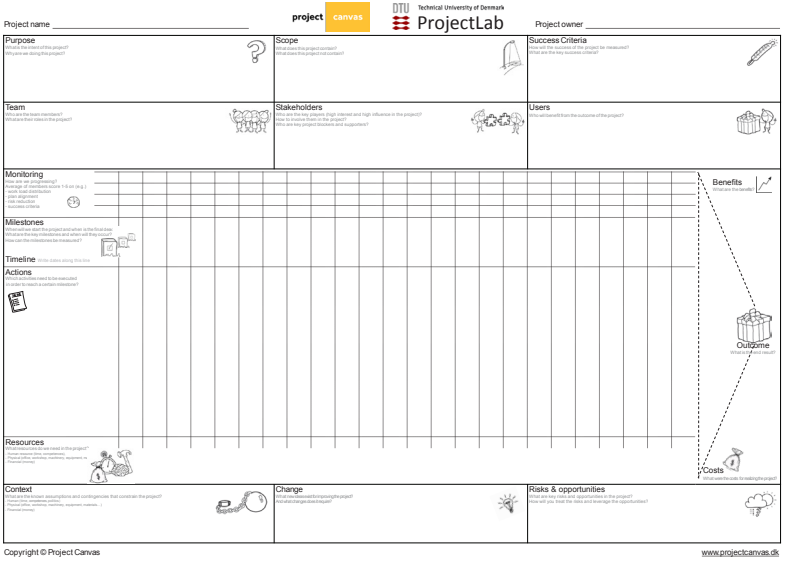
Projects are, in many respects, a leap of faith. Project practitioners will need to navigate an inherently uncertain context and make decisions with limited information. Thus, we ask ourselves proactively "What if?" and reactively "What now?", and "so what?'. The focus of this perspective is this lack of knowledge, or uncertainty, and how it is reduced over the course of the project, as well as the learning embedded in and after the project. Part of the uncertainty is about anticipating what could go wrong (risk), and what opportunities could emerge (opportunity), and deciding how to respond to such risks and opportunities. Moreover, not knowing is also an opportunity for learning and developing the skills of people involved in the project as well as organizational capabilities.

ABOUT PROJECT CANVAS

Project Canvas is a tool that improves communication in project teams and provides a simplified project overview. Project Canvas is built on well known project methodologies including PRINCE2, PMI and Scrum.

To keep the tool simple, Project Canvas is inspired by empirically tested visual tools such as the Business Model Canvas, the Game Plan and the Team Alignment Map. Project Canvas is developed by several experienced project managers who combine both academic research and practical use.

This work has resulted in Project Canvas, which consists of 16 elements that altogether give you a complete overview of your project.



You might ask: "Is there a need for another tool? Don't we have enough already?" It is true, there are many tools which all try to solve specific project problems and/or help you in different areas of project management. Project Canvas, however, focuses on helping to establish an simple and effective overview of the project you are involved in. Overview is important for the team to work in a common direction, being engaged and motivated. It is also important for briefing stakeholders who have concerns about the project status - in other words it helps you to do projects.

The tool is used by project teams to simplify project communication and to synchronize understanding of the project among those involved - both internally and externally. Project Canvas can be used both offline, as a physical printout with post-its, and can be found online at www.doing-projects.org

The tool has proved valuable as a:

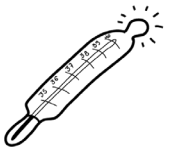
- pre-project tool to kickstart projects and specify "what is the purpose?", "why is it undertaken?" and "how should it be delivered?"
- sales tool to sell and convince stakeholders to accept a project.
- briefing tool for communicating project status and progress.
- project management tool for those simple projects that do not need complex management systems.

In teaching, Project Canvas has proven valuable as well. Especially when working on authentic problems. The tool has been tested in both Innovation and Engineering classes where students work with real life clients. The Canvas serves to both give the students an overview of their project, and also provides a tool for dialogue about specific content and prioritization with the teachers. By introducing elements such as scope and stakeholders, the students are encouraged to navigate the complexity of having two main stakeholders – academia and the business – and it helps them to professionally communicate content to both parties.

The next chapter will cover all 16 of the elements in depth.

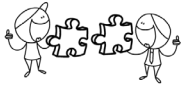
EXPLANATION OF **ELEMENTS**





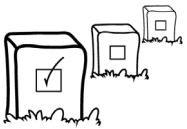

VISION	SCOPE	SUCCESS CRITERIA	OUTCOME	COSTS	BENEFITS

PURPOSE



TEAM | STAKEHOLDERS | USERS

PEOPLE



MILESTONES | MONITORING | ACTIONS | RESOURCES

COMPLEXITY

CONTEXT

CHANGES

RISKS & OPPORTUNITIES

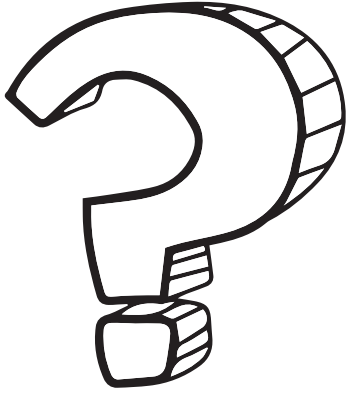
UNCERTAINTY

VISION

Definition: The reason the project is carried out and the intentions of the project owner.

What is Vision?

The Vision describes why the project is started and the desired outcomes, which should be achieved. It is the fundamental reason for initiating the project, leading to the end result. Vision shows that the project is "beneficial", which means it creates significant value for the project owner, the people involved in the project and its end users.



Why Vision is important

When considering a project, it is important to identify what you plan to achieve. Therefore, the vision acts as a continuing guideline for the project. It highlights what the project will accomplish and the benefits it should bring. It should also unify the team's understanding of the project.

How to use the Vision element

The vision is often expressed in one or two "soft" phrases, giving a perspective for initiating the project. The following questions can be helpful when defining the vision:

- Why are we doing the project?
- What is the intention of the project owner?
- What will be created, changed or enhanced?

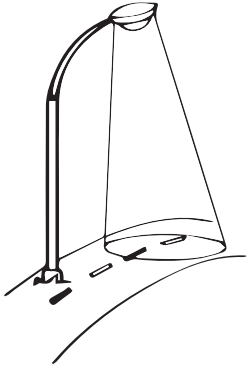
Tip: When defining the Vision, do not use more than 1-2 statements.

SCOPE

Definition: Scope represents what is a part of the project and what is outside of the project boundaries.

What is Scope?

The scope is designed to capture what the project will include and exclude. It is a considerable part of aligning the expectations of everyone involved in the project. If disagreements regarding the workload arise in the course of a project, a good scope definition serves as a common reference point for everyone.

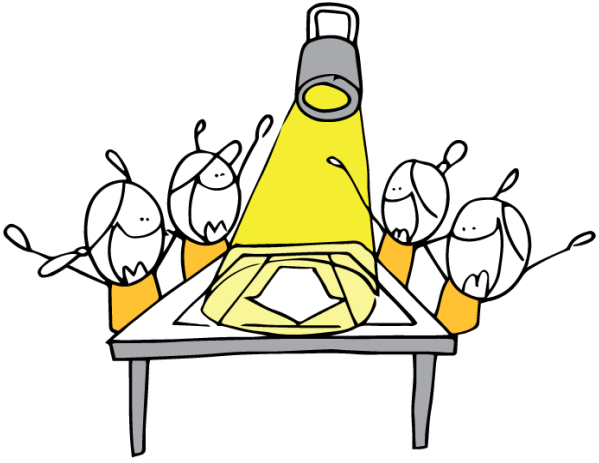


Why Scope is important

Expansion of the scope (scope creep) is an expected part of many projects. The user or a stakeholder often returns with new requests or requirements for the project. These requests are likely to affect the project costs, time or quality. In such cases, the original scope definition can be used to determine whether there is a basis for a re-negotiation of project resources.

How to use the Scope element

When defining the project scope, the team explores the immediate project activities, milestones and end results. They are placed either inside or outside of the project's scope. The elements should be revised until a satisfactory scope has been created. To make the best use of scope as a project guideline, all stakeholders should commonly agree upon and authorize the defined scope before initiating the project. The following questions are helpful when defining the scope:



- Which areas should be covered with this project?
- Which areas should not be covered with this project?

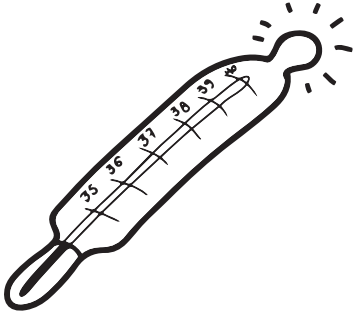
Tip: Think project length, width and depth when defining Scope.

SUCCESS CRITERIA

Definition: Measurable criteria chosen to determine whether the project has achieved its desired result.

What are Success Criteria?

Success criteria indicate when the project vision has been accomplished with a satisfactory result. The success criteria should be sufficiently detailed so it is easy to identify when a project is successful. Therefore, all desired objectives should be covered. The more elaborate the success criteria are, the easier it will be to evaluate the project afterwards.



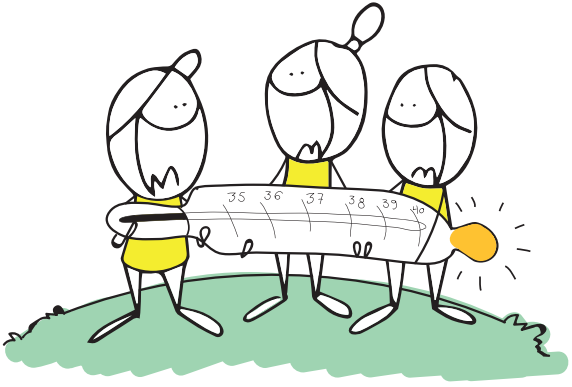
Why Success Criteria are important

Success criteria play a crucial role in evaluating a project and reporting its current status. They help in judging if the set goals have been reached to an acceptable level.

How to use the Success Criteria element

Good criteria for success are characterised by being specific, measurable, realistic and time specified. At the same time, they should also be ambitious, but never unrealistic. The following questions are helpful when defining success criteria:

- What (goals / targets) should be achieved in order for the project to be successful?
- What are the benefits of the project?
- How will the benefits be measured?



Tip: Include a clear time frame within which the criteria can be met.

OUTCOME

Definition: Outcome is a description of the desired result of the project work being undertaken.

What is Outcome?

The outcome captures what the project should lead towards. The other elements in the canvas should support and contribute to attaining the result. The result can be seen as a unifying intention throughout the project process.

Why Outcome is important

The result needs to be defined, because it influences the focus of a project. It should not be confused with purpose, which is the reason the project is carried out and the intentions of the project owner, whereas the result reflects the concrete desired outcome of the project. To deliver the project benefits and to fulfill the purpose, the project team must define the result.

How to use the Outcome element

A well defined outcome is characterised by being SMART: Specific, Measurable, Acceptable, Realistic (but ambitious and challenging), and Time set. Thereby it represent the contract between the project sponsor and the team. It is important to remember that the result is more rigid while actions toward it are more flexible. The following questions can be helpful when specifying results:

- How do we realise the vision of the project?
- What do we want to deliver to obtain the vision?

Tip: When defining the Outcome be as specific as possible.

BENEFITS

Definition: A benefit is a measurable improvement resulting from an outcome that is perceived as an advantage by one or more stakeholders.

What are Benefits?

Outputs of the project result in an outcome, which is a result of the change made by the output. The outcome result in a measurable improvement and that improvement is called a benefit. But these measurable outcomes is only considered a benefit if one or more stakeholders actually perceives this outcome as an advantage, and therefore something they can benefit from.

Why Benefits are important

The benefits are important for your stakeholders and users because stakeholders probably invest in the project because of the benefits, and users will use the project output because of the benefits. If the project doesn't have benefits - then what's the purpose of the project?

How to use the Benefits element

Take a look, at the outcomes of the project. How does out stakeholders and users benefit from these? Do we need to change our output, to accommodate other outcomes to enhance benefits for our stakeholders?

- Who benefits from our output?
- How do our outputs benefit users?
- How do our outputs benefit stakeholders?
- Do we need to change our outputs?

Tip: Take an extra look at your outputs, and examine the interests of users and stakeholders

COSTS

Definition: Costs are the expenses, invested to a project, in order to be completed and achieve its desired result.

What are Costs?

In business, the cost is usually a monetary valuation of effort, materials, resources, time and utilities consumed, risks incurred and opportunity forgone in production and delivery of a good or service. Resources are interconnected with the project costs, as they represent all these inputs available, that initiate and actualize a project. When calculating the cost of a project, the project team must add the cost of everything necessary, to complete it.

Why Costs are important

Having a detailed overview of Project Costs, is important for everyone involved, especially for the project team and the project organization. The team needs to estimate costs, develop the budget, monitor cost variances, and take appropriate actions when necessary, in order to avoid adverse cost impacts.

How to use the Costs element

As a project is initiated and actualised, the team has a complete view of all possible Costs for successful project completion, and it is important to keep track on them, in accordance to the initial Budget created. The following questions can be helpful when identifying the Costs:

- What were the costs for realizing the project?
- Are all costs necessary for the successful project completion?
- Are the costs monitored?

Tip: Start by enlisting all costs, and then cluster them into important cost categories.

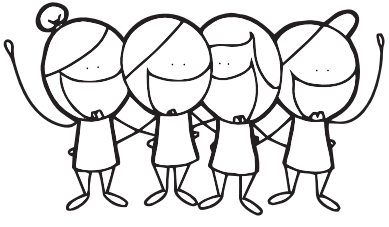
TEAM

Definition: Group of individuals who work in collaboration to implement the project and achieve a desired outcome.

What is Team?

The team is a group of people who plan and execute the project. Each member of the team has a role and responsibility for performing particular actions throughout the project.

Note: As the number of team members depends on the size and the complexity of the project, the team can also consist of just one person. But in general, the best team size is considered to be around 4 to 6 people.



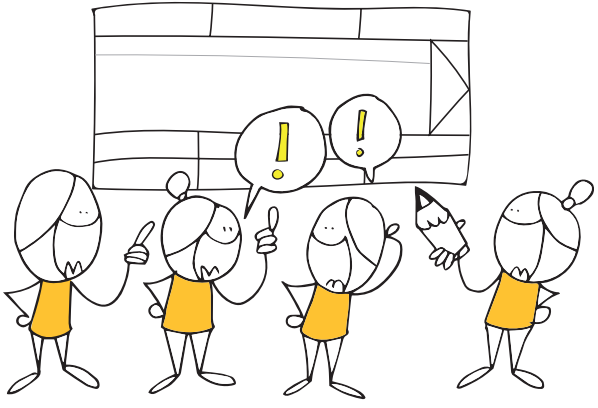
Why Team is important

It is important to create the right combination of individuals with a diverse skill set, so the project tasks are efficiently delegated. All the team members should have a complete understanding of project objectives and be aware of their responsibilities. The team should cooperate throughout the project to identify issues that require action.

How to use the Team element

It is always good practice to align expectations and form a common understanding of the project between members of the team. The roles and responsibilities of individuals should be defined along with the necessary competences, which are not available from within the team. The following questions can be helpful when defining the team:

- Who are the participants?
- Who is the project manager?
- What other roles are present in the team?



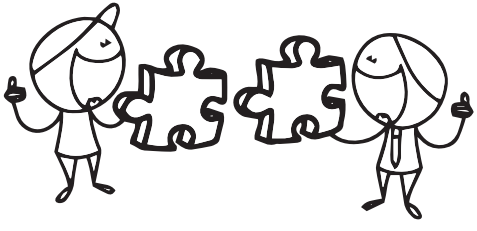
Tip: When selecting the Team, choose people with different backgrounds.

STAKEHOLDERS

Definition: Groups or individuals, in addition to the team and users, who affect or are affected by the outcome of the project.

What are Stakeholders

In the Project Canvas framework, what is meant by stakeholders is the individuals or groups, which positively or negatively affect the performance or completion of the project from outside of the team. They may exert influence over the project, its actions or its team members. Stakeholders can act as a part of the team, if their roles are aligned with the project team members roles. This is usually decided in a dialogue between the team and the stakeholders. The stakeholders often provide different kinds of services to the project team.

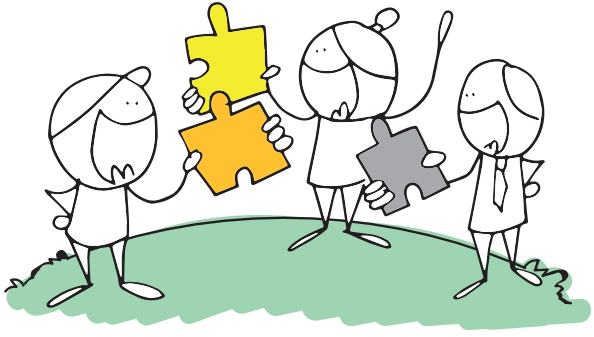


Why Stakeholders are important

Stakeholders are important because they may have resources, such as specific knowledge, that can help carry the project forward.

How to use the Stakeholders element

Working with stakeholders should strengthen the project. They can bring know-how and resources, which are not available to the team, but are important for the project to be successful. If the team, for example, lacks understanding of their end users, the stakeholders can provide this insight to the team. The stakeholders can become involved with the project at any point. The following questions can be helpful when defining the stakeholders:



- Who is interested or affected by the project?
- What is their role in the project?
- What knowledge or information is lacking inside the project team?
- What external assistance is needed to achieve the desired outcome?

Tip: Develop a plan for engaging and communicating with Stakeholders.

USERS

Definition: Recipients of the project's desired outcome or groups of individuals who will be impacted by the outcome of the project.

What are Users?

The users are individuals or groups who benefit from the outcome of the project. Therefore, users are intrinsically linked to the vision of the project. It is important to examine which challenges users face and gain insight into what they need, so the solution solves a real and present issue.

Why Users are important

The users are important, because they validate the reason for the project's existence. An absence of users means a lack of vision and no justification to continue. Identifying users' needs early in the project will increase the chance of achieving the best possible outcome.

How to use the Users element

When using this element, it is important to consider all possible users. Users are typically presumed as people from outside of the project team; however, team members may also use or be impacted by the outcome of the project. The following questions can be helpful when identifying the users:

- Who are the targeted users of the project?
- Who will benefit from the outcome of the project?
- Are there people in the project team who also represent the users?

Tip: When defining Users, collect insight and avoid making assumptions.

MILESTONES

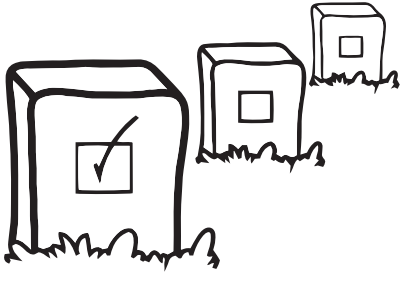
Definition: Milestones are significant events in the project, which divides the project into manageable parts.

What are Milestones?

Milestones are used to provide a simplified overview of a project. Working with milestones means focusing on highlights of the work rather than the details. Milestones mark particularly crucial events in the project and are especially important in long-term projects. They serve as supplements to the success criteria and the end result.

There are several types of milestones:

- Decision points: for selecting sets of actions and transition to a new phase.
- Coordination points: where work on several fields must be completed at a certain point in time.
- Approval: both internal and external.
- Liability transfers: to or from the project team.



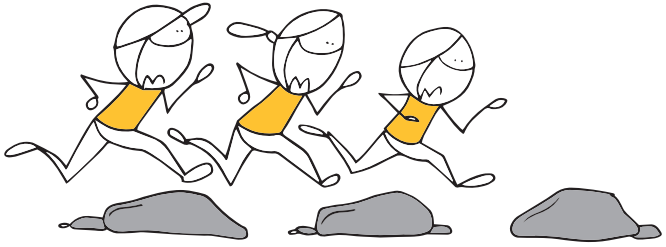
Why Milestones are important

Instead of just initiating and closing the project without defined check points, milestones are used to clear out the clutter and divide the project into smaller parts. It then makes it easier to determine if the project is on schedule. At the same time, milestones can be used for communicating with the team and stakeholders. They hereby serve as a status overview and identify the next steps to take.

Tip: Do not add more than 4-6 milestones to the project.

How to use the Milestone element

Milestones are defined by identifying important success criteria and/or results. They guide the completion of different parts in the project. Usually, four to six milestones is enough to create a project overview. Milestones should be selected throughout the entire project life cycle. The following questions are helpful when defining milestones:



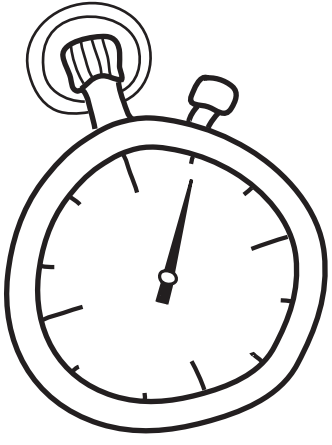
- When does the project start?
- When is the deadline for the project?
- When do the key milestones occur?
- How is the achievement of a milestone measured?

MONITORING

Definition: Monitoring is to examine the progress or quality of the project over a period of time

What is Monitoring?

Monitoring is a tool for the project team, to examine team alignment and satisfaction, and a tool for starting a discussion about the way the team works.



Why Monitoring is important

That is the question we ask ourselves when we try monitoring the project. It is important to monitor the progress of your project, and also how the project team sees the progression of the project, in order to ensure that the team is aligned. If the team experience e.g. unalignment or uneven work distribution, the team might need to change the way they work.

How to use the Monitoring element

To monitor a project, it is necessary to state what metrics to monitor the project with. An example could be, that all team members rate the following metrics on a scale from one to five, and write down the average. Some metrics might suit different project teams better than others, so choose the metrics that suit your team! Metrics could be one of the following: Plan Alignment , Workload distribution, Risk reduction or Success criteria.

- Are we feeling behind, or ahead?
- Is the work evenly distributed throughout the team and over time?
- Are we actually treating our risks?
- Are we working towards reaching our goals?
- Why are we rating the measures differently?

Tip: A great way to improve the teamwork, is to ask why the rating was good or bad - and learn from that!

ACTIONS

Definition: Project actions are tasks, activities or work that helps to achieve the project's results.

What are Actions?

Actions are the completion of specific tasks within a defined period of time. They advance the project toward the desired result. An action can be split into minor activities depending on the level of detail of the Project Canvas. Actions are best described by using verbs like;

- create
- provide
- organise
- test
- produce

Why Actions are important

The absence of a clear action plan can lead to confusion or poor resource management, which may lead to project failure. Clearly defined actions make it easy to allocate the workload between the team members and keep the process under control.

How to use the Actions element

The "Action" should accurately describe what needs to be done, how it should be executed, by whom and when. It is crucial to consider which resources are required to complete each action. Specific and measurable actions make it easier to monitor and control the project. At first, actions can be identified by focusing on the end result. The level of detail can then be increased. The following questions can be helpful when specifying actions:

- What is the best way to describe the necessary actions?
- Does each action have a direct link to one or more of the outcomes?
- Are the actions detailed enough to develop a project plan?

Tip: When defining the Actions break them into manageable parts.

RESOURCES

Definition: What is needed in order for the project's actions to be executed and completed.

What are Resources?

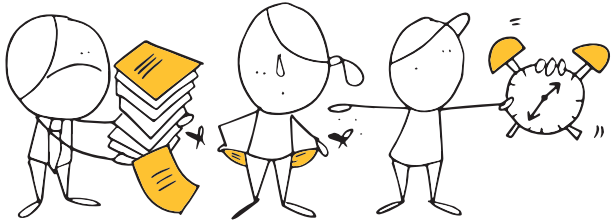
The resources include the total time estimated for all project actions, their cost and used materials. They can be tangible (i.e. paper) or intangible (i.e. knowledge) resources that are needed to complete the actions. For example, some project actions may require time and specific knowledge or skills together with work space and special supplies. People or manpower can also be considered a resource.

Why Resources are important

It is impossible to reach the desired outcome of the project without sufficient resources. Accurate resource allocation is important for efficient execution of the project tasks. Lack of resources is a serious constraint for completing a project and is often the reason for failure.

How to use the Resources element

The resources element should clearly identify all the project needs. It is important to minimise the duration of the project and maximise the use of available resources. The following questions can be helpful when identifying the resources:



- What resources are needed in the project?
- What resources are lacking in the project?
- Where will lacking skills/materials be found?
- Will certain tasks need to be outsourced?

Tip: Time is one of the most important resources to remember.

CONTEXT

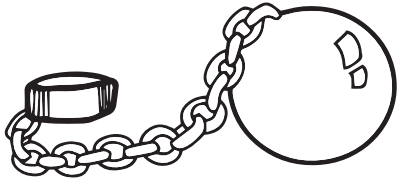
Definition: Limitations such as events, resources or other complications that interfere with the project.

What is the Context?

Every project has limitations set by its environment. This may for example be rules, procedures or standards, but also aspects such as time, money, technology, or knowledge – aka. Resources in Project Canvas.

Why Context are important

Being aware of the context is important for everyone involved in the project, especially for the project team. The team members need to take the context into account, so they can plan and adjust the project accordingly.



How to use the Context element

When initiating a project, the team should acknowledge the context and how it influence each of the other elements in the canvas. The following questions can be helpful when identifying the context:

- What are the current barriers or limitations to the project?
- Which restrictions affect the project development?

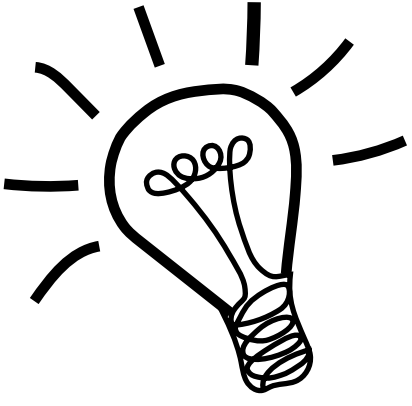
Tip: Remember the triple constraint of Time, Resources and Quality.

CHANGE

Definition: Changes are the necessary adaptations of new ideas to the project in order to meet the objectives and improve the outcome.

What is the Change?

As the project matures, things change and we will need to adapt to those changes and to the maturing process inherent to the project. During the execution, new ideas occur that are expected to improve project outcomes, so these elements need to be consolidated into the existing project plan. Although project changes potentially lead to cost overruns and major delays, e.g in a software of construction project, at the same time they might lead to a more successful outcome in terms of effectiveness (doing the right things).

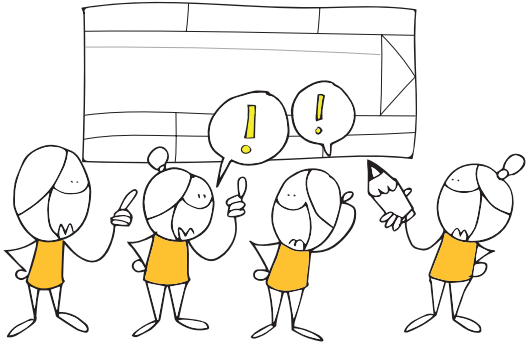


Why Changes are important

In case of having differences between that execution and the planning phase, it should be determined if any action is necessary. Also, during monitoring phase, the project should have the flexibility to some extent, and be able to react to changes in system performance. These new ideas need to be considered and adopted in the project, to bring a positive impact to the project success.

How to use the Changes element

The team ought to think thoroughly new ideas that can potentially improve project outcomes, and how could they be implemented. The following questions can be helpful when identifying the resources:



- What new ideas exist for improving the project?
- And what changes does it require?
- What changes needed to be made in order to adapt the project to the new external environment?

Tip: The ideation process might take place in each project phase - but the earlier it occurs, the fewer changes are needed.

RISKS & OPPORTUNITIES

Definition: Likelihood of events or conditions that can have a positive or negative impact on a project and the outcome.

What are Risks?

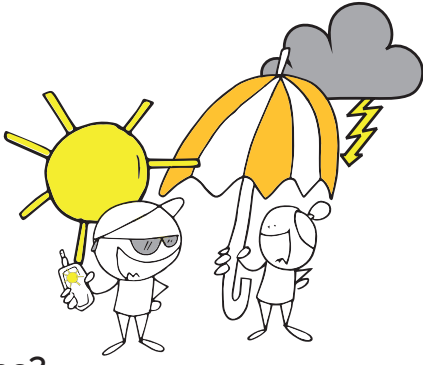
Risks are different from constraints because they only have potential to occur. Every project holds uncertainties, which can affect it in both good and bad ways. For example, if a significant competitor is planning to enter the market that the project operates, this scenario could threaten the project outcome. Although, at the same time, if the project team would implement a shield strategy and make a clearer scope, this could lead into an opportunity of strengthen the project success. Consequently, noteworthy risks are not only downsides, referred to as threats, but also upsides, referred to as opportunities.

Why identifying Risks & Opportunities is important

Risks are present in all projects. Therefore, it is important to identify and keep them in mind, but not to avoid them. This will help to increase the probability of meeting the project objectives. In addition to this, efficient risk management will keep the project as close to the agreed plan as possible.

How to use the Risks & Opportunities element

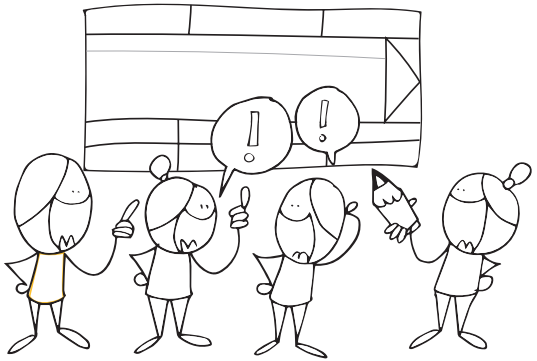
First, the team should identify all possible risks determine actions to enhance opportunities and reduce threats. Also, it is necessary to track, throughout the project phases, the opportunities that could improve the project outcome. The following questions can be helpful when identifying the risks:



- What are the key risks and opportunities in this project?
- How will you treat the risks and leverage the opportunities?

Tip: All Risks & Opertunities identified have a probability and an impact to consider.

USE CASES



The next sections present two cases where Project Canvas has been used by organisations trying to achieve very different results. This provides a perspective on how the canvas can be utilized in various types of projects and, furthermore, it illustrates the versatility of the tool. In both cases, members of the Project Canvas team facilitated workshops with the featured organisations to support and guide the process. This practical experience demonstrated how the use of visual tools helps to make your project plan clear and your project communication more efficient.

DEPLOYABLE FINS

The Deployable fins made as a "Fagpakke project" in collaboration with Copenhagen Suborbitals and DTU SkyLab in 2017. The goal was to deliver usable CAD drawings and calculations to Copenhagen Suborbitals and to have a working prototype as a proof of concept.

The group used ProjectCanvas both as a startup tool, and as a monitoring tool during the project together with other task management tools.

In the initial phase of the project, the group planned the project and used the ProjectCanvas as a tool for that. The group initiated their planning by filling out as many elements as possible and got an overview of the different aspects of the project, which enabled them to better plan the project in detail. Especially the Vision, Scope, Success Criteria, Team Members, Stakeholders, Users, Context, Change & Risks elements was a great help to keep the focus on the objectives - especially when decisions were to be made.

During the project, the group used the Canvas as a backbone for the daily morning status meetings. Here the Activity element came in handy, as the group took inspiration from Gantt chats in their use of the Activity element, and used it to monitor how the project was progressing, have an overview of current and future tasks

Project Canvas has been a usefull tool during the whole process - especially as a tool to have an overview of the project, when taking decisions and to make the group dynamics work.

Project name: Deployable Fins

project canvas — DTU Engineering Systems, Department of Management Engineering — ProjectLab

Project owner: Group 8

Vision
What is the intent of this project? Why are we doing this project?

Develop prototype, and deliver usable calculations and models to Copenhagen suborbitals

Scope
What does this / What does this

Includes:
Prototyping,
CAD modeling,
Dimensioning,

Not Included:
Material recommendations,
Physical model,

Success Criteria
What do we need to achieve in order for th / How can the Success Criteria be measure

A functional prototype
Usable CAD models

Team
Trond
- Project manager
- CAD models
- Concept dev.
- Construction dev.

Kasper
- Project management
- Report writing
- Concept dev.
- Construction dev.

Anders
- Dimensioning
- Construction dev.
- Report writing
- Concept dev.

Stakeholders
has an inte / at way are

Copenhagen suborbitals
- financial support
- Intrest in solution

Skylab
- Exebiton model
- Know-how

Users
Wh

Copenhagen suborbitals
Concepts & calculations for future use

Other
Student Inspiration

Skylab
Exebition model for students and sponsors

Monitoring
How are we progressing? Average of members score 1-5 on (e.g.)
- Work load distribution
- Plan alignment
- Risk reduction

3	4	5	5	4	4	5	4	5	5	5	4	2	4	5	5	5	3	4	4	5		
5	4	4	2	5	1	4	5	5	2	3	6	3	5	5	5	5	4	4	5	5		
4	4	4	2	5	5	5	5	5	5	3	3	2	4	5	5	5	3	4	5	5		
4	4	3	3	5	3	2	5	5	3	2	5	5	3	5	3	4	5	5	5	5		

Milestones
When will we start the project and when is the final deadline ? What are the key milestones and when will they occur?

4 5 8 9 0

Project Plan
Final concept draft
CFD done
Dim. done

Week 1 | Week 2 | Week 3

Actions
Which activities need to be executed in order to reach a certain milestone?

- First meeting CS
- Meeting w. Niels
- CFD meeting w. JW
- Meeting with CS
- Concept development
- Theoretical work
- Brainstorm
- Construction dev.
- Concept screening Concept scoring
- Report work
- Skylab economy meeting
- Planing & Meetings
- Initial time budget
- CFD
- Dimensioning
- Plan report work
- Write concept development
- Meeting with CS
- Meeting w. Niels
- DOF analysis
- Material proposal
- Extra CFD calc.
- Component work
- CAD for conceptualizing
- CAD & Tec. Drawing
- Flow chart
- Meeting with CS
- 3D print
- Write Dimensioning chapter
- Prototyping
- Reassessment of the rapport
- Meeting w. Niels
- Meeting with CS
- CAD reassessment
- Test
- Rapport Writing
- Grammar & Corrections
- Prototype Done
- Rapport Done

Benefits
What are the benefits?

Resources
What resources do we need in the project?
- Physical (office, building, server)
- Financial (money)
- Human (time, knowledge)

- Skylab know-how
- CS financial support
- 6 · 240 hours

Costs
What are the costs for realizing the project?

Change
What ne / And wh

- Workshop limitations
- Deadline
- Budget < 100 DKK

Limited workshop expericence

Context
What are the known limitations of the project?
- Physical (office, building, server)
- Financial (money)
- Human (time, knowledge, politics)

SpaceX has a working solution

Risks
Wh / Ho

- Missing Components
- Over budget
- Group Conflict
- Bad concept choice

- Bad workprioritization
- Run out of time
- Occupied Workshop

51

DRIVR - CPH

Drivr is a start-up company focusing on upgrading taxi services. For two years, their main product has been an app that orders taxis with just one click, and now Drivr is expanding. They are going to provide the cars themselves as they become a full service high end taxi company. Drivr wanted to get an overview of their Copenhagen launch. For this, they used Project Canvas.

The vision of their project is to Launch Drivr as a high end taxi and limousine service in Copenhagen. They aim to improve ground transportation, ease booking hassles and provide a luxurious taxi experience for customers. At the same time Drivr wants to create a cheaper alternative to the expensive booking systems used by other taxi companies. The new Drivr product is an extension of the digital application, and by making Drivr's booking system accessible on mobile devices in each taxi, they can bypass the use of expensive booking systems. Another clear market advantage is the fact that Drivrs tablet solution is much cheaper for the individual taxi drivers in comparison to old booking systems which cost 40.000 DKK to get installed in one taxi. The launch is a complex task with many stakeholders and users. The company has already launched in London and is running with a fleet of 250 cars on the street. In Denmark, there are many challenges, risks and constraints that must be taken into consideration. For example, governmental taximeter regulations that demand a high degree of customisation of the Drivr product. For Drivr, getting an overview of their project launch with Project Canvas was really beneficial. The tool helped them point out milestones along the way for the whole team, and gave them a common frame of reference so that everyone was on the same page in the project.

Project name: Drivr - CPH

project canvas — DTU Engineering Systems, Department of Management Engineering — ProjectLab

Project owner: Drivr CPH office

Vision
What is the intent of this project?
Why are we doing this project?

- Launch Drivr in DK

Scope
What does this project contain
What does this project not contain

- Sales and marketing
- Customisation for DK

Success Criteria
What do we need to achieve in order for
How can the Success Criteria be measu

- 150 taxis in CPH
- Proof of concept in DK

Team
Who are the team members?
What are their roles in the project?

- 2 biz dev
- 2 operations
- 1 sales

Stakeholders
Who has an interest in t
In what way are they inv

- Board of investors
- Super users
- App dev. team

Use
Who w

- Taxi & limousine companies
- Private taxi customers
- Business taxi customers

Monitoring
How are we progressing? Average of members score 1-5 on (e.g.)
- Work load distribution
- Plan alignment
- Risk reduction

3	4	5	5	4	4	5	4	3	5	5	4	2	4	5	5	5	3	4	4	5	
5	4	4	2	5	1	4	5	5	2	3	6	3	5	5	5	5	4	4	5	5	
4	4	4	2	5	5	5	5	5	5	3	3	2	4	5	5	5	3	4	5	5	
4	4	3	3	5	3	2	5	5	3	2	5	5	3	5	3	4	5	5	5		

Benefits
What are the benefits?

- Communication between youth and municipality
- All partners use Drivr as main booking system

Milestones
When will we start the project and when is the final deadline ? What are the key milestones and when will they occur?

- 97% bookings with first partner

Actions
Which activities need to be executed in order to reach a certain milestone?

- Finding partners
- Intention agreements
- Find partners
- Research potential partners
- Beta test booking system
- Feedback from partners
- Design the system
- Develop system backend
- Launch front end booking + app
- PR + marketing
- Pilot test backend
- Implement system
- Partner support
- Customer support
- Optimize system
- Add call center
- Final delivery

Resources
What resources do we need in the project?
- Physical (office, building, server)
- Financial (money)
- Human (time, knowledge)

- Transportation know how
- Legal knowledge
- Financing & investment

Costs
What are the costs for realizing the project?

- Cabs
- IT systems
- Offices

Change
What new ideas e
And what change

- Time (running out of funds)
- Technical Danish customisation
- Small project team

Context
What
- Physi
- Finan
- Huma

- Trial ride differentiation from Uber
- Add on services
- Clear differentiation from Uber

Risks
W
Ho

- Legal Danish taxi laws
- Scalability - is the system ready for 150 taxis?
- No Uber presence in DK

53

HOW TO USE PROJECT CANVAS

Project Canvas is a dynamic tool that can be used in different ways to suit the needs of your project. It is, however, recommended to follow the order of steps laid out in this facilitation guide.

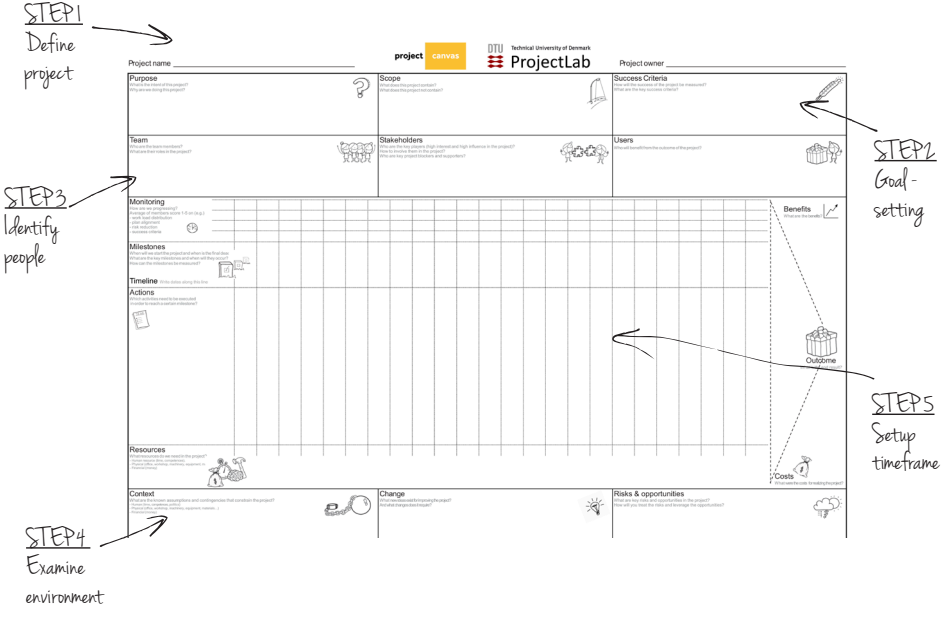
The elements of Project Canvas are divided into 5 groups. Each group represents a certain step in the facilitation process. The illustration shows how the elements are organised and the order in which they should be examined. The questions for each element on the canvas allow project team members to gain a shared understanding of what to focus on. The questions also guide the discussion to simplify the decision making process.

For using Project Canvas a facilitator is needed. The facilitator can be one person (e.g. a teacher or project leader), but can also be a group who co-facilitate (e.g. a study group). The facilitator has been introduced to Project Canvas in advance, either in a course or workshop, or by reading through the explanation of elements given in Chapter 2 on his/her own. Each element should be explained to the team by the facilitator(s) before adding any information to the canvas.

Remember to discuss and make sure everyone agrees when adding new information onto the canvas. It is a good idea to use 'sticky notes' for this process so everyone can contribute. The canvas can be revised as many times as needed and does not have to be perfect on the first version.

Tip: Create a parking spot for good ideas you don't know where to put right now.

FACILITATION IN 5 STEPS



Step 1: Define Project

State the project name and the project owner - a person, group or organisation that is ultimately responsible for the success or failure of the project.

Step 2: Goal-setting

Firstly, define the project Vision: What is the basic intention of the project? Then determine the Scope of the project by exploring the boundaries of the project activities. What does the project contain and what does it not contain?

When the Vision and Scope are defined, you need to agree on some measurable Success Criteria. What do you need to achieve in order for the project to be successful? The Success Criteria can help you see, if the project is meeting the predefined goals. As the final step in the project goal-setting phase, you should define the project Outcome: What is the project end result?

Step 3: Identify People

When you have reached a shared understanding of what the project is, it is time to focus on the people in and around the project. Start with the Team: Who are the team members and what are their roles in the project?

After that, focus on your Stakeholders: Who has an interest in the success of the project? In what way are they involved in the project? It is equally important to understand who will be the Users that benefit from the outcome of the project. These can also be stakeholders and team members.

Step 4: Examine Environment

It is time to look at the project environment. First, focus on the project Resources: What resources do you need? This includes financial, physical and human resources of the project. Second, look into the Constraints. What are the known limitations of the project? While constraints help you define what is certain in the project environment and establishes the boundaries, assessing the Risks will help you to be prepared for any uncertainties. So, ask your team (or yourself) what might happen that could restrict the project?

Step 5: Setup Time Frame

The last step is to create the project timeline. Start by defining the project Milestones as a series of tangible events or deadlines that are essential to the project's progress. When will you start, and when is the deadline? What are the key milestones and when will they occur?

After listing the project Milestones, it is time to review Activities. Which Activities need to be executed to reach a certain milestone? List the activities under the milestone(s) they relate to.

Where to use Project Canvas

Project Canvas can be used for different purposes depending on the size and complexity of the project, the needs of the team, and stage which the project has reached. The use of Project Canvas is divided into three contexts:

– **The project kickstart**
for pitching & initiating projects

– **The project overview**
for briefing, communication & status

– **The project management**
for assigning tasks and charting progress

The Project Kickstart

Project Canvas can be used before anything has been defined in a project. In this context, Project Canvas is a pre-project tool which provides an overview of what needs to be covered to get a shared understanding of the project.

When moving through the 12 elements in the canvas, make sure the group is given time to brainstorm and discuss different perspectives. Welcome and encourage contributions, but be sure to agree on content before it is put onto Project Canvas.

The Project Overview

After a project has been initiated and work has commenced, Project Canvas can be used for communicating with stakeholders, e.g briefing or reporting project status. Use Project Canvas to ensure everyone understands: completed and ongoing tasks, any changes to resources or scope, and how to manage present risks.

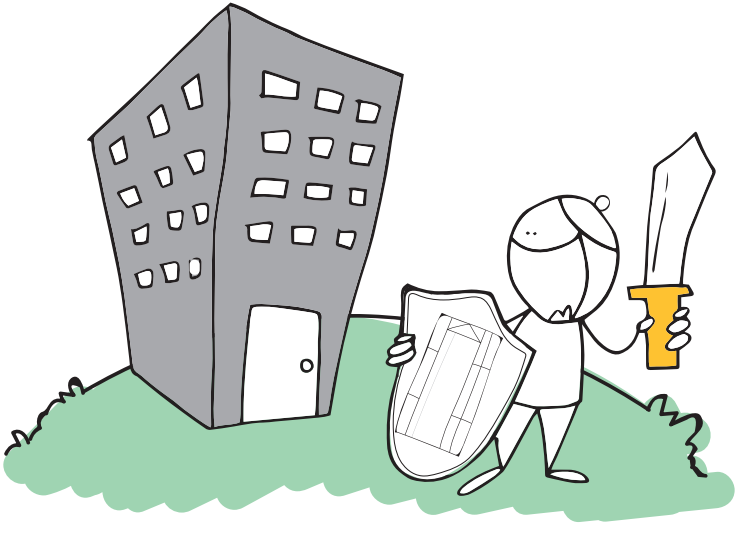
The Project Management

When a project is already underway and

the project group requires a simple project management tool, Project Canvas is useful for assigning tasks and charting progress. In this context, the tool allows all members of the project group to gain perspective about a project's status on a daily or weekly basis.

Context of Use	Project Kickstart	Project Overview	Project Management
Conditions	Pre-project tool, Brainstorming, Discussion, Definition.	Communication with Stake-holders, Briefing, Reporting status.	Project management, Assigning tasks, Charting progress, Controlling pro-cess.
Guidelines	Starting from the question "What is the project about?" explore all the elements on the Canvas (this can be done by one or several team members). When working in the group: encourage brainstorming and discussions, consider different perspectives and opinions. Keep it simple: don't include too much information, only what is relevant and useful.	Begin by presenting activities which are complete and then the progress towards success criteria. (status) Focus on activities which change over time. Monitor changes to available resources and identify scope creep to maintain focus. Understand the present risks and how to manage them.	Led by the project manager use the canvas on a daily or weekly basis. Sign off against completed tasks. Assign resources to new activities. Monitor the project variables to control and optimize the workflow.
Average Time frame*	2-4 Hours	0.5-1 Hours	Ongoing

* The specified time frame varies according to the complexity of a project and size of the project team. The estimated team size is 4-12 people.



Project Canvas and Intrapreneurship

The canvas is useful in a teaching context, especially when students work with intrapreneurship projects in real organizations. It can also be used as a communication means between student groups and teachers, for example, during preparation for exams, or in order to avoid assumptions and misinterpretation.

Project Kickstart

Study projects often suffer from the dilemma of having to deliver both academic project work and real value to a company. The process of visualizing both sets of deliverables on the canvas, leads to better dialogue between students and teachers during the project period. Focusing on Vision, Scope and Outcome is a good way to show how learning goals complement the company's objectives.
The teacher introduces and facilitates a kickoff session where the students learn to use the canvas and make a preliminary plan for their coming project(s). This helps to break down information that needs deeper discussion and to highlight various elements of project learning, including issues, which are unclear and need to be resolved at an early stage.

Project Overview

The canvas can serve as a dialogue tool during supervision meetings between a teacher and students. It is easy for the supervisor to get a quick update on both the progress and the students' understanding of the project.

Exam

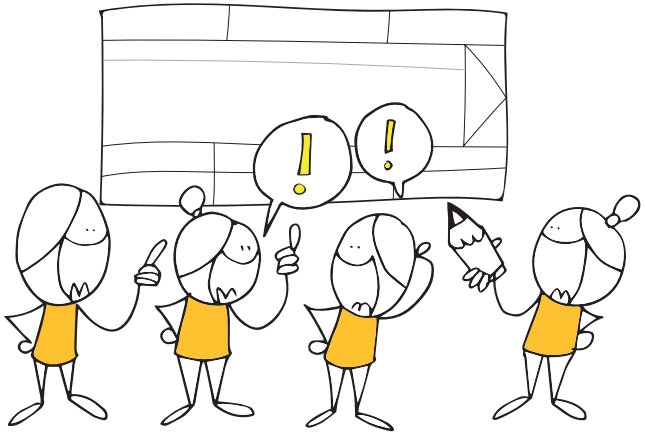
During exam, the canvas can be used as a way to illustrate the research and a project development process.

Authors:
Simon Stubben
Thomas Simon Olesen
Nina Bonne Breum
Sune Liengård
Markus Glavind
Theodosios Kokotas
Christian Thuesen

Editors:
Howard Wills
Yulia Tchernaya
Jesper Knoop-Henriksen

Illustrator:
Cecilie Otzen, Sketchy Banana

Layout by:
Howard Wills



We would like to thank
Nynne Christiansen, Mette Fischer Thomsen and Anam Nabil for their contribution.

Partners:
DTU Engineering Systems
Department of Management Engineering
ProjectLab

FONDEN FOR ENTREPRENØRSKAB
MEDLEM AF JA WORLDWIDE

DTU Diplom
Center for Diplomingeniøruddannelse

Version: 2.2
Date: 05/01/19
Edited by: Markus Glavind