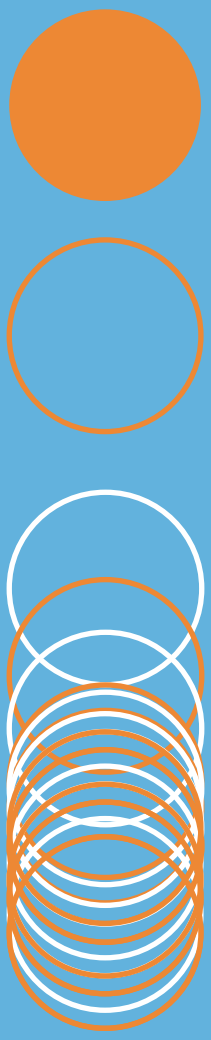
APPENDICES

Designing a project selection toolkit for Philips' value based care studios

2019. 7.11



More details...

>> Master thesis by Yiting Jia

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Appendix A : interview guide

A.1 : interview guide for validating design intervention opportunities and for collecting related criteria

Current situation about project selection process

1. Do you have any experience in project selection on the basis of value-based care? If so, could you share the experience with me?

2. What aspects do you think are essential to consider in project selection on the basis of value-based care?

3. What you think are the main barriers in project selection, and how do you think to solve them?

4. In selecting suitable project, collaboration might be essential. There might be difficulties because of different professional background and different cultures. What you think is important when considering the " collaboration" element in project selection?

5. I am going to design a project selection toolkit for the Maximum healthcare lab on the basis of VBC. What do you think are essential to pay attention to creating such a toolkit?

Feedback on criteria I identified

6. What's your suggestion or feedback on the current summarized criteria I have identified for project selection in value-based care studios?

7. For all criteria, do you think these criteria are equally important? Do you think they should be considered at the same time or different stages?

General questions

8. Is there anything that you think is important related to project selection but I haven't mentioned?

9. Could you recommend useful documentations to read or related people you think are helpful to talk to?

A.2 : interview guide for collecting feedback on project selection frameworks and corresponding toolkit prototypes

1. project introduction 15 min

Question:

Do you think the project selection journey identified is the usual scenario you experience in practice?

Do you think the two identified opportunities are the most important ones? Is there any new opportunity you think is also important?

2. Project description template and project evaluation template use 10min

Question:

Do you think some criteria are not essential or suitable for project selection in value-based care studios? And are there any criteria that you feel are important while there doesn't exist on the forms?

For the definitions, examples, indicators related to each criterion, do you think they are easy to understand? What's your opinion about them?

3. Guiding canvas introduction and digital platform introduction 30 min

Question:

What's your opinion about the suggested process? Do you think it is helpful?

What do you think about the digital platform and charts in the digital platform?

Appendix B: complete summary of sub-criteria

B.1 Summarized sub-criteria from project management field

A1. importance of the project & willingness of stakeholders

Definition : Whether the project could solve or lighten the critical problems of stakeholders & to what extent stakeholders are willing to tackle it.

Similar terms used from literature

[M] Gap value

[N] owner's willingness to take risk

[O] facilitating competition advantages

A2. knowledge return

Definition : It means the new knowledge and competence gained in the project.

Similar terms used from literature

[E] new knowledge

[K] learning and knowledge

A3. environmental benefits

Definition : It means to what extent the project contributes to protecting the environment and reducing waste.

Similar terms used from literature

[K] social benefits

[K] environmental benefits

[H] society and environment

[K] benefits to community

[G] enviromental considerations

Terms belonging to this criterion

[K] recycling of materials

[K] reduction of the usage of natural resources

[K] reuse of parts

A4. customer needs & satisfaction

Definition : It means the fulfillment that customers derive from the solution of the project provided.

Similar terms used from literature

[E] customer satisfaction

[D]customer satisfaction

[K]meeting customers' needs

[B] customer needs

[F] customer benefits

[F] customer value

[F] customers' satisfaction

A5. strategic fit

Definition : It means to what level the project helps stakeholders realize the strategic objectives.

Similar terms used from literature

[M] to what extent contributing to ambition realization

[A] strategic relevance

[F] strategy relevance

[F] strategy alignment

[E]corporate strategy(business fit)

[K]strategic alignment

[G]strategic fit

[D] impact on business strategy

A6. impact on other projects

Definition : It means impact that the project contributes to other projects in the organization(like financial impact; knowledge impact; experience impact etc.)

Similar terms used from literature

[K] relationship with other projects

[K] extended benefits in other projects

[E]project optimisition : strategic coherence & project interdependency

[K]potential for replicability or expansion

Terms belonging to this criterion

[G]technology applicability to other products and processes

[G]technical record on projects (data)

A7. employee impact

Definition : It is the benefits the project contributes to employees (like safety, meeting their needs, etc).

Terms belonging to this criterion

[G]workplace safety

[E] maximisation of security

[K]employment generation

[K]team motivation

project management field

Figure 50: seven sub- criteria about "desirability" from project management field

B1. competence analysis

Definition : It is the competence needed to complete the project.

B1.1 Core competence leverage analysis

<Similar terms used from literature>

[F]using core competence

[B]logistics and distribution strengths

B1.2 competence needed & availability analysis

<Similar terms used from literature>

[B] manufacturing compatibility

[G]existence of required competence

Terms belonging to this criterion

<Technology needed & availability analysis>

[B]technology competency

[E] basic technology competency and engineering competence

[B]technology availability

[E]innovation of technology level

[N]technology availability

[K]degree of innovation

<other>

[C]in-house design ability

[N]contractor's capacity, technology availability, complexity,innovation

[K]project complexity

[F]technical complexity

B2. regulation impact

Definition : It is the regulation impact on the project.

<Similar terms used from literature>

[K]compliance with the regulatory aspects

[N] political impact

[G]external regulations

Terms belonging to this criterion

[K]political benefits

[K]patentability

B3. feasibility of project itself

Definition : It is the probability of the success of the project itself.

<Similar terms used from literature>

[N] risk allocation

[K] uncertainties involved

Terms belonging to this criterion

<Technology risk>

[A] technical risk

[F]size of technical gap

[G] probability of technical success

[E]technology gap

[E] technology feasibility of project

project management field

Figure 51: three sub- criteria about "feasibility" from project management field

C1. financial investment needed & availability analysis

Definition : It is the needed investment for the project and the available situations of organizations.

Similar terms used from literature

[D] project cost
[I] implementation cost
[N] life cycle cost
[E]resource and equipment availability
[G]availability of available resources
[P] associated costs

Terms belonging to this criterion

[K] investment in HR
[K] investment in technology
[K] investment in marketing
[K] investment in infrastructure
[K] investment in suppliers

C2. market impact

Definition : Market impact is the positive or negative impact that market impact on the attractiveness of the project solution.

Terms belonging to this criterion

<competition>

[G]number and strength of competitors
[F]competitiveness
[E]competitive position
[E]market maturity
[E]the price of similar rival products
[E]the length of product life cycle

<market analysis>

[F] market growth & future potential
[E] market demand (latent need)
[E] increasing sales
[F] market size
[G] potential size of market

C3. economic return

Definition : Economic return is the money made or lost on an investment.

Similar terms used from literature

[F] financial return (NPV, ECV, IRR)
[K]potential revenue
[E]economic return
[D]finanical impact

C4. cost overrun risk

Definition : It is the risk of cost overrun for the project.

Similar terms used from literature

[F] certainty of financial estimates
[E]economic success

project management field

Figure 52: four sub- criteria about "viability" from project management field

B.2 Summarized sub-criteria from information technology field

A1. importance of the project & willingness of stakeholders

Definition : Whether the project could solve or lighten the critical problems of stakeholders & to what extent stakeholders are willing to tackle it.

Similar terms used from literature

[O]importance to the organization's future success

A3. environmental benefits

Definition : It means to what extent the project contributes to protecting the environment and reducing waste.

Similar terms used from literature

[J] environemntal impact

A7. employee impact

Definition : It is the benefits the project contributes to employees (like safety, meeting their needs, etc).

Similar terms used from literature

[C] productivity improvement in target users

A5. strategic fit

Definition : It means to what level the project helps stakeholders realize the strategic objectives.

Similar terms used from literature

[C]company objectives

[C]strategic dimension

[I] alignment with strategic objectives

[O]contribution to organizational goals / objectives

A4. customer needs & satisfaction

Definition : It means the fulfillment that customers derive from the solution of the project provided.

Similar terms used from literature

[C]user satisfaction

[C]user needs

[O] required by customers/suppliers

[O] match with users' interests

A6. impact on other projects

Definition : It means impact that the project contributes to other projects in the organization(like financial impact; knowledge impact; experience impact etc.)

Similar terms used from literature

[I] dependency to other projects

[J]similarity to existing business

information technology field

Figure 53: six sub- criteria about "desirability" from information technology field

B1. competence analysis

Definition : It is the competence needed to complete the project.

B1.1 Core competence leverage analysis

<Similar terms used from literature>

[I] skill alignment

B1.2 competence needed & availability analysis

<Similar terms used from literature>

[I] innovation required

Terms belonging to this criterion

<Technology needed & availability analysis>

[I]technology requirements

[O]availability of needed technology

<other>

[O]availability of skilled is personnel

[C]in-house design ability

B2. regulation impact

Definition : It is the regulation impact on the project.

<Similar terms used from literature>

[O] required by regulations

[C] political dimension

Terms belonging to this criterion

[O] management support: political acceptance

[O] new industry standards

[O]internal political decisions

B3. feasibility of project itself

Definition : It is the probability of the success of the project itself.

<Similar terms used from literature>

[J] risk

[I] risk of project

[C] probability of success of project

[O] structure of risk

[O] size risk

information technology field

Figure 54: three sub- criteria about "feasibility" from information technology field

C1. financial investment needed & availability analysis

Definition : It is the needed investment for the project and the available situations of organizations.

Similar terms used from literature

[J] investment

[C]total investment

C2. market impact

Definition : Market impact is the positive or negative impact that market impact on the attractiveness of the project solution.

Terms belonging to this criterion

<competition>

[J]competition

<market analysis>

[O]growth rate

C3. economic return

Definition : Economic return is the money made or lost on an investment.

Similar terms used from literature

[J] likely profit

[O]contribution of profitability

[C]return on investment

[C]discounted cash flow

[O]benefit cost ratio

[O]rate of return

[I] ROI of project

[I] net present value of earnings

C4. cost overrun risk

Definition : It is the risk of cost overrun for the project.

Similar terms used from literature

[O]risk of cost overrun

information technology field

Figure 55: four sub- criteria about "viability" from information technology field

B.3 Summarized sub-criteria from healthcare field

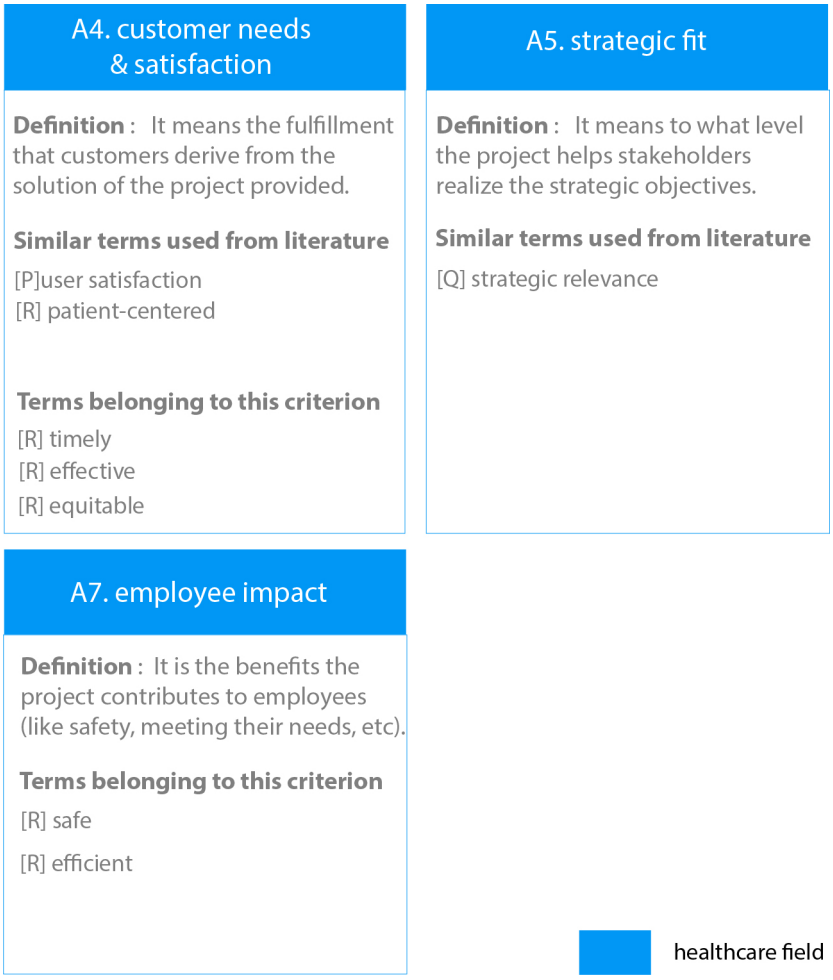


Figure 87: three sub- criteria about "desirability" from healthcare field

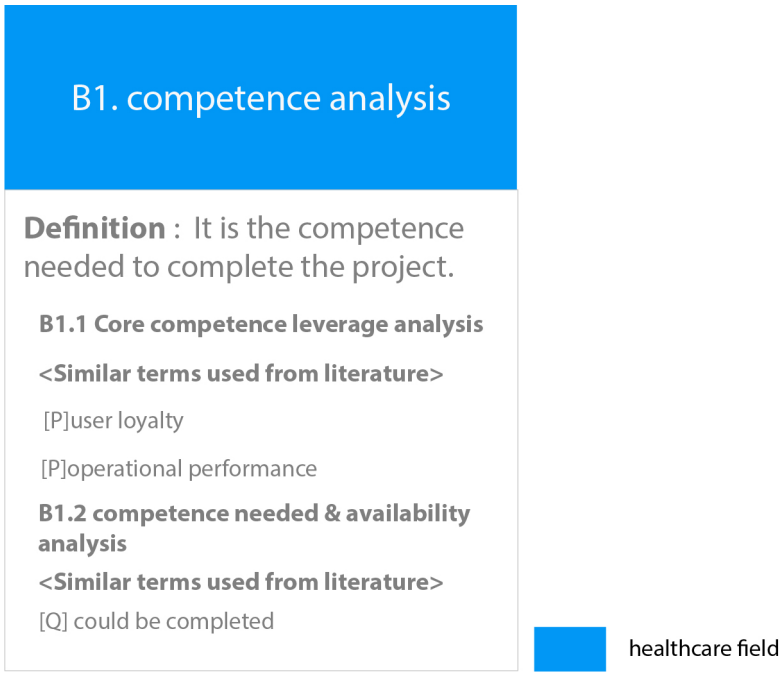


Figure 56: one sub- criterion about "feasibility" from healthcare field

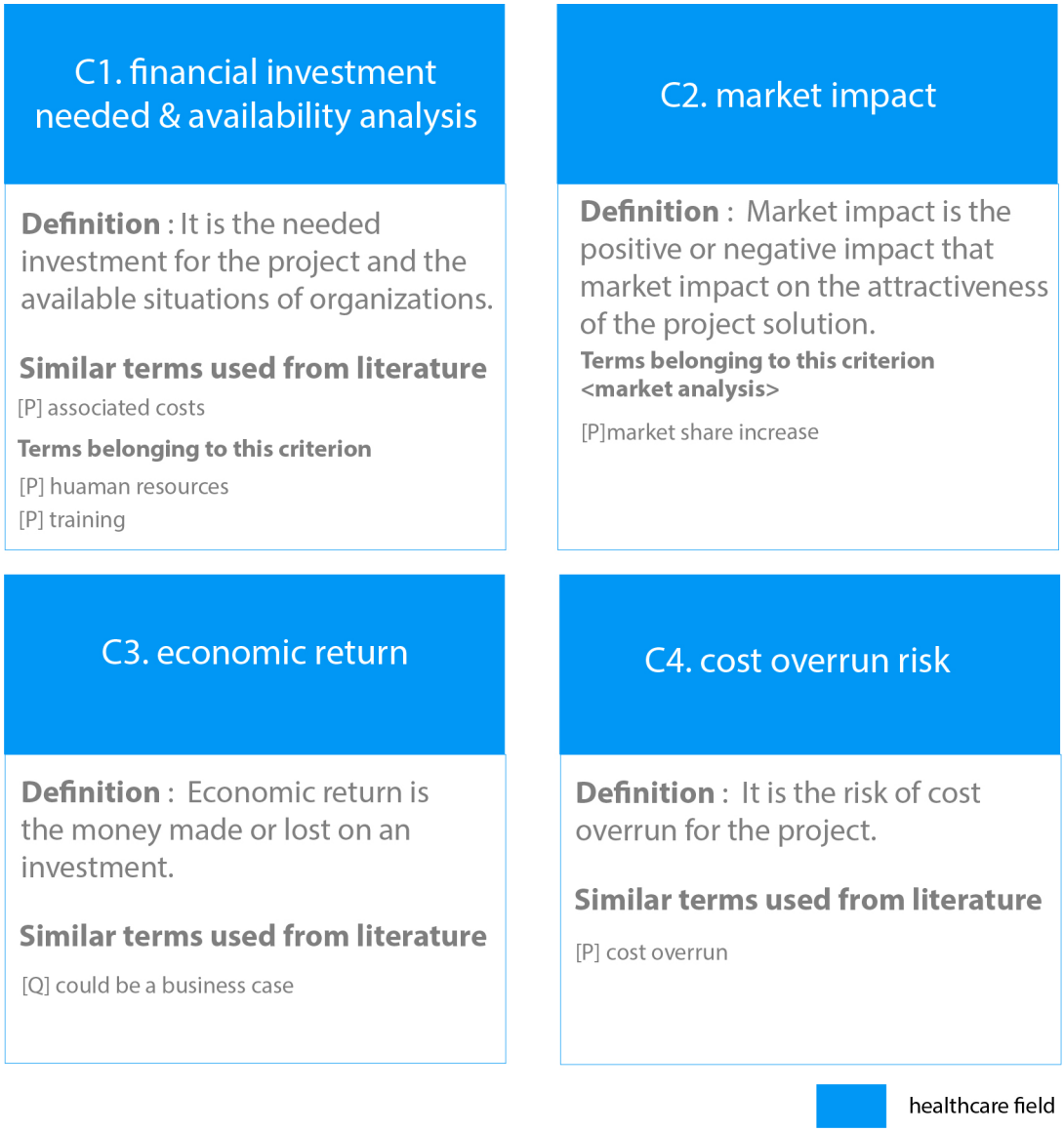


Figure 57: four sub- criteria about "viability" from healthcare field

B.4 Definitions, examples and indicators for final sub-criteria

Desirability (excluding Quadruple aim)

critical level

Definition:

This means to what extent the project is critical to your organization - whether the value of the project is enormous for your organization(the necessity of doing this project).

knowledge return

Definition:

This means whether new knowledge and competence could be gained in the project, which will benefit your organization in the future.

impact on other projects in the studio

Definition:

This means whether the value of the project will amplify or diminish the value created in other projects in the studio.

Desirability - Quadruple aim

improved patient experience

Definition:

This means increasing the sum of all interactions related to health care activities, that influence the patient's perception of the entire care process.(Jason,2014).

The summarized indicators for improving patient experience were synthesized from the research New Zealand Health Quality & Safety Commission had conducted in 2013("Development of patient experience indicators for New Zealand," 2013). They are as follows:

- Pay attention to patients' physical & emotional needs.

- Improve communication and sharing information with patients

- Improve care coordination, integration and conversion with different provider settings.

- Encourage and support patients' participation and collaboration in decision making.

better health outcomes (include individuals & populations)

Definition:

This means an increase in health resulting from measures or specific health care investments or interventions.("Outcomes | CIHI," 2019).

Indicators that could be considered:

The International Consortium for Health Outcomes Measurement(ICHOM), which is launched in 2012, is working on creating a global standard for measuring results by medical conditions for each patient group. Up to now, 28 standard sets covering different situations and for the specific patient population have been summarized, like "low back pain," "stroke," "lung cancer" ("ICHOM | ICHOM Standard Sets | View Our Collection," 2019). Figure 27 is the example visual which shows the most important outcomes to persons with Pregnancy And Childbirth.

For possible projects, evaluating how the project contributes to improved better outcomes could be based on assessing how the project will contribute to the group based on the corresponding standard sets.

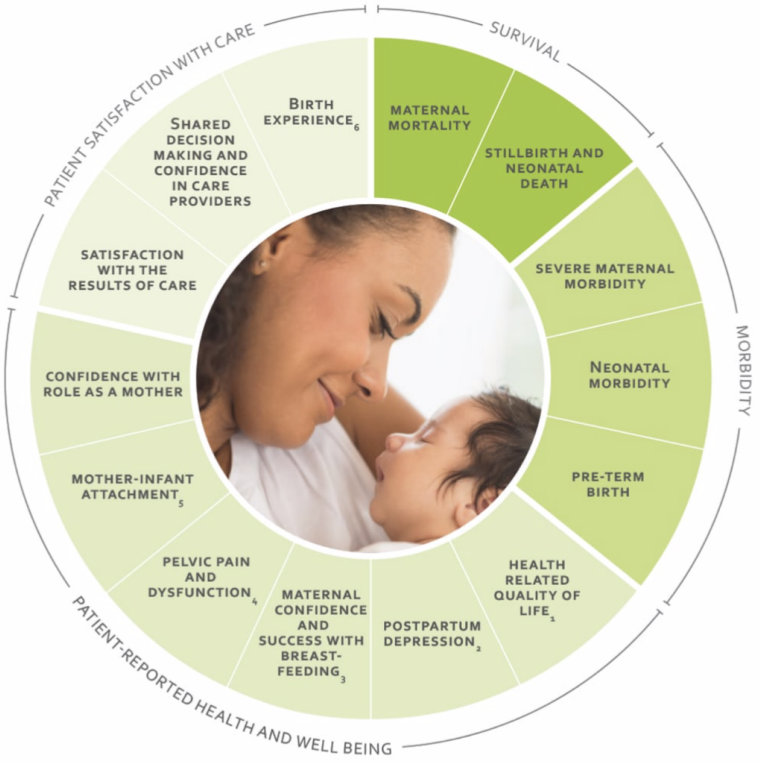


Figure 58: standard sets for Pregnancy and childbirth

improved staff experience

Definition:

This means experiencing happiness and meaning in health care work. Meaning refers to the importance of daily work, and happiness refers to the sense of success and satisfaction brought by meaningful work.(Sikka, Morath & Leape, 2015).

Indicators that could be considered relevant to healthcare professionals' engagement have been mentioned in many reports. Finally five indicators that could be regarded as related to improving staff experience were summarized from a Computing Technology Industry Association Survey on Healthcare IT("Healthcare in digital transformation: digital and connected healthcare", 2019), Deloitte report(Bersin, Flynn, Mazor & Melian, 2017)and Philips value-based care paper ("value-based care", 2019). They are as follows:

- Facilitate effective work.
- Facilitate decision support.
- The topic provides a safe, trustful, integrative solution for staff.
- Support teamwork and working environment.
- Facilitate self development.

lower cost of care

Definition:

This means reducing costs related to healthcare events.

According to the relevant reports from the American College of Physicians(Ginsburg, 2009), Health Affairs(Fleming, 2011) and Philips internal report("value-based care", 2019), five indicators were summarized important for lowering the cost of care.

- Optimize workflow through preparation.
- Reduce cost in the process.
- Facilitate patient monitoring and management.
- Reduce waste (less variance, shorter waiting time, etc.).
- Simplify diagnostic process and procedure.

Feasibility

competence needed & analysis

Definition:
This means the competence needed to complete the project and the availability of competence of organizations.

Indicators that could be considered:
Related experience is technology competence; experts needed situations etc.

project characteristics

Definition:
This means the probabilities of success of the project itself.

Indicators that could be considered:
Is it of high possibility to complete this project in this time frame?
Is it a high-risk project or not?
How many uncertainties do we have on this project? Etc.

external conditions

Definition:
This means whether the external conditions will help or hamper the development of the project.

Indicators that could be considered:
How does the project in line with the current paradigm?
Does the project need a new collaboration? New agreements?

Viability

financial investments

Definition:
This means the investment needed for the project and the available situations of organizations.

Indicators that could be considered:
Human resource investment; research investment; marketing investment; technology investment, etc.

market attractiveness

Definition:
This means the market impact on evaluating the attractiveness of the solution to the project.

Indicators that could be considered:
The competition situation; growing or mature market; health technology assessment.

financial return

Definition:
This means the predicated money made or lost on the investment of the project.

Indicators that could be considered:
Business model; profit margin etc.

cost overrun risk

Definition:
This means the risk that the actual cost exceeds the budgeted cost.

Indicators that could be considered:
Payback time; delay risk; the certainty of financial estimate; flexibility in time etc.

Appendix C: current project selection method introduction

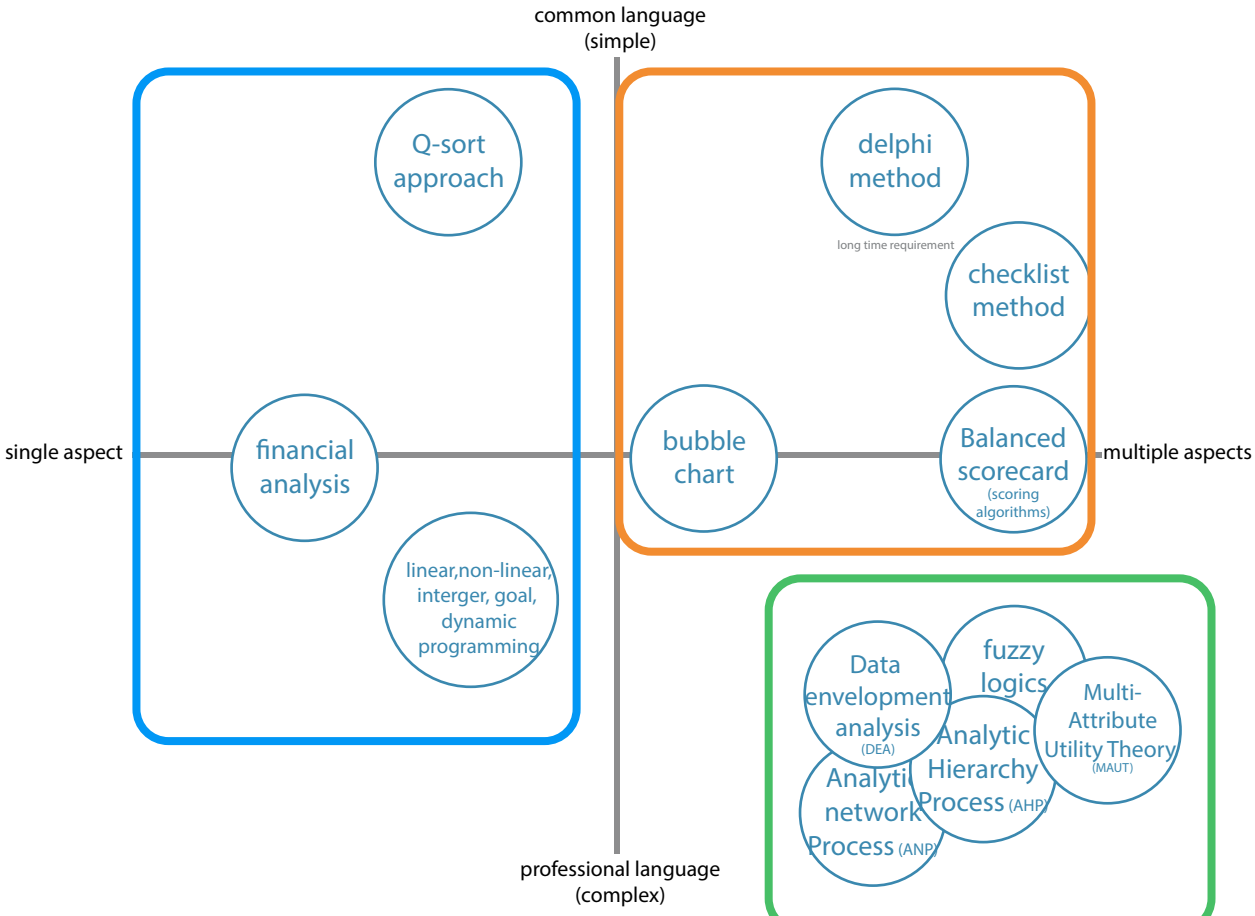


Figure 90

Q-sort approach

Description: It is a method that classifies a group of items based on subjective analysis. Participants divide projects into five sets according to a single criterion(Helin & Souder, 1974).

Characteristics*:* This method is based on subjective analysis.

---

financial analysis

Description: This method evaluates projects based on mainly financial criteria(Verbano & Nosella, 2010).

Characteristics: This method is based on financial equations.

linear,non-linear, interger, goal, dynamic programming

Description: Methods group optimizes objectives.

Characteristics: This method is based on mathematical methods and could evaluate financial aspects as well as portfolio optimization aspect.

---

delphi method

Description: Delphi is a method that finds the best situation through letting many experts answer questionnaires(Chan, Yung, Lam, Tam & Cheung, 2001).

Characteristics: This method is based on subjective analysis. It requires a long time and could cover many kinds of criteria.

---

bubble chart

Description : An information display & discussion tool. X & Y axes and the size of bubbles could display three criteria.

Characteristics: Bubble chart assesses projects through three criteria. And It provides a visual overview.

---

checklist method

Description: This checklist approach examines whether all criteria are met. It assumes that all requirements are the same vital(Heidenberger & Stummer, 1999).

Characteristics: This method could cover many kinds of aspects.

Balanced scorecard

Description: The scoring algorithm assesses potential projects through a lot of criteria and uses a specific algorithm to give scores for proposals. Different weights could be given to different criteria to represent the different levels of importance. The five-point system is one of the most accepted scales(Henriksen & Traynor, 1999).

Characteristics: This method could cover many kinds of criteria. Compared with checklists, different weights are used to obtain final figures of projects.

Data envelopment analysis (DEA)

Description: A linear programming method that doesn't assume a prior weight for inputs and outputs(Jahantighi, 2015).

Characteristics: This method is based on mathematical methods and could cover many kinds of criteria.

---

fuzzy logics

Description: The fuzzy logic could efficiently handle qualitative and quantitative data in complex problems(Salehi & Tavakkoli-Moghaddam, 2008).

Characteristics: This method is based on mathematical methods and could cover many kinds of aspects.

Analytic network Process (ANP)

Description: ANP is a technique that allows calculating the interrelationships between elements when selecting the most outstanding project(Büyüközkan & Öztürkcan, 2010).

Characteristics: This method is based on mathematical methods and could cover many kinds of criteria. What's more, it could handle interdependencies "both hierarchical and network."

Analytic Hierarchy Process (AHP)

Description: AHP selects the most critical project in a multi-criteria context(Amiri, 2010).

Characteristics: This method is based on mathematical methods and could cover many kinds of criteria.

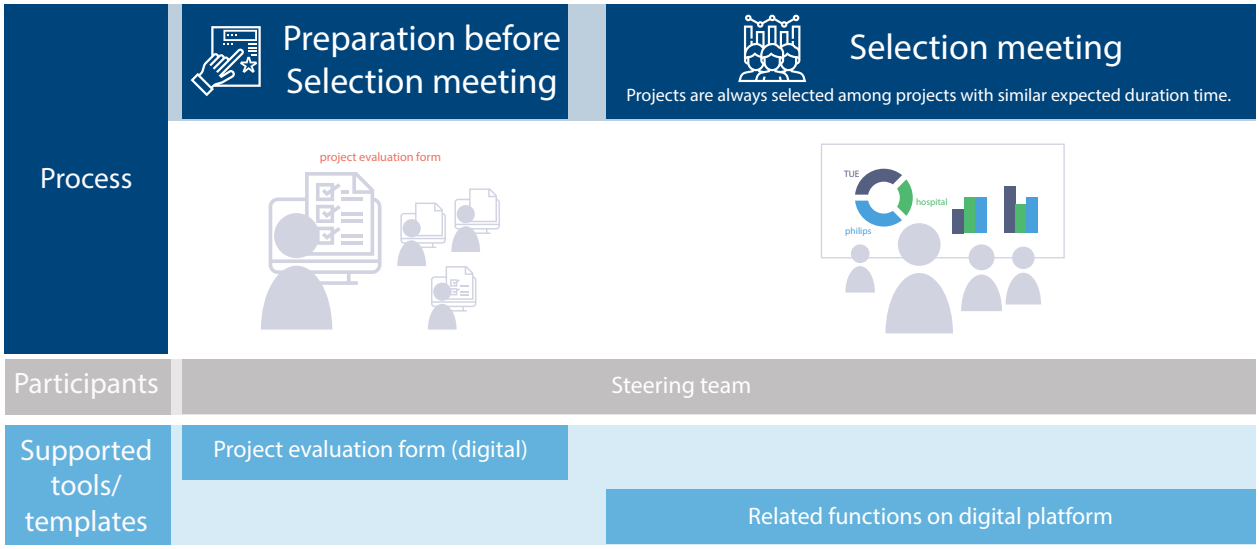
Multi-Attribute Utility Theory (MAUT)

Description: MAUT is a theory through lots of single attributes to help decision analysis(Duarte & Reis, 2006).

Characteristics: This method is based on mathematical methods and could cover many kinds of criteria.

Appendix D: First version of project selection framework & corresponding toolkit

D.1 First version of project selection framework



Steps:

1. In the "project collection" phase, healthcare professionals could document their ideas on the platform. After possible projects are collected, project evaluation forms that contain project introduction and related criteria surveys will be sent to steering team members who will participate in the project selection meeting. And they need to finish those evaluation forms.

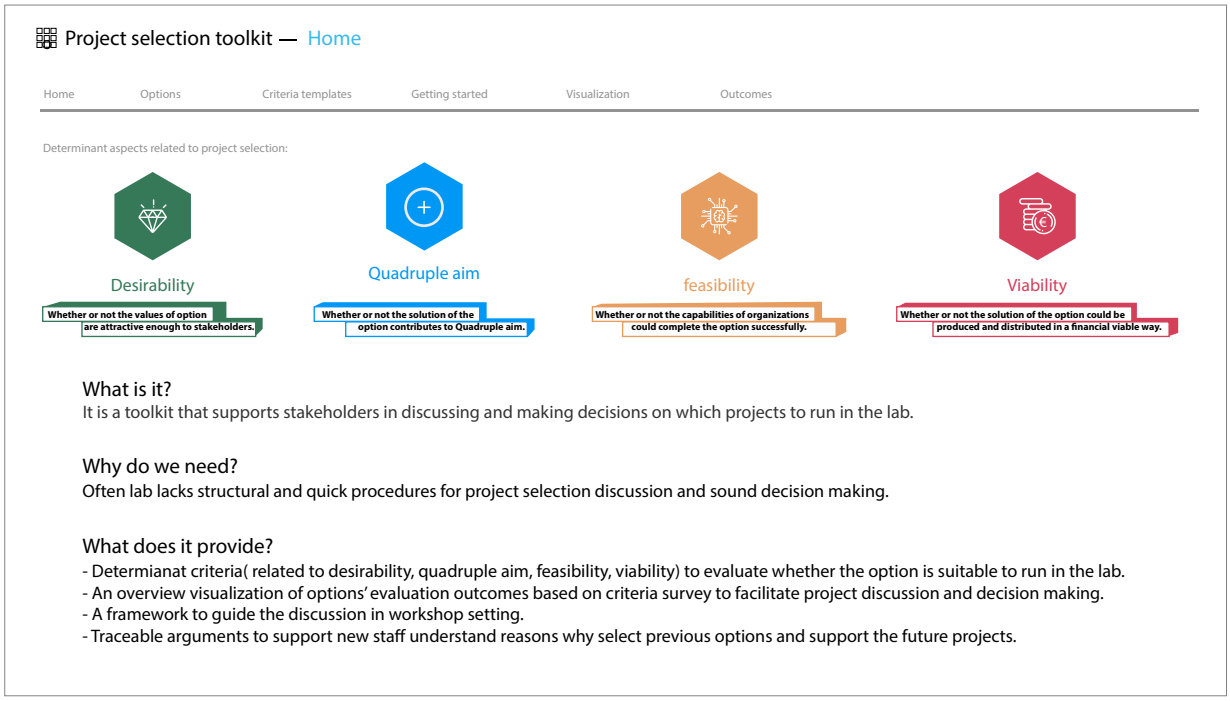
2. In the "project selection meeting" phase, all steering team members could discuss and compare projects based on the charts of outcomes of criteria surveys.

3. In the "decision making" stage, arguments for selected projects will be documented to make the selection process more traceable.

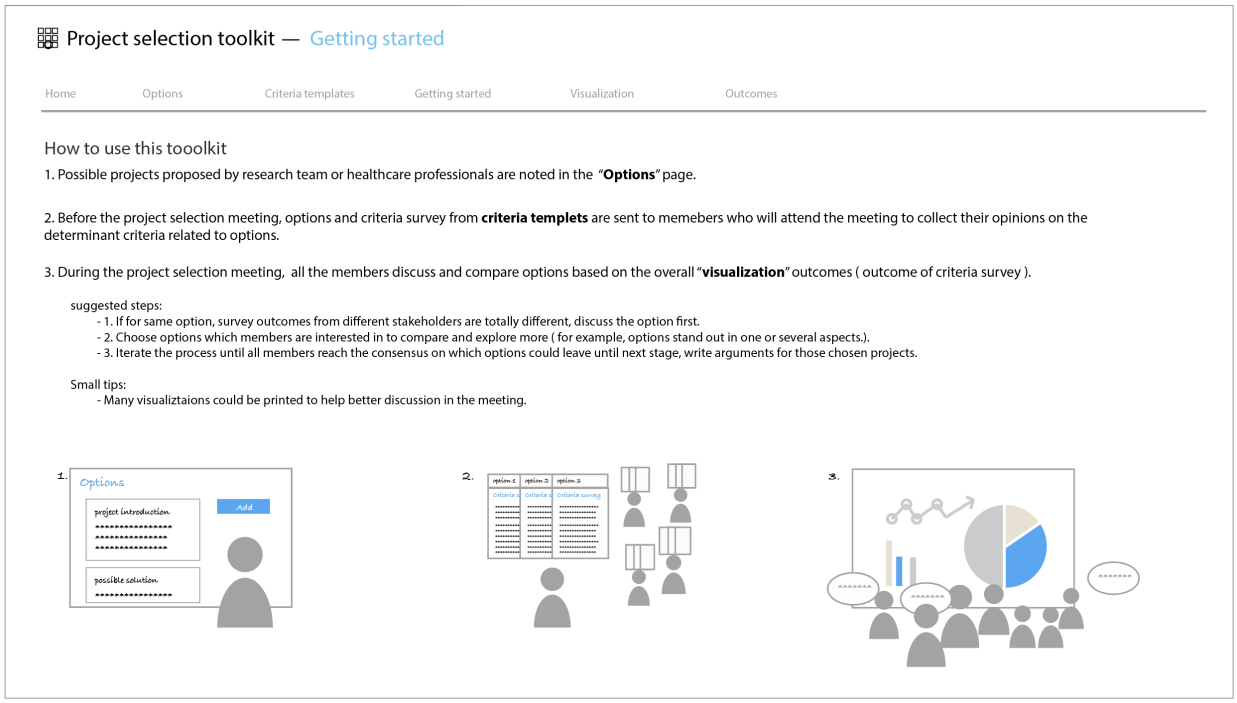
In the prototype, there were six main functions - "Home," "Options," "Criteria template," "Getting started," "Visualization," and "Outcomes."

"Options" and "Criteria template" were designed to support the "preparation" stage. "Visualization" was intended to help the "project selection meeting" stage. "Outcomes" was intended to support the "decision making" stage. Other pages were designed to explain and introduce the toolkit. Detailed situations are as follows.

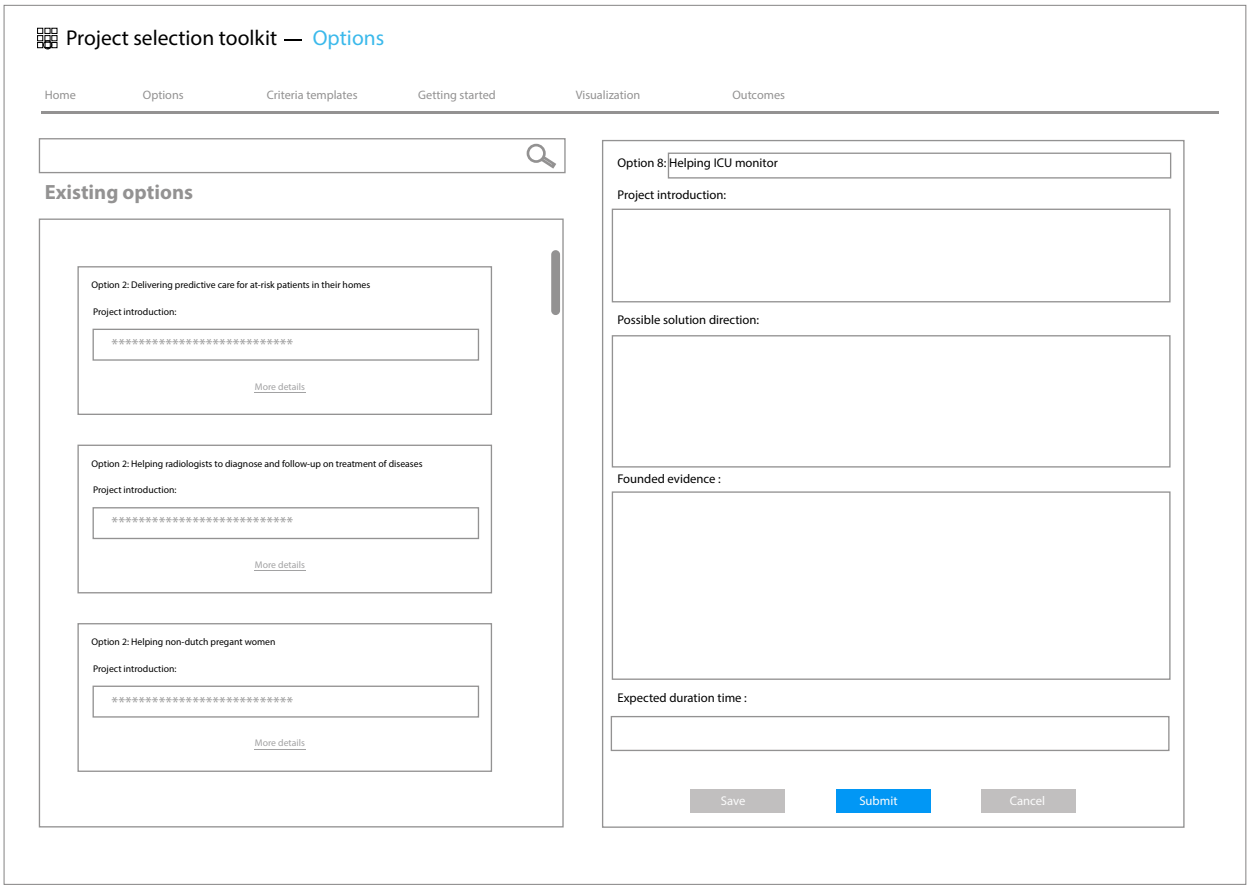
D.2 First version of project selection toolkit



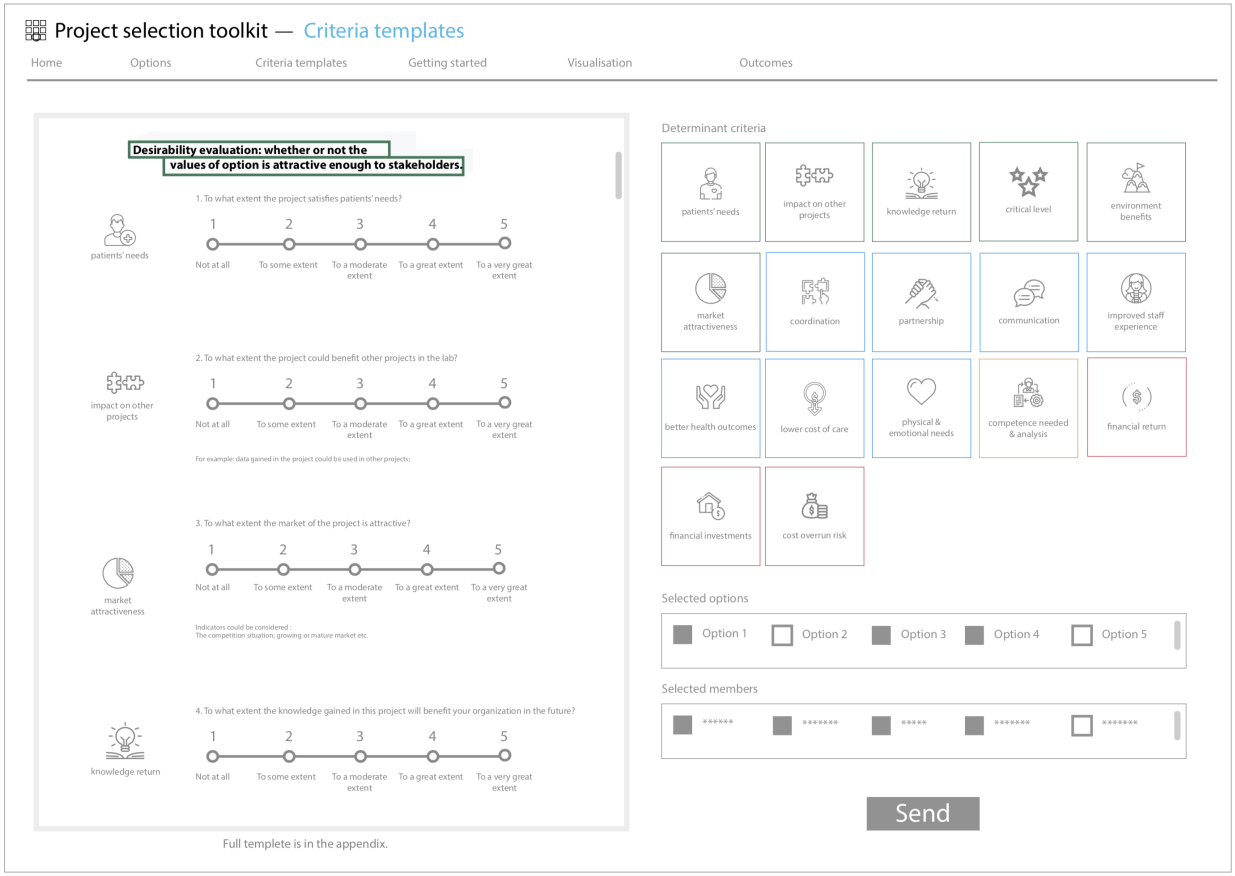
- "Home" page introduces the toolkit.



- "Getting started" page introduces how to use this toolkit.



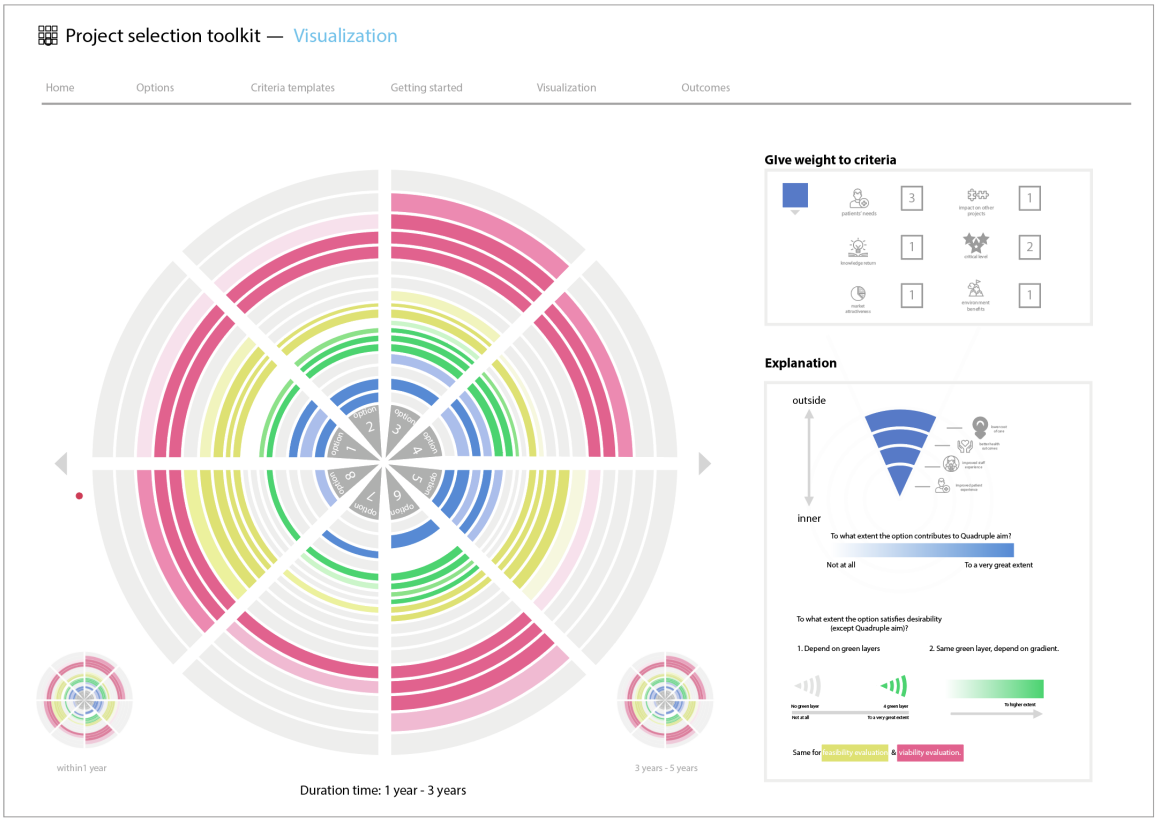
- "Option" page shows an overview of possible projects and also provides a place to write a new project down.



Full templete is in the appendix.

- "Criteria template" page provides criteria survey.

Following is the first designed version of the criteria survey. A five-point scale is used to let participants score the project performance on the corresponding criterion.



- "Visualization" page shows the outcomes of criteria surveys related to each project.

- Different projects will be classified into corresponding visualization outcome circles.

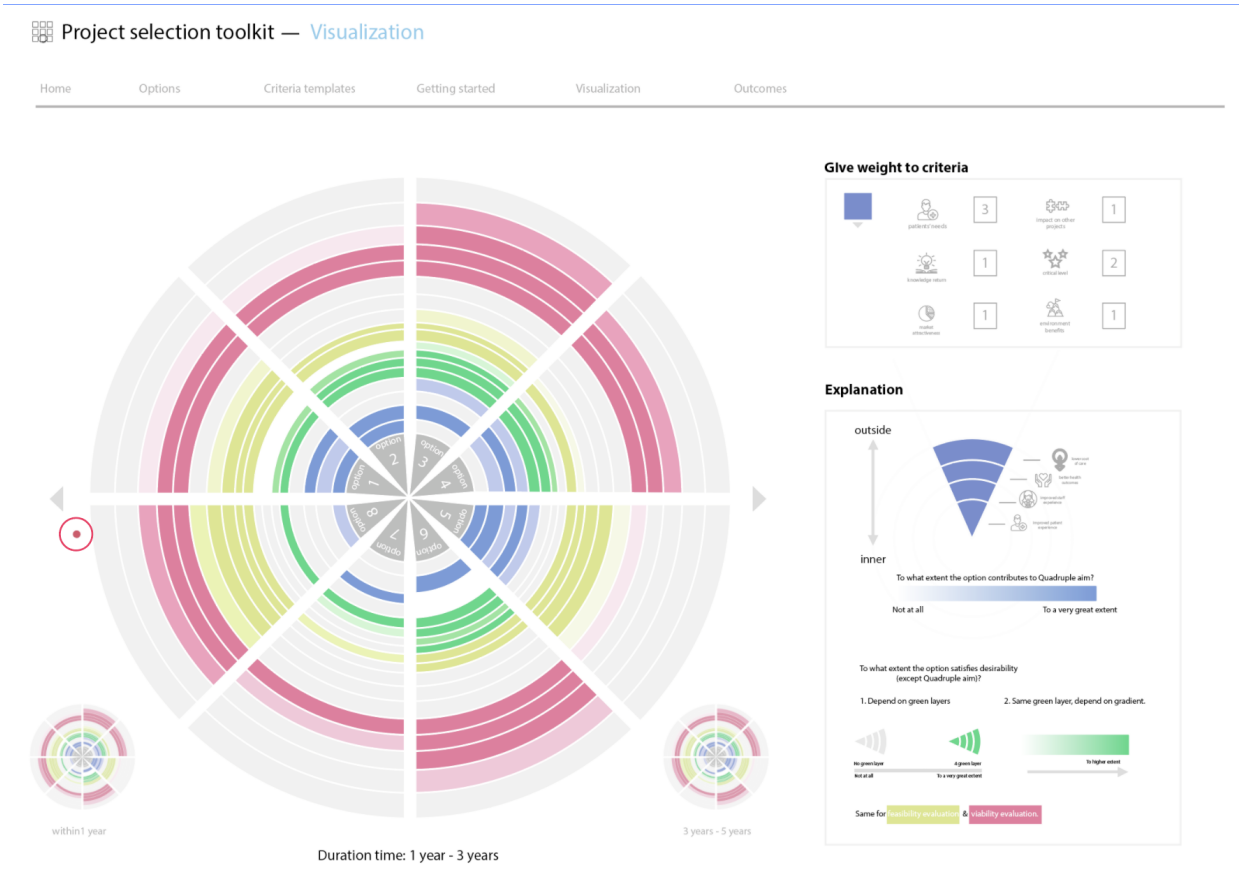
(In the example visualization page, the biggest outcome circle is equally divided by eight projects, which are all expected to take time between 1 year and three years.)

- Different colors represent outcomes of different determiant criteria.

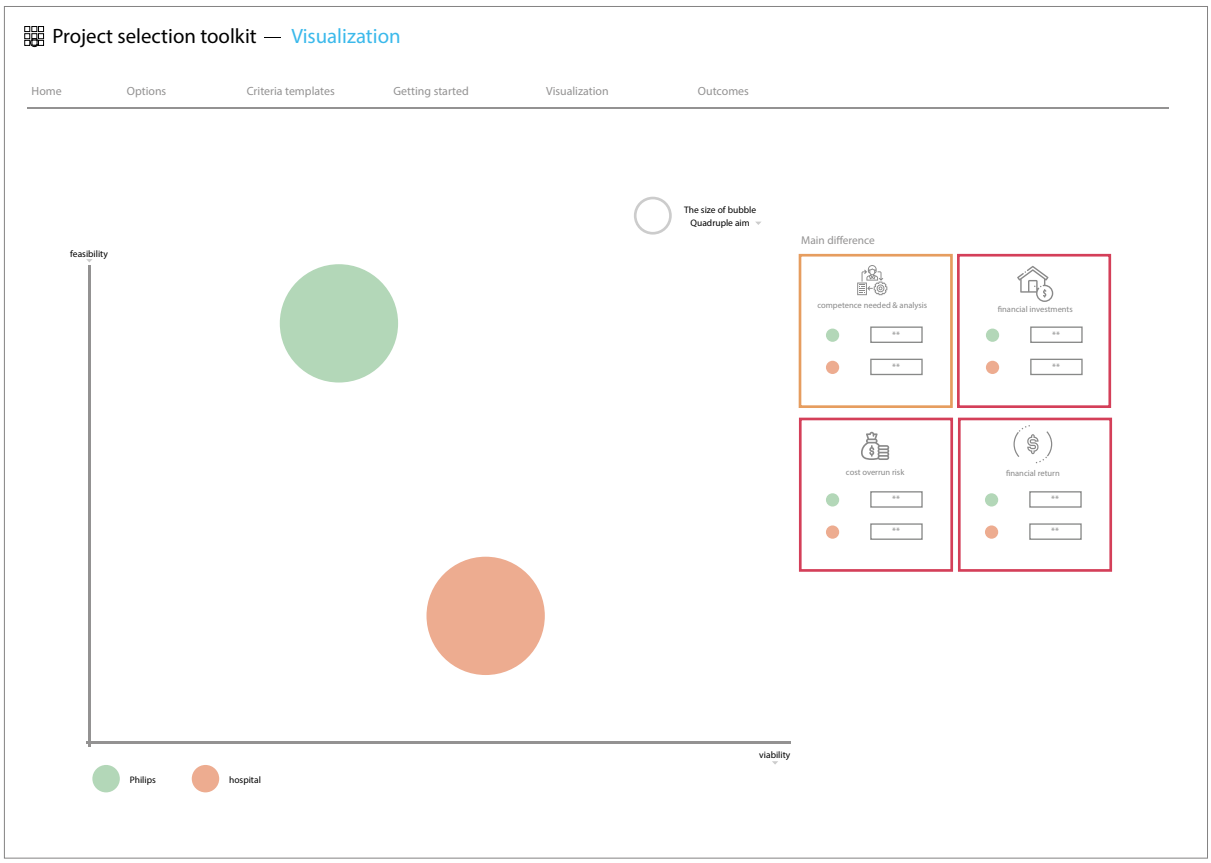
Blue represents the outcome of to what extent the project contributes to Quadruple aim. Each layer of the ring from the inside to the outside represents one aim. And the bluer the ring, the greater extent the project contributes to the corresponding aim.

Green represents outcomes of to what extent the project satisfies "desirability" except Quadruple aim. Yellow and red separately represent outcomes of "feasibility" and "viability." More green layers of rings, the greater extent the project satisfies desirability. If the numbers of green layers are the same, the greener the outside layer is, the greater extent the project meets desirability. So are the feasibility and viability.

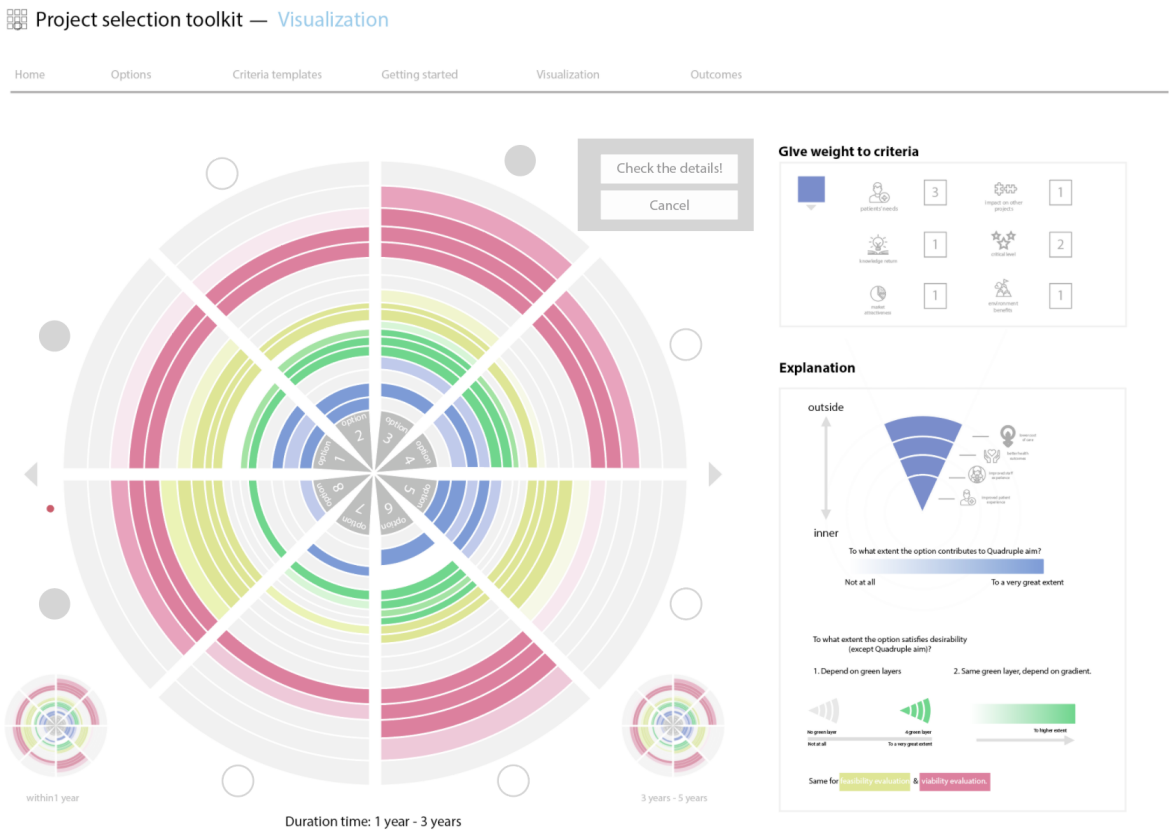
- Weight could be given to criteria if members agree some criteria are much more important than others.



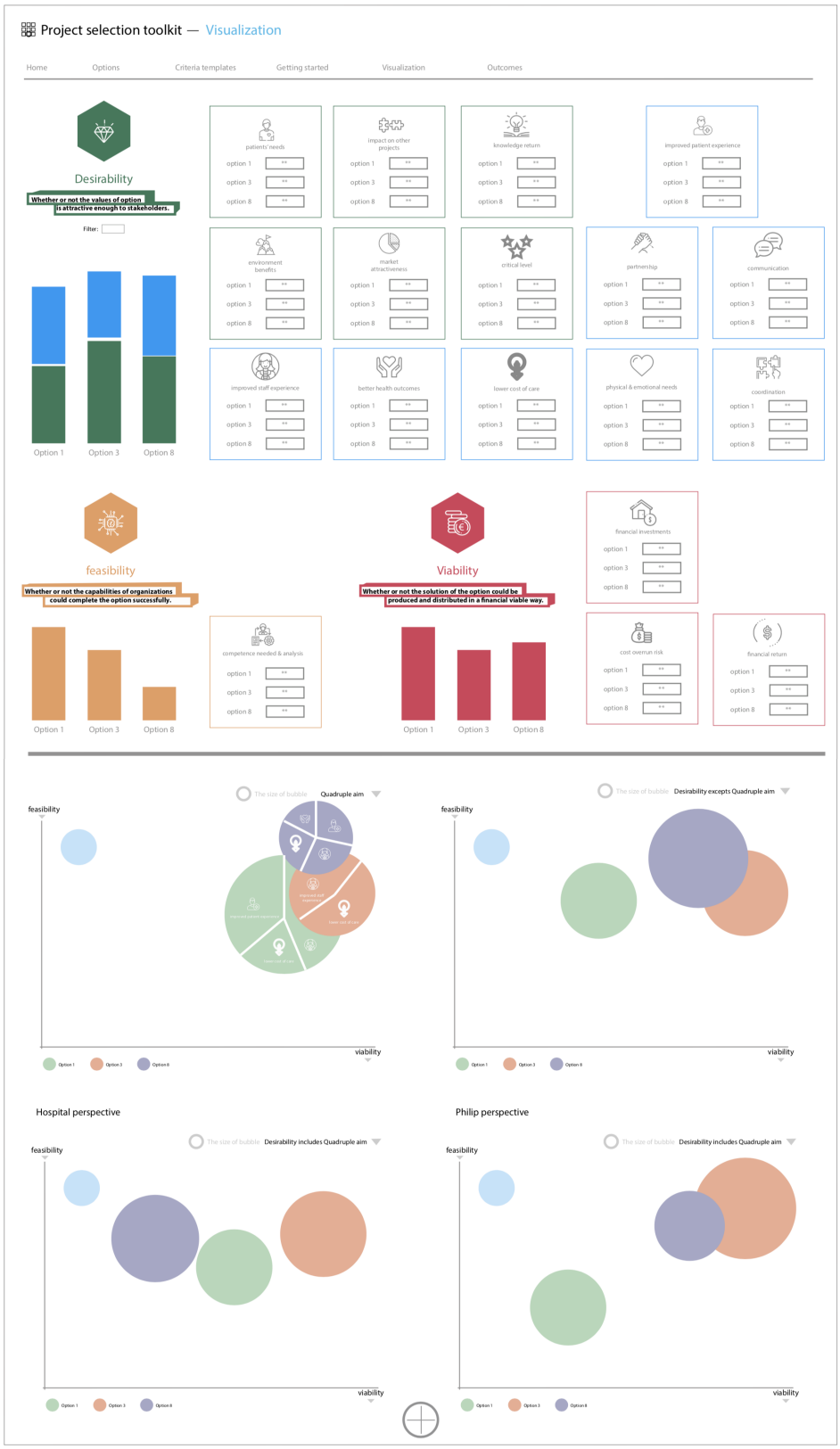
- If besides the project, there is a red dot, which means for that project, there exists at least one aspect that different stakeholders score quite differently on the same determinant criteria in the same project. Then click the red dot could know the specific situation.



- After clicking the red dot, the differences will show up, as well as the original different sub-criteria outcomes. After discussion, the score for tests could be adjusted or just kept.

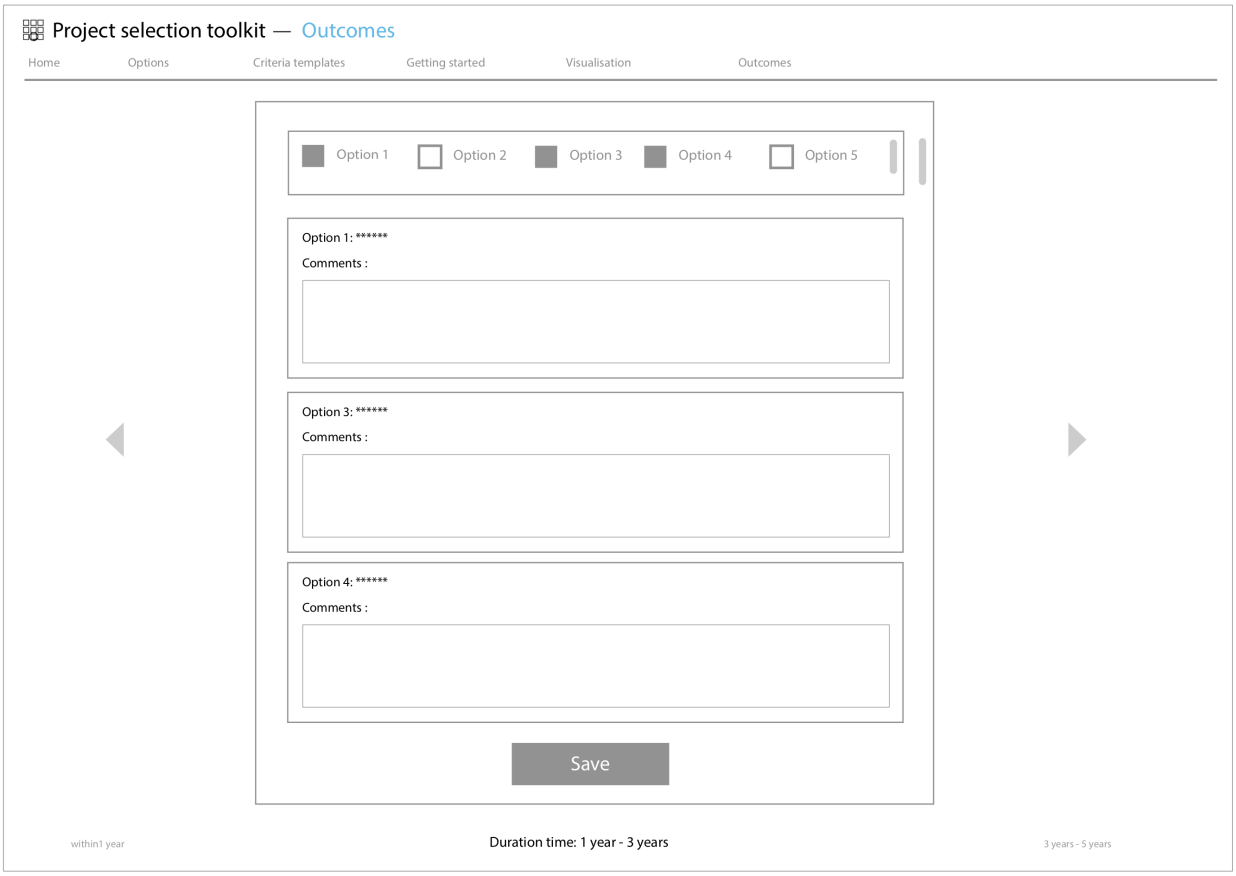


- Select projects that participants are most interested in to compare.



-The example visualization outcomes for projects 1, 3, and 8.

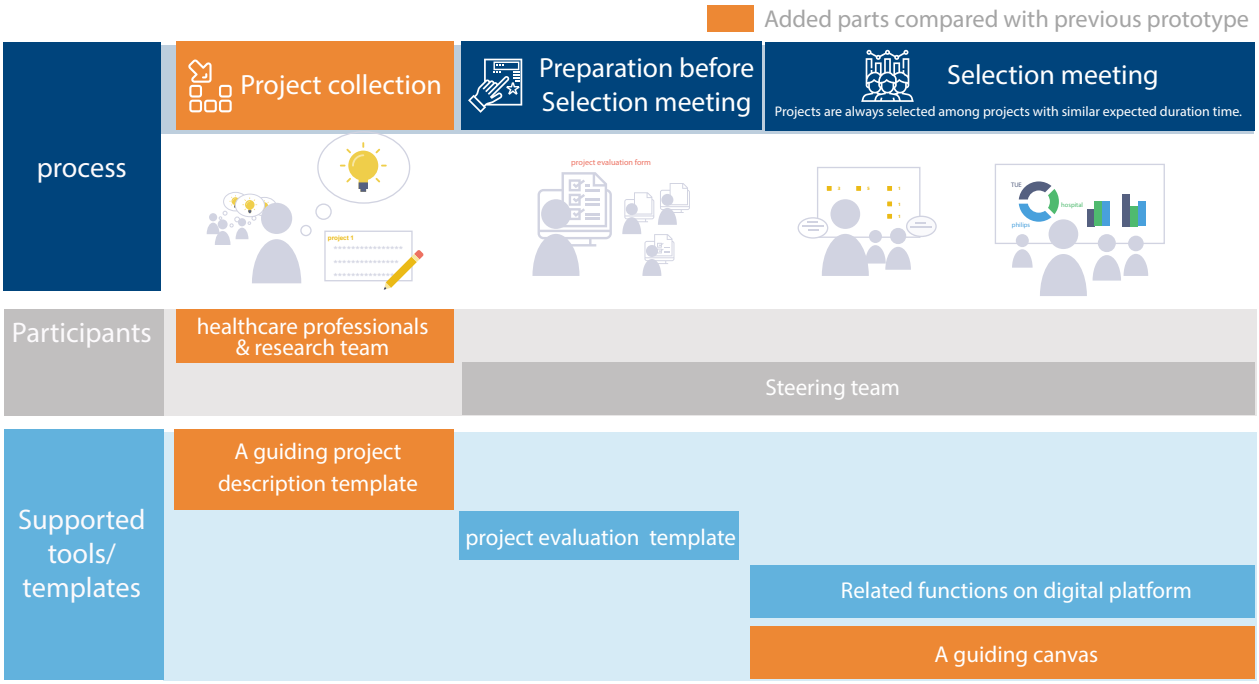
The different outcomes for each criterion will be compared.
Compared visualizations could be added and customized. There are four examples of customized compared visualizations.



- "Outcomes" page shows the selected projects and relevant arguments.

Appendix E: Second version of project selection framework & corresponding toolkit

E.1 Second version of project selection framework

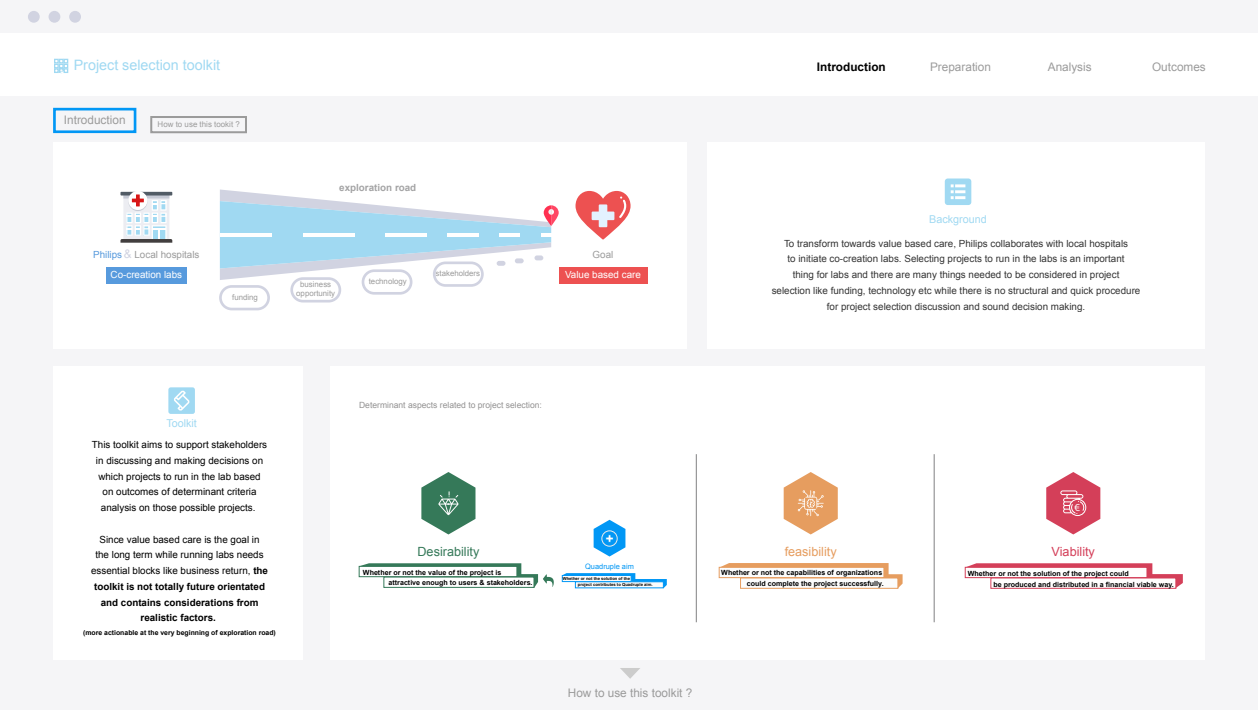


Compared with the first version of the project selection framework, the second version of the project selection framework adds a better-designed project collection phase. A guiding project description template is designed to support healthcare professionals better describe the project and let healthcare professionals and research team better add related arguments.

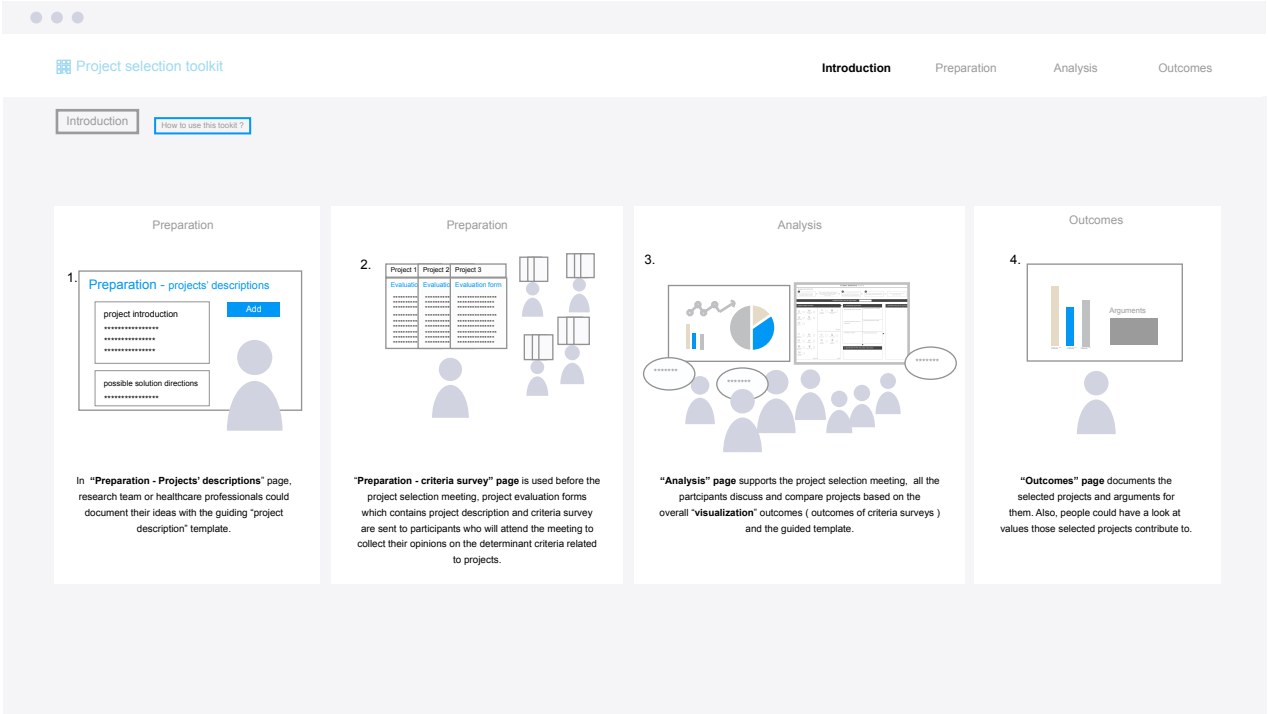
In the selection meeting, compared with the first version of the project selection framework, a guiding canvas is designed to guide the process of the selection meeting.

Prototype 2 has four functions, "introduction," "preparation," "analysis, ' and "outcomes." For each step, the related designed page is introduced.

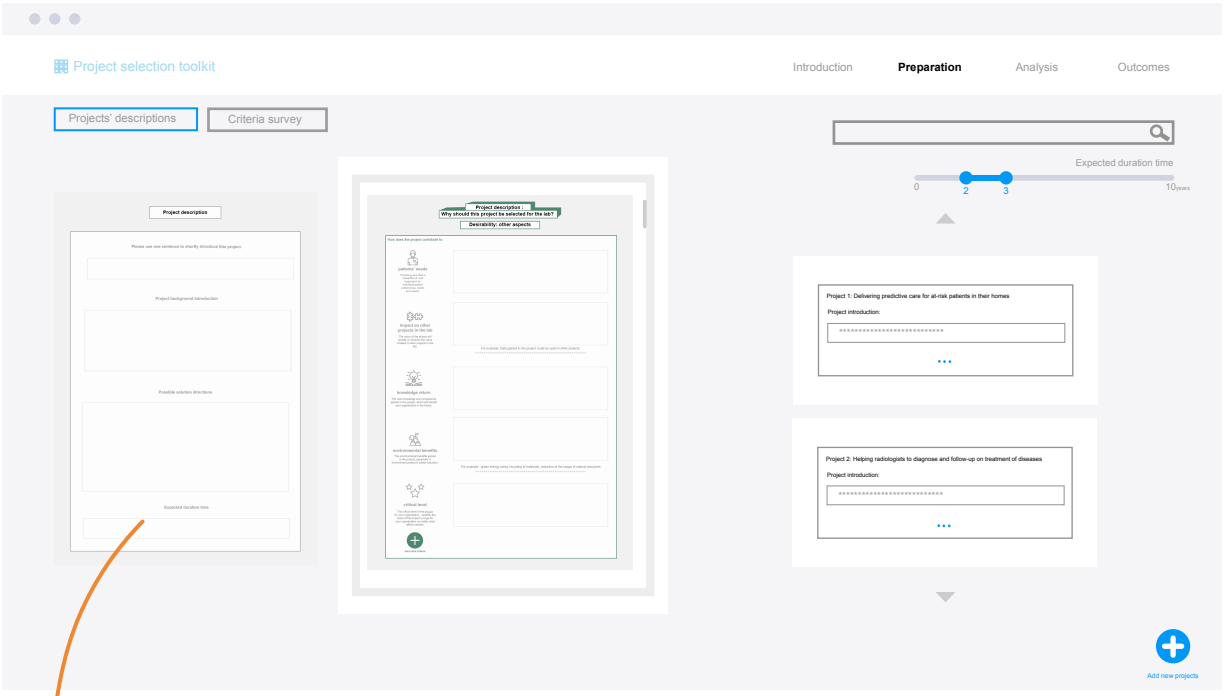
E.2 Second version of project selection toolkit



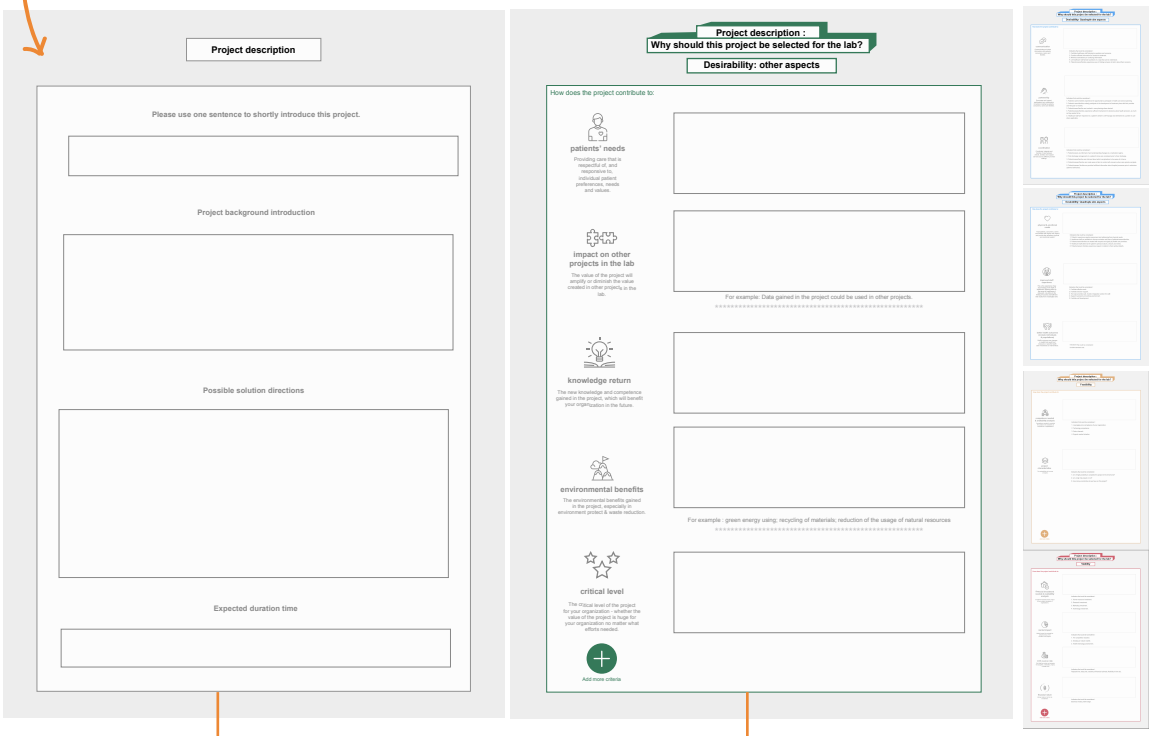
- "Introduction" page shows the background and the position of the toolkit.



- "Introduction - how to use this toolkit" page explains how to use this toolkit.

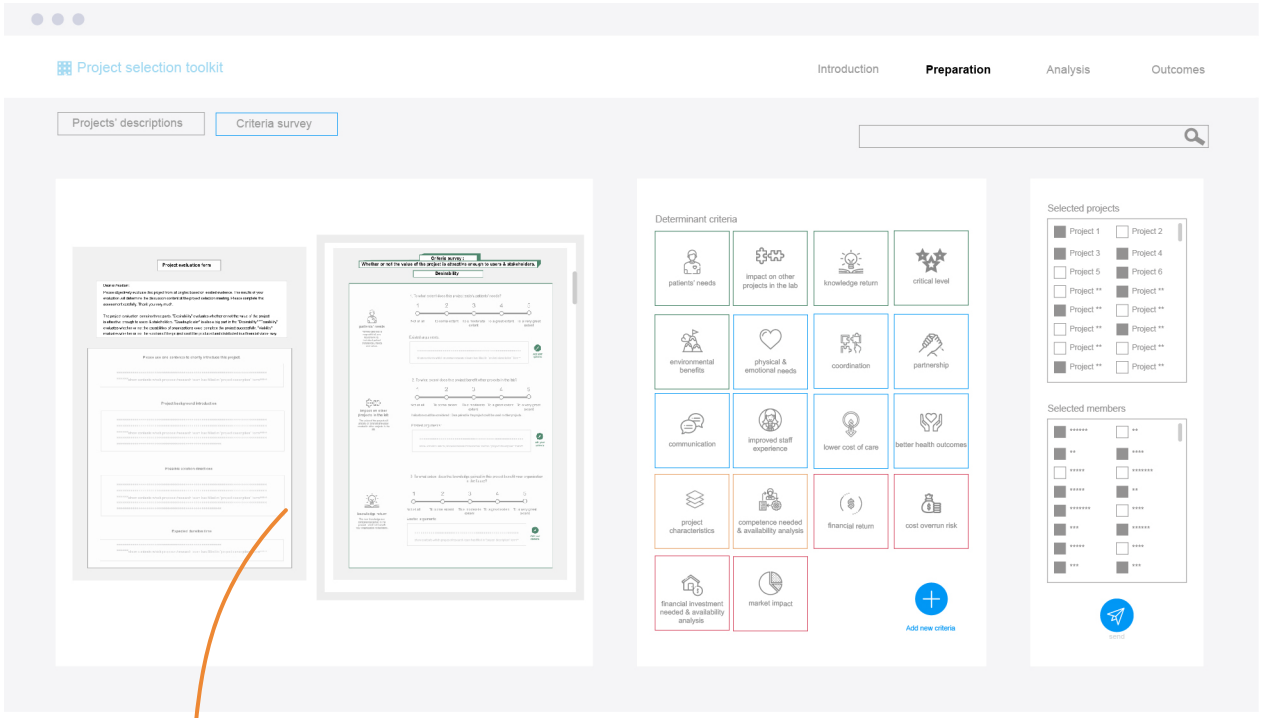


- "Preparation-project description" page provides a project description template for healthcare professionals and research teams to fill in.



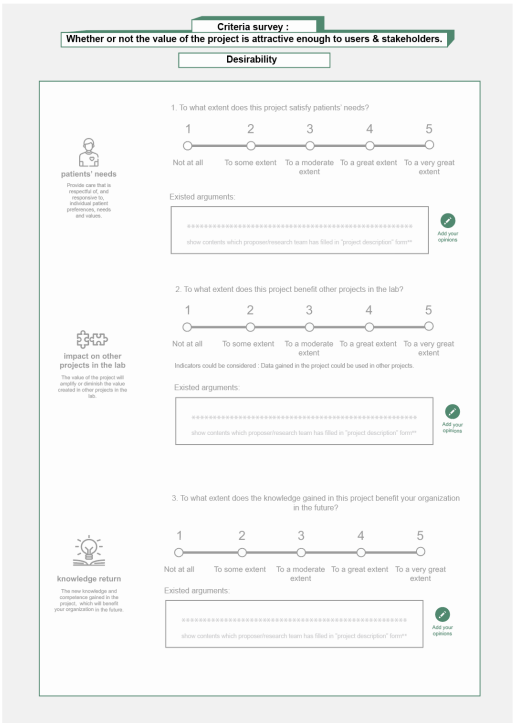
project introduction

places to add related arguments

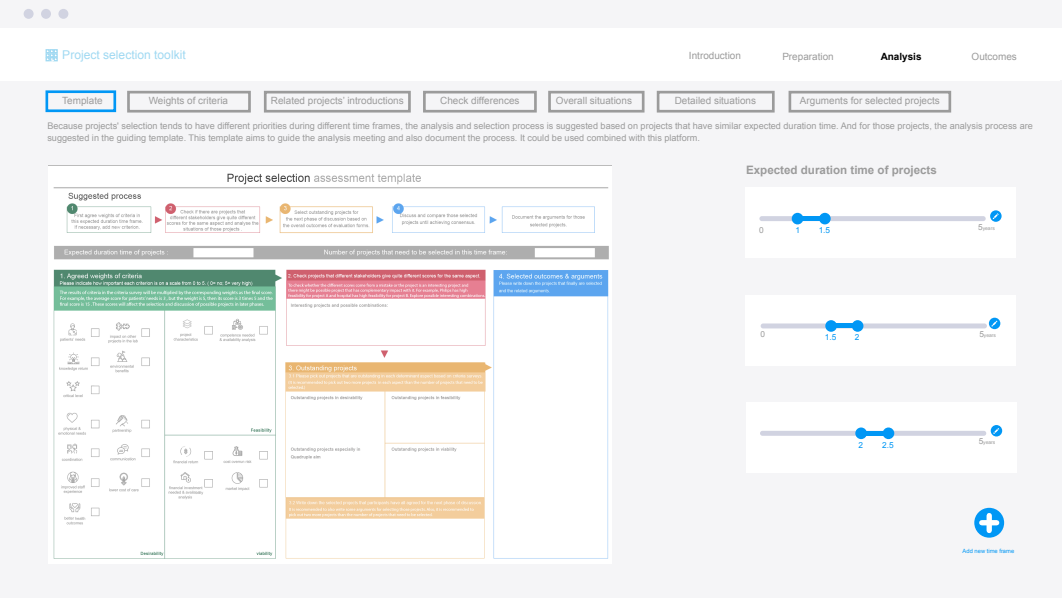


- "Preparation - criteria survey" page provides a project evaluation form for steering team members to fill in.

showing project introduction content healthcare professionals have filled in.



scoring based on the proposed arguments



- The meeting is designed to select projects among projects with similar expected duration time.

During project selection and assessment meetings, except for the digital platform, a guiding template is designed to support the assessment meeting combined with the platform.

This template has two main aims. On the one hand, this template could guide the process. It has three suggested steps:

-First, let all participants agree on the weights of criteria in this expected duration time frame. If necessary, add new criteria.

- Check if there are projects that different stakeholders give quite different scores for the same determinant criterion. (supported by function “difference check” on the platform)

- Discuss and compare projects until achieving consensus. (supported by function “overall situations” and “detailed situations” on the platform)

On the other hand, this template could help document the key findings in the project selection process.

Project selection assessment template

Suggested process

1. First agree on weights of criteria in this expected duration time frame. If necessary, add new criteria.
2. Check if there are projects that different stakeholders give quite different scores for the same aspect and analyse the situations of those projects. (supported by function “difference check” on the platform)
3. Discuss and compare projects until achieving consensus. (supported by function “overall situations” & “detailed situations” on the platform.

Expected duration time of projects :

Number of projects that need to be selected in this time frame:

1. Agreed weights of criteria

Please indicate how important each criterion is on a scale from 0 to 5. (0= no; 5= very high)

The results of criteria in the criteria survey will be multiplied by the corresponding weights as the final score. For example, the average score for patients' needs is 3 , but the weight is 5, then its score is 3 times 5 and the final score is 15 . These scores will affect the selection and discussion of possible projects in later phases.

Desirability

- patients' needs ☐
- impact on other projects in the lab ☐
- knowledge return ☐
- environmental benefits ☐
- critical level ☐
- physical & emotional needs ☐
- partnership ☐
- coordination ☐
- communication ☐
- improved staff experience ☐
- lower cost of care ☐
- better health outcomes ☐

Feasibility

- project characteristics ☐
- competence needed & availability analysis ☐

viability

- financial return ☐
- cost overrun risk ☐
- financial investment needed & availability analysis ☐
- market impact ☐

2. Check projects that different stakeholders give quite different scores for the same aspect.

To check whether the different scores come from a mistake or the project is an interesting project and there might be possible project that has complementary impact with it. For example, Philips has high feasibility for project A and hospital has high feasibility for project B. Explore possible interesting combinations.

Interesting projects and possible combinations:

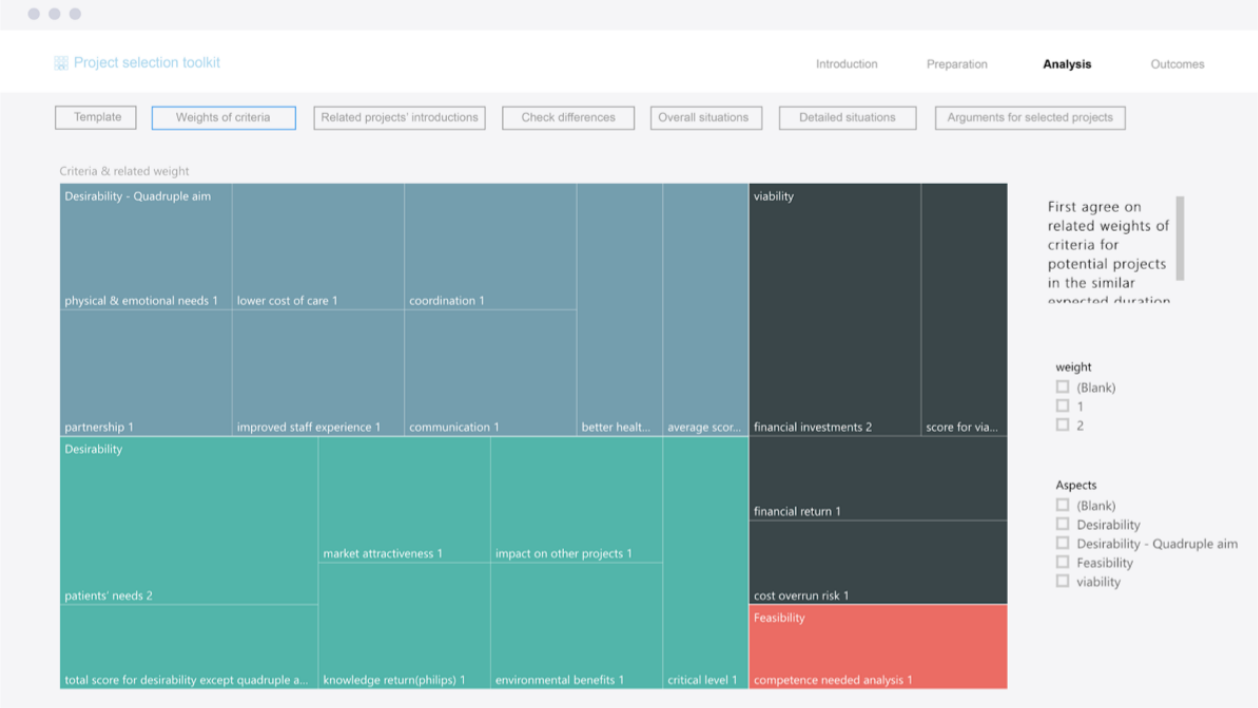
3. Outstanding projects

3.1 Please pick out projects that are outstanding in each determinant aspect based on criteria surveys. (It is recommended to pick out two more projects in each aspect than the number of projects that need to be selected.)

Outstanding projects in desirability	**Outstanding projects in feasibility**
Outstanding projects especially in Quadruple aim	**Outstanding projects in viability**
Outstanding projects in all aspects	

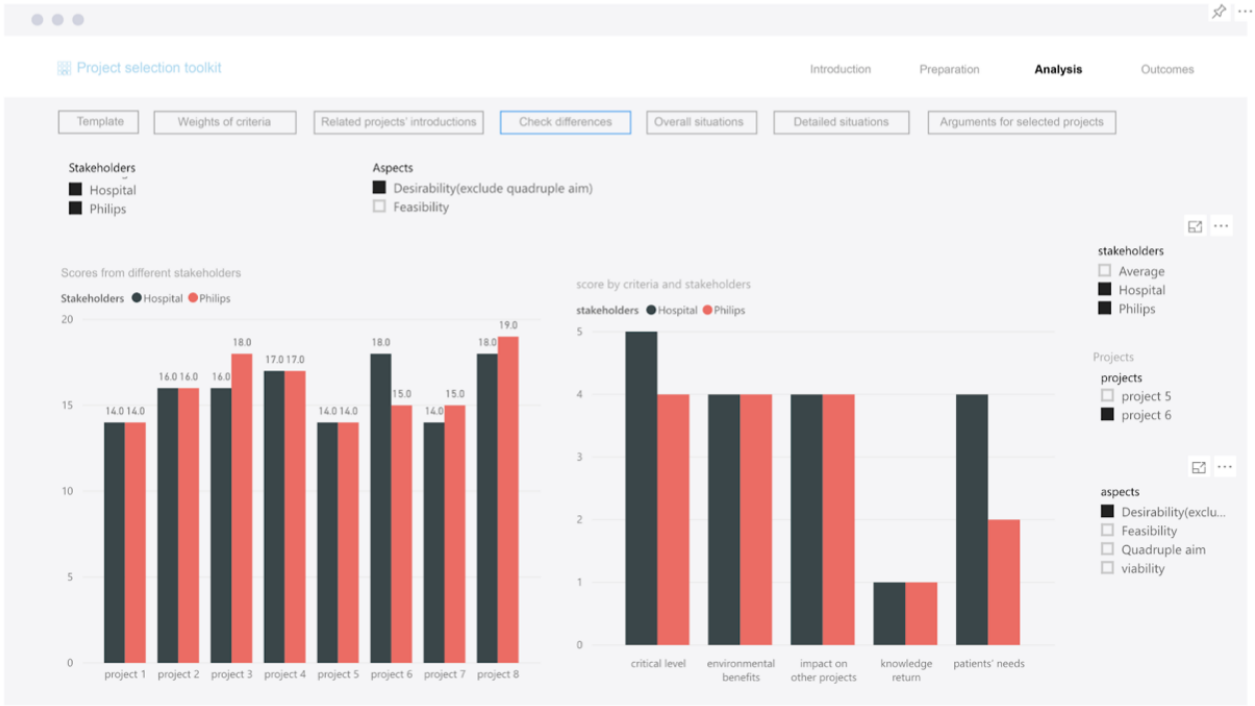
3. Selected outcomes & arguments

Please write down the projects that finally are selected and the related arguments.

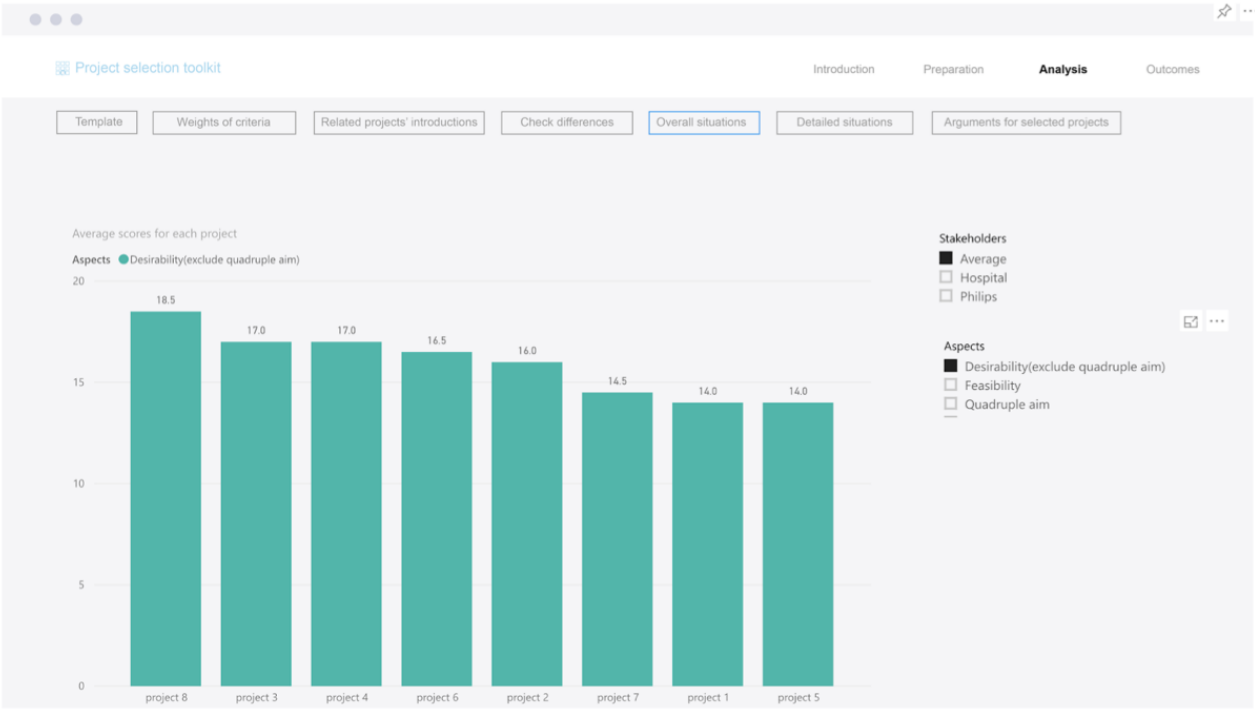


- "Weights of criteria" page shows different weights of criteria

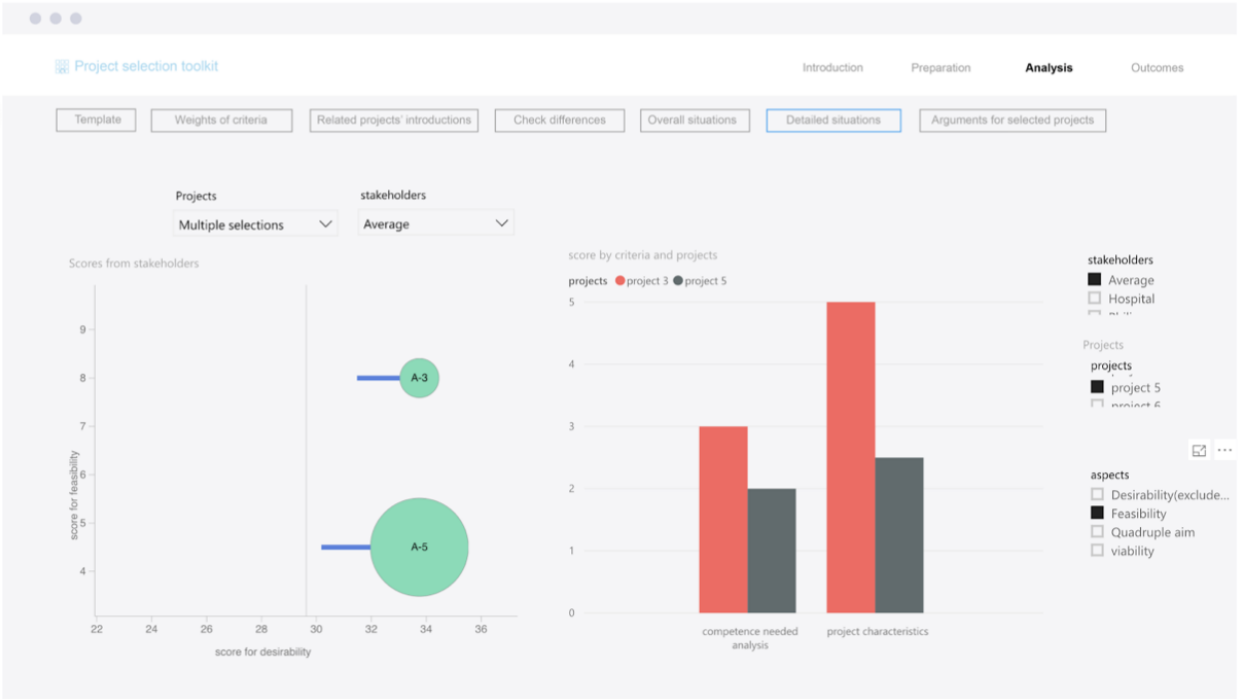
.



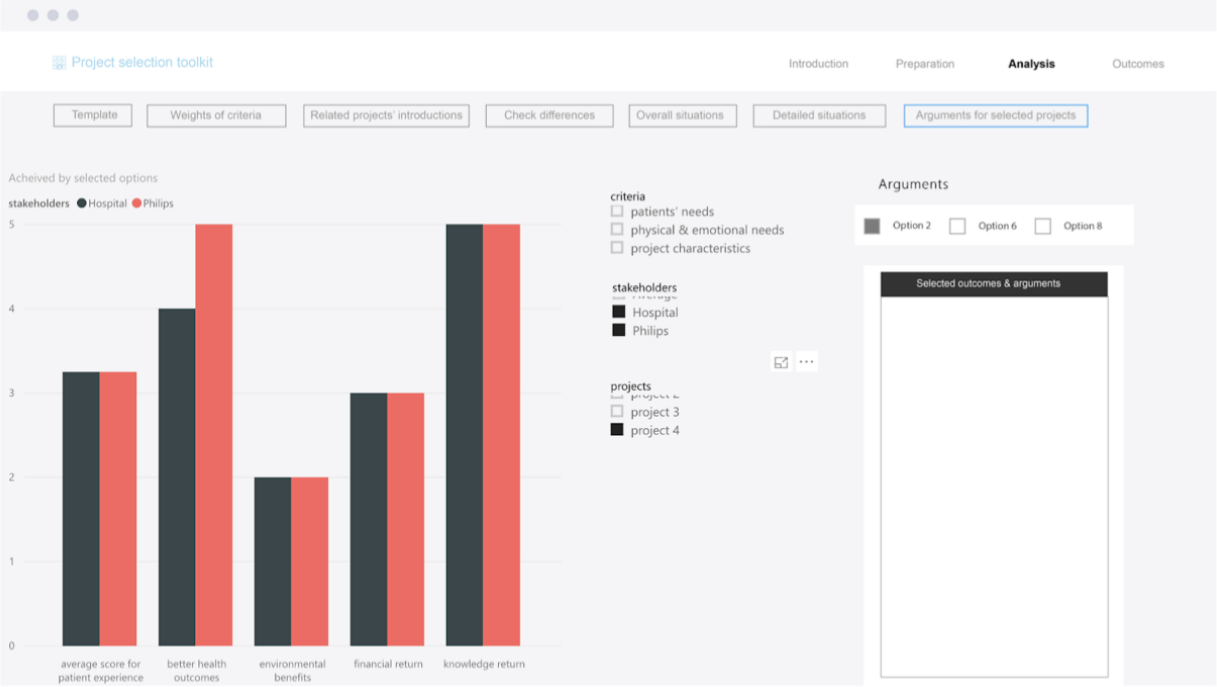
- "Difference check" page



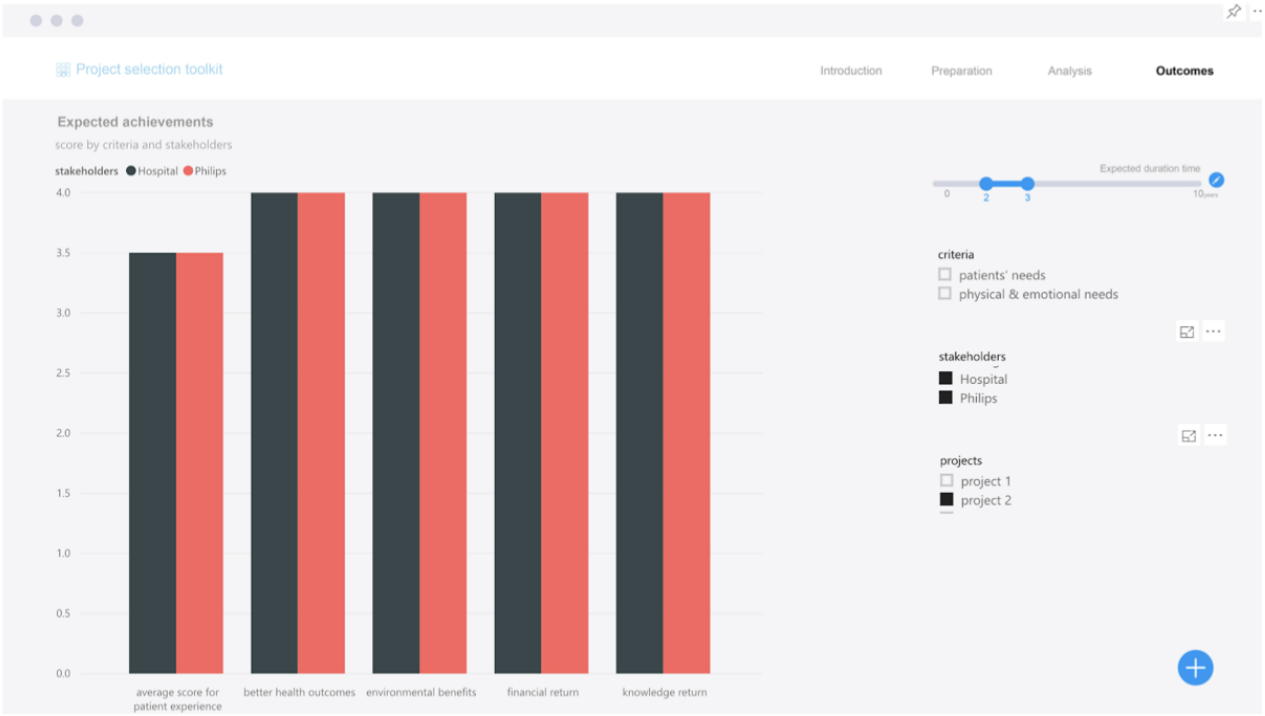
- "Overall situations" page supports select outstanding projects in each aspect.



- "Detailed situations " page supports comparing projects in detail.



- "Arguments for selected projects" shows arguments for selected projects as well as combined value those selected projects contribute to stakeholders.



- "Outcomes" page shows the selected projects and total value those selected projects contribute to stakeholders based on the chosen expected duration time.

Appendix F. Final printed project selection toolkit

F.1 Final printed project description form

Project description

Please carefully fill in this project description form. On this first page, there are places for basic information about the project. please fill in all basic information. In the later pages, there are places for proposing arguments about how this project could contribute to each determinant criterion. Just fill those which you have already have arguments for. We will contact you for further developing the project. Thank you very much.

Please use one sentence to shortly introduce this project.

Project background introduction

Possible solution directions

Reasons for proposing this project

Expected duration time

Contact person

Project description :
Why should this project be selected for the lab?

Desirability: Quadruple aim aspects

How does the project contribute to:

improved staff experience

This is the experience of joy and meaning in the work of healthcare. Meaning refers to the sense of importance of daily work. Joy refers to the feeling of success and fulfilment that results from meaningful work.

Indicators that could be considered :
1. Facilitate effective work.
2. Facilitate decision support.
3. The topic provides safe, trustful, integrative solution for staff.
4. Support teamwork and working environment.
5. Facilitate self development.

better health outcomes (include individuals & populations)

Health outcomes are changes in health that result from measures or specific health care investments or interventions.

Indicators that could be considered:

ICHOM standard sets.

lower cost of care

Lower cost of care" is used to refer to the lower cost of all direct and indirect costs associated with an episode of care for a period of health care coverage (e.g., a health plan benefit year).

Indicators that could be considered :
1. Optimize workflow through prepartion.
2. Reduce cost in the process.
3. Facilitate patient monitoring and management.
4. Reduce waste(less variance, shorter waiting time etc).
5. Simplify diagnostic process and procedure.

improved patients' experience

Patient experience (PX) is defined as the sum of all interactions, shaped by an organization's culture, that influence patient perceptions across the continuum of care

Indicators that could be considered :

1. Pay attention to patients' physical & emotional needs.
2. Improve communication and sharing information with patients, consumers, carers and families.
3. Improve coordination, integration and transition of care between clinical, ancillary and support services across different provider settings.
4. Encourage and support participation and collaboration in decision making by patients, consumers, carers and families.

Project description :
Why should this project be selected for the studio?

Desirability: other aspects

How does the project contribute to:

impact on other projects in the lab

This means whether the value of the project will amplify or diminish the value created in other projects in the studio.

For example: Data gained in the project could be used in other projects.

****

knowledge return

This means whether new knowledge and competence could be gained in the project, which will benefit your organization in the future.

critical level

This means to what extent the project is critical to your organization - whether the value of the project is enormous for your organization(the necessity of doing this project).

Add more criteria:

Project description :

Why should this project be selected for the studio?

Feasibility

How does the project suit:

competence needed & availability analysis

This means the competence needed to complete the project and the availability of competence of organizations.

Indicators that could be considered :

1. Related experience.
2. Technology competence.
4. Experts needed situation.

project characteristics

This means the probabilities of success of the project itself.

Indicators that could be considered :

1. Is it of high possibility to complete this project in this time frame?
2. Is it a high-risk project or not?
3. How many uncertainties do we have on this project?

external conditions

This means whether the external conditions will help or hamper the development of the project.

Indicators that could be considered :

1. How does the project in line with the current paradigm?
2. Does the project need a new collaboration? New agreements?

Add more criteria:

Project description :
Why should this project be selected for the studio?

Viability

How does the project suit:

financial investment needed & availability analysis

This means the investment needed for the project and the available situations of organizations.

Indicators that could be considered :

1. Human resource investment.
2. Research investment.
3. Marketing investment.
4. Technology investment.

market impact

This means the market impact on evaluating the attractiveness of the solution to the project.

Indicators that could be considered :

1. The competition situation.
2. Growing or mature market.
3. Health technology assessment.

cost overrun risk

This means the risk that the actual cost exceeds the budgeted cost.

Indicators that could be considered :

Payback time; delay risk; the certainty of the financial estimate; flexibility in time etc.

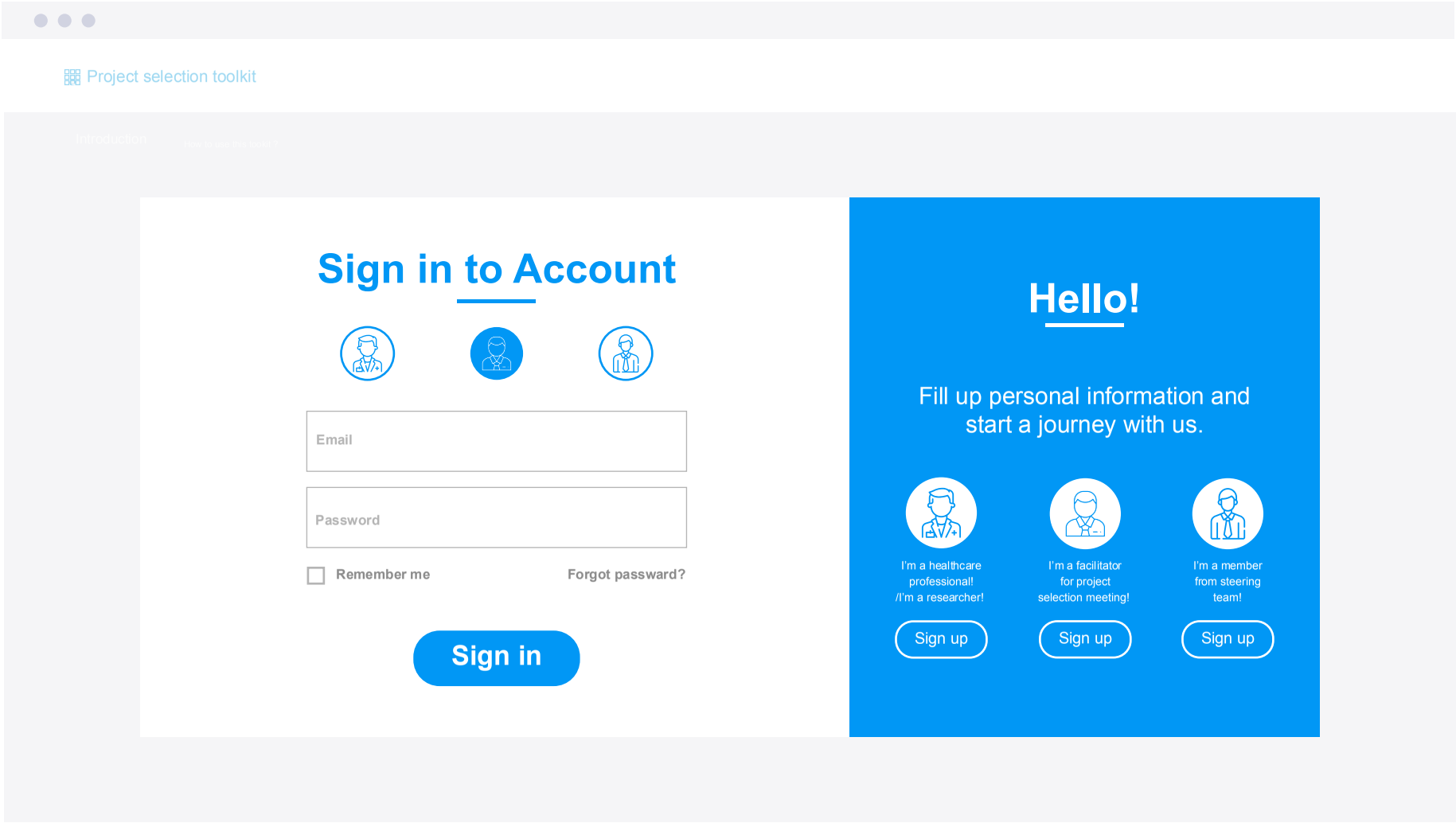
financial return

This means the predicated money made or lost on the investment of the project.

Indicators that could be considered :

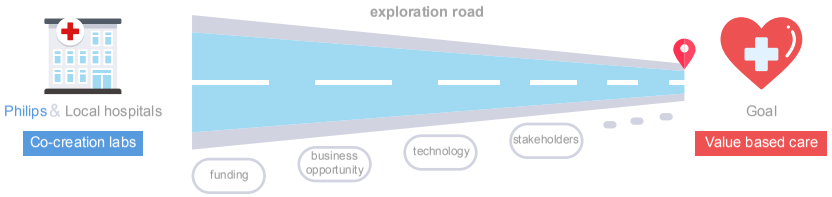
Business model; profit margin.

Add more criteria:


Project selection toolkit
Introduction
Sign in to Account
Email
Password
Remember me
Forgot password?
Sign in
Hello!
Fill up personal information and start a journey with us.
I'm a healthcare professional! /I'm a researcher!
Sign up
I'm a facilitator for project selection meeting!
Sign up
I'm a member from steering team!
Sign up

Introduction

How to use this tookit ?



Background

To transform towards value based care, Philips collaborates with local hospitals to initiate value based care studios. Selecting projects to run in the studios is an important thing and there are many things needed to be considered in project selection like funding, technology etc, while there is no structured procedures for project selection discussion and sound decision making. A toolkit to help project selection is needed.

Toolkit

This toolkit aims to support stakeholders in discussing and making decisions on which projects to run in the studio based on project scores of determinant criteria.

Since value based care is the goal in the long term while running studios needs essential blocks like business return, **the criteria in the toolkit now are not totally future orientated and contains considerations from realistic factors.**

(more actionable at the very beginning of exploration road)

Determinant aspects related to project selection:

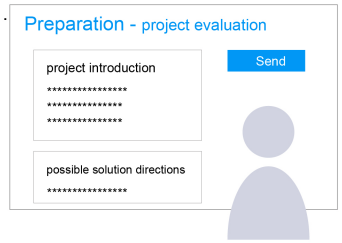
How to use this toolkit ?

Introduction

How to use this tookit ?

Preparation

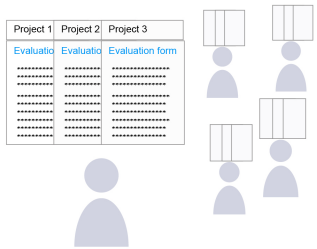
1.



In **“Preparation - project evaluation**” page, those projects that research team or healthcare professionals proposed will be shown.

Preparation

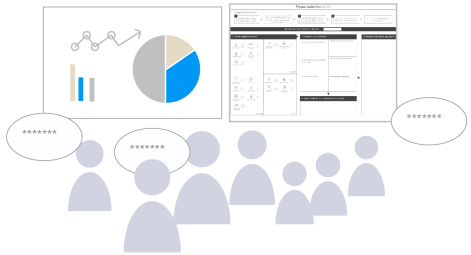
2.



Before the project selection meeting, click the “**send to steering team**” button to send project evaluation forms which contains project descriptions and criteria surveys to steering team to collect their opinions on the determinant criteria related to projects.

Analysis

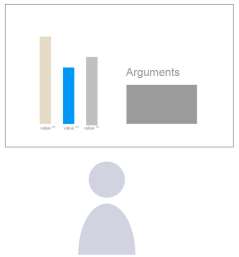
3.



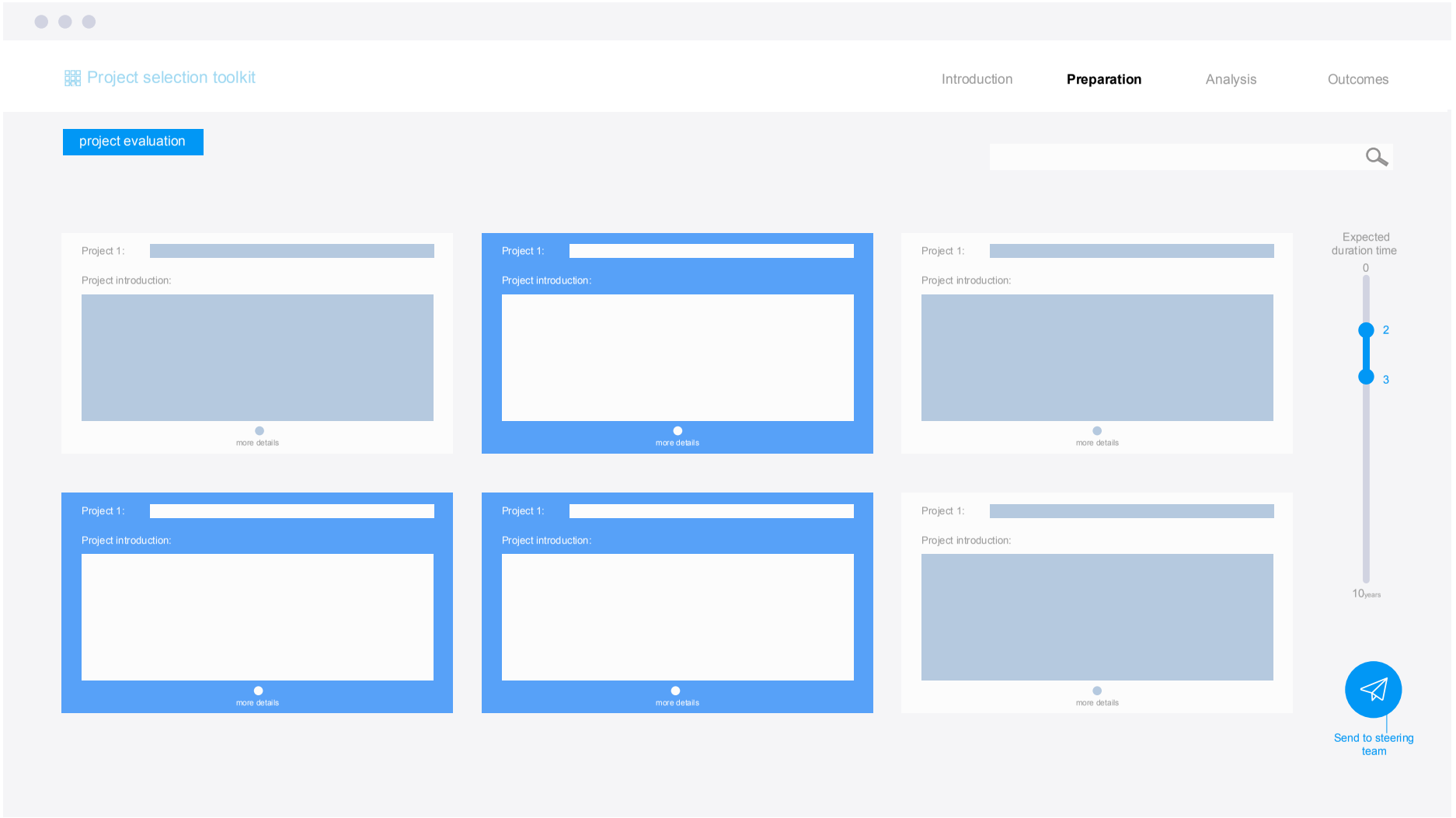
“Analysis” page supports the project selection meeting, all the partcipants discuss and compare projects based on the overall “**visualization**” outcomes (outcomes of criteria surveys) and the guiding template.

Outcomes

4.



“Outcomes” page documents the selected projects and arguments for them. Also, people could have a look at values those selected projects contribute to.


Project selection toolkit
Introduction
Preparation
Analysis
Outcomes
project evaluation
Project 1:
Project introduction:
more details
Project 1:
Project introduction:
more details
Project 1:
Project introduction:
more details
Project 1:
Project introduction:
more details
Project 1:
Project introduction:
more details
Project 1:
Project introduction:
more details
Expected duration time
0
2
3
10years
Send to steering team

Template | Weights of criteria | Difference check | Main comparisons | Project performance in different aspects | Arguments for selected projects

Project selection guiding canvas

Suggested process

1. First agree weights of criteria in this expected duration time frame. If necessary, add new criteria.
2. Check if there are projects that different stakeholders give quite different scores for the same aspect and analyse the situations of those projects. (supported by function "difference check" on the platform)
3. Discuss and compare projects until achieving consensus. (supported by function "overall situations" & "detailed situations") on the platform.

Expected duration time of projects :

Number of projects that need to be selected in this time frame:

1. Agreed weights of criteria

For those criteria members gave different weights in project evaluation forms. Disucuss their weights until achieving consensus. Then put those final weights into digital platform.

- impact on other projects in the lab
- critical level
- knowledge return
- improved staff experience
- lower cost of care
- better health outcomes
- improved patients' experience

Desirability

- project characteristics
- competence needed & availability analysis

Feasibility

- financial return
- cost overrun risk
- financial investment needed & availability analysis
- market impact

viability

2. Check projects that different stakeholders give quite different scores for the same aspect.

To check whether the different scores come from a mistake or the project is an interesting project and there might be possible project that has complementary impact with it. For example, Philips has high feasibility for project A and hospital has high feasibility for project B. Explore possible interesting combinations.

Interesting projects and possible combinations:

3. Selected outcomes & arguments

Please write down the projects that finally are selected and the related arguments.

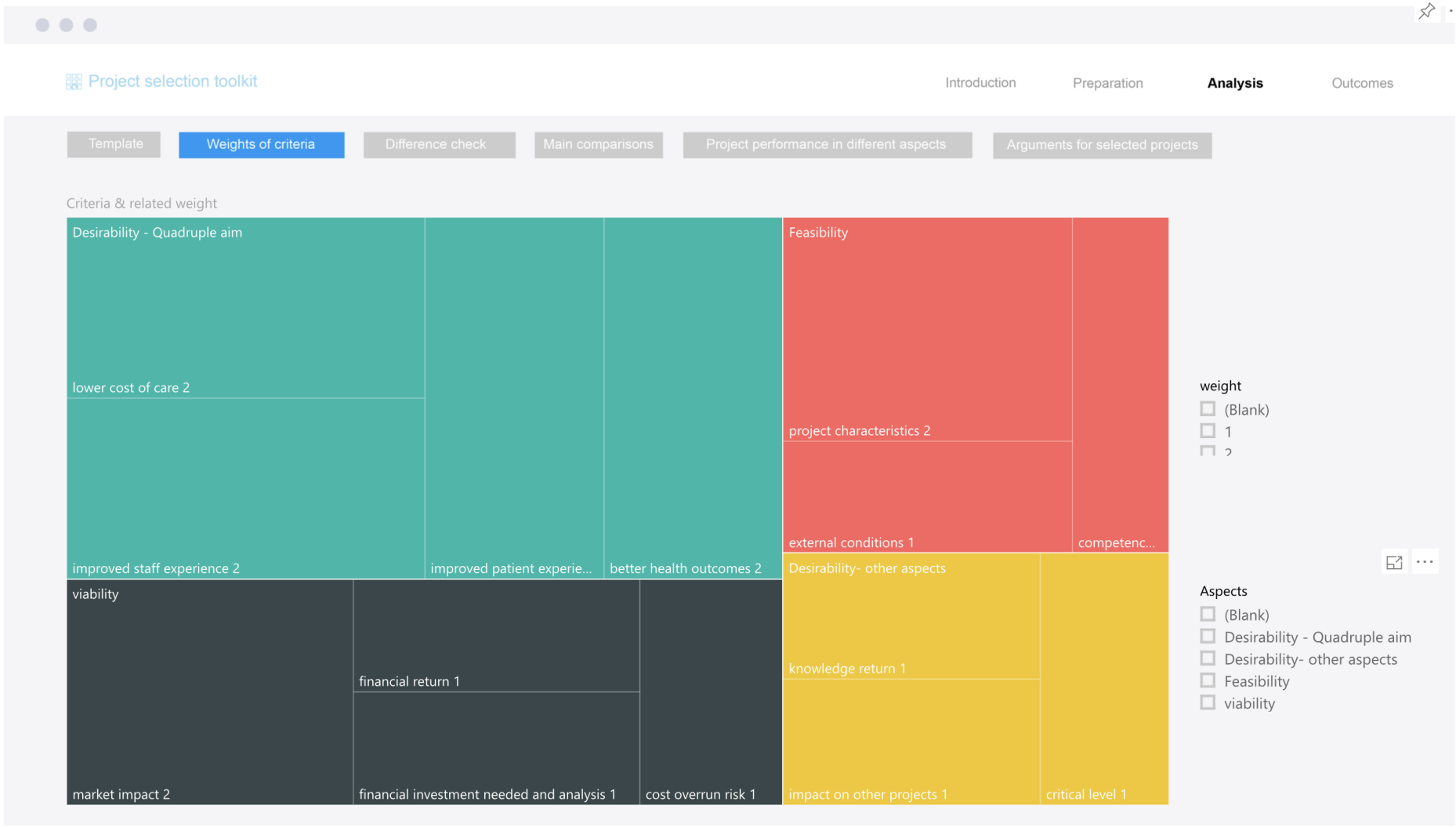
Expected duration time of projects

0 — 1 — 1.5 — 5years

0 — 1.5 — 2 — 5years

2 — 2.5 — 5years

Add new time frame


Project selection toolkit
Introduction
Preparation
Analysis
Outcomes
Template
Weights of criteria
Difference check
Main comparisons
Project performance in different aspects
Arguments for selected projects
Criteria & related weight
Desirability - Quadruple aim
lower cost of care 2
improved staff experience 2
improved patient experie...
better health outcomes 2
Feasibility
project characteristics 2
external conditions 1
competenc...
viability
financial return 1
market impact 2
financial investment needed and analysis 1
cost overrun risk 1
Desirability- other aspects
knowledge return 1
impact on other projects 1
critical level 1
weight
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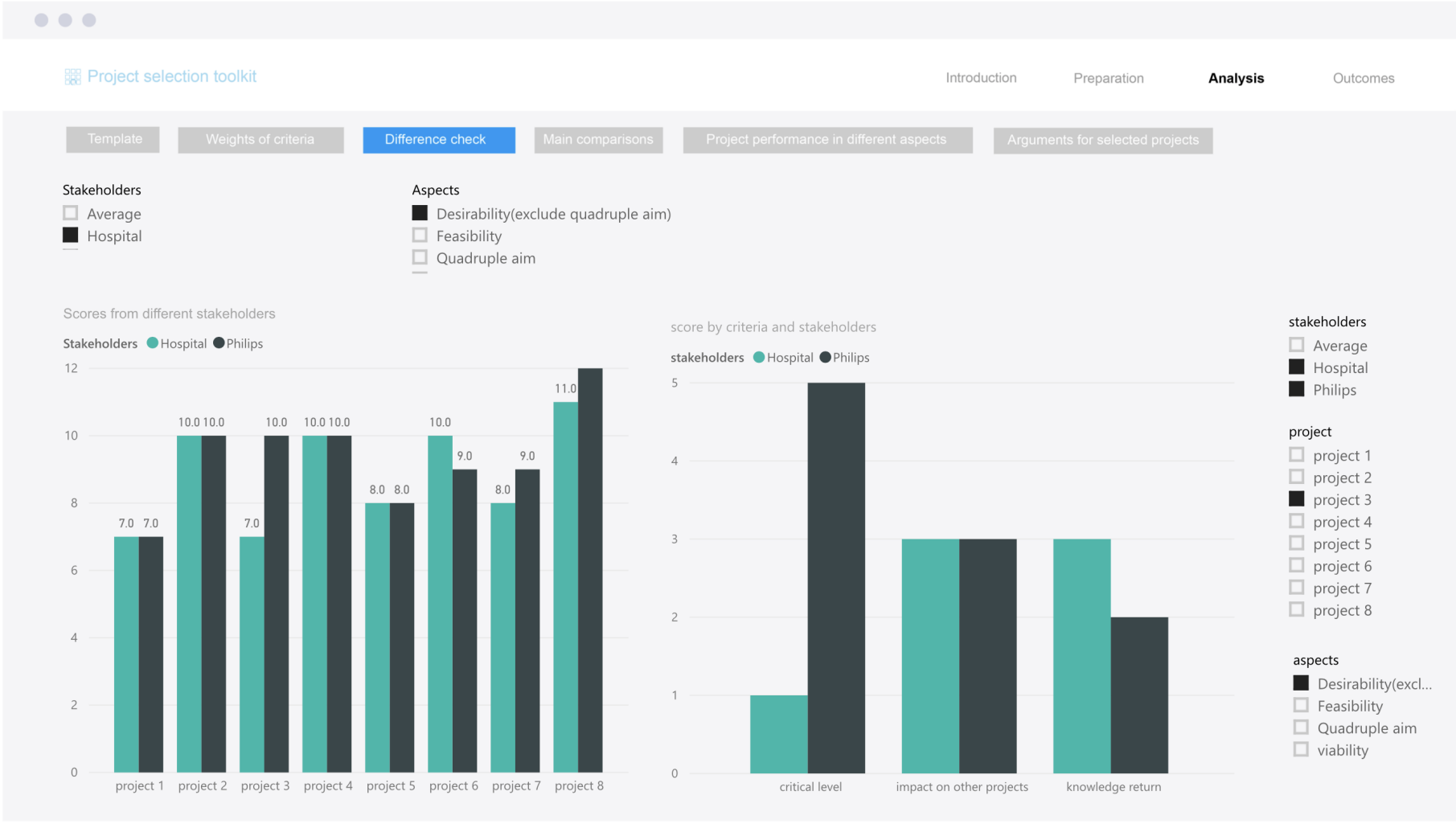
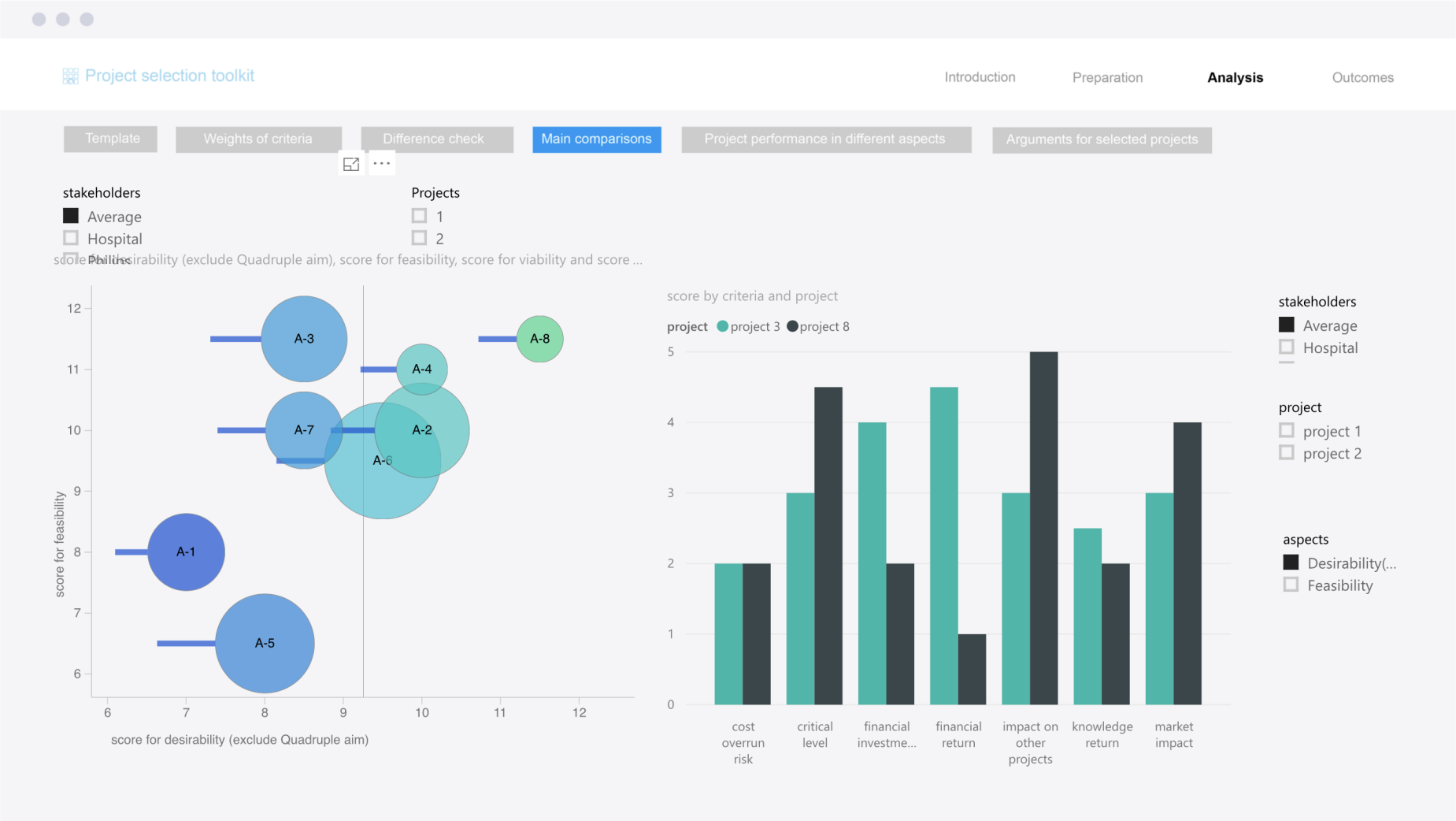
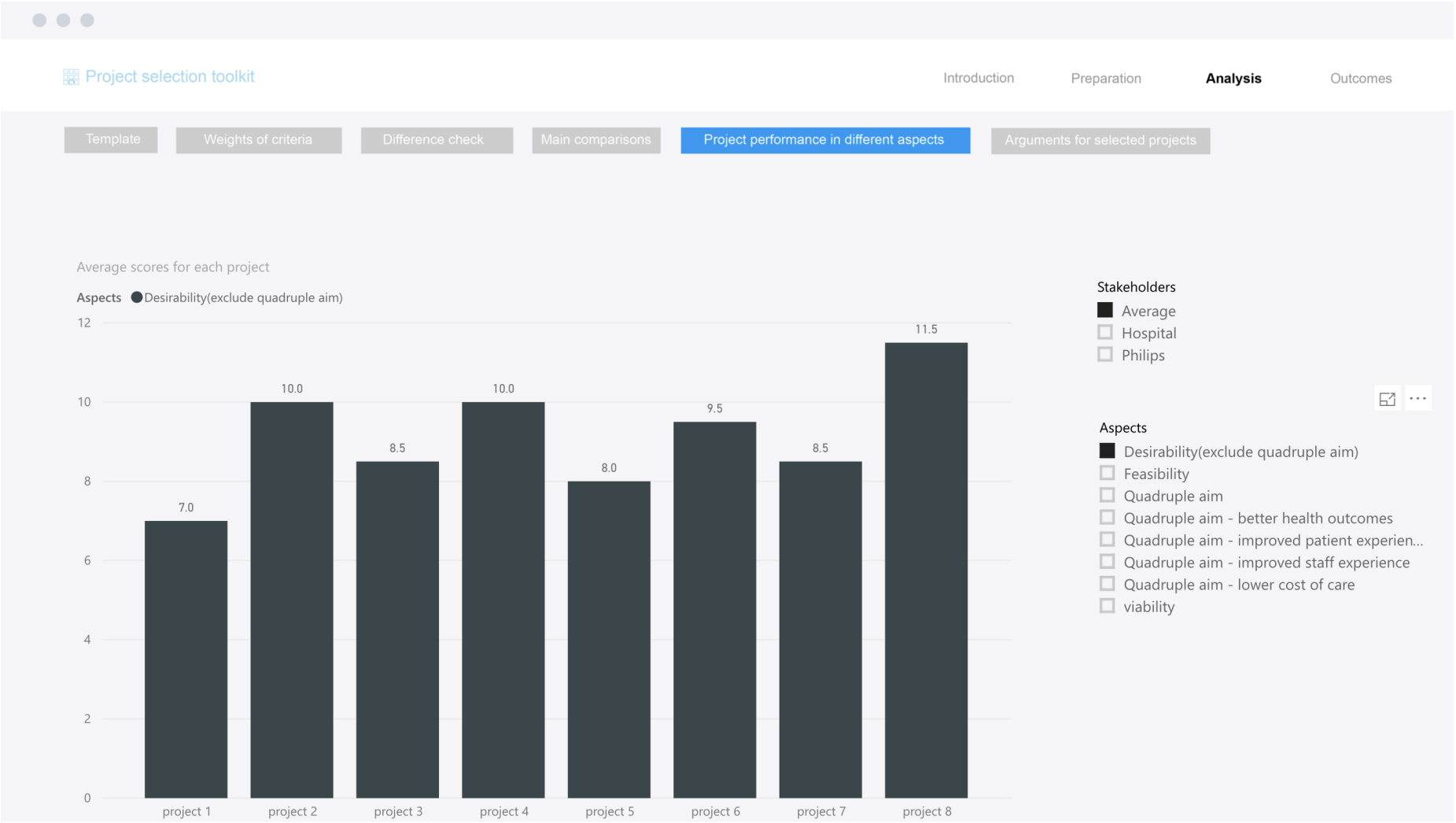
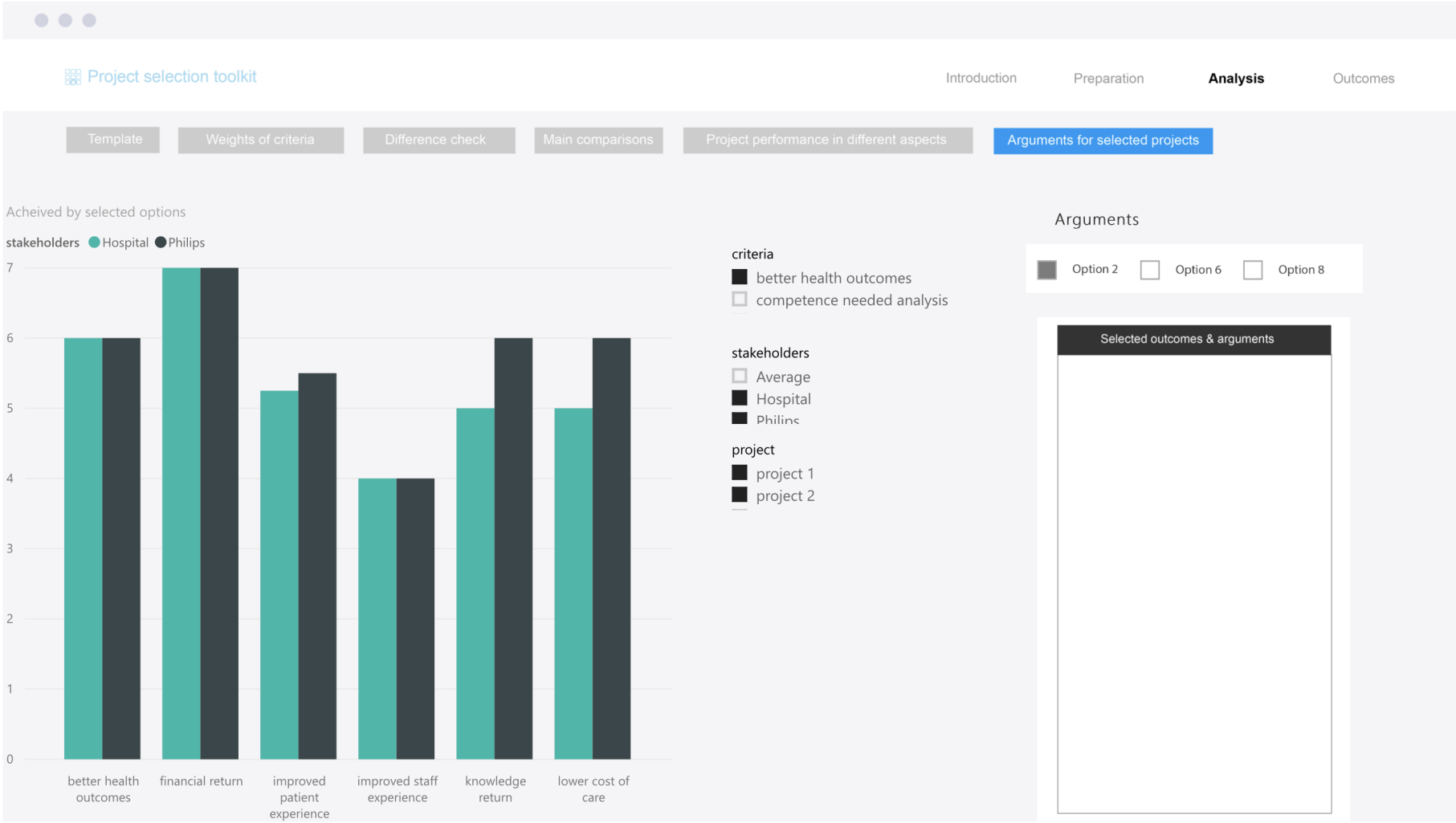
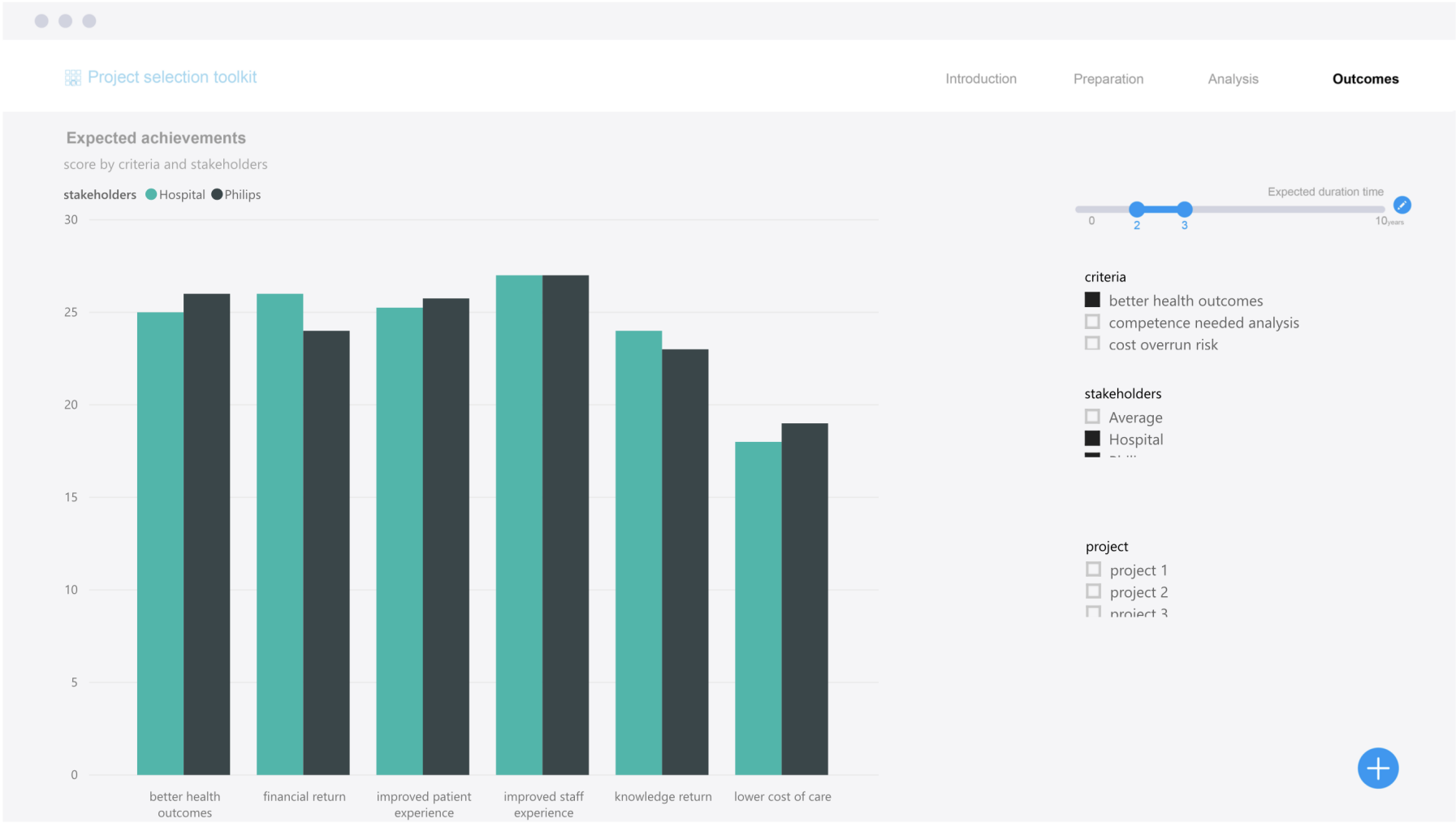
1
Aspects
(Blank)
Desirability - Quadruple aim
Desirability- other aspects
Feasibility
viability


Project selection toolkit
Introduction
Preparation
Analysis
Outcomes
Template
Weights of criteria
Difference check
Main comparisons
Project performance in different aspects
Arguments for selected projects
Stakeholders
Average
Hospital
Aspects
Desirability(exclude quadruple aim)
Feasibility
Quadruple aim
Scores from different stakeholders
Stakeholders Hospital Philips
12
10
8
6
4
2
0
7.0 7.0
10.0 10.0
7.0 10.0
10.0 10.0
8.0 8.0
10.0 9.0
8.0 9.0
11.0
project 1
project 2
project 3
project 4
project 5
project 6
project 7
project 8
score by criteria and stakeholders
stakeholders Hospital Philips
5
4
3
2
1
0
critical level
impact on other projects
knowledge return
stakeholders
Average
Hospital
Philips
project
project 1
project 2
project 3
project 4
project 5
project 6
project 7
project 8
aspects
Desirability(excl...
Feasibility
Quadruple aim
viability

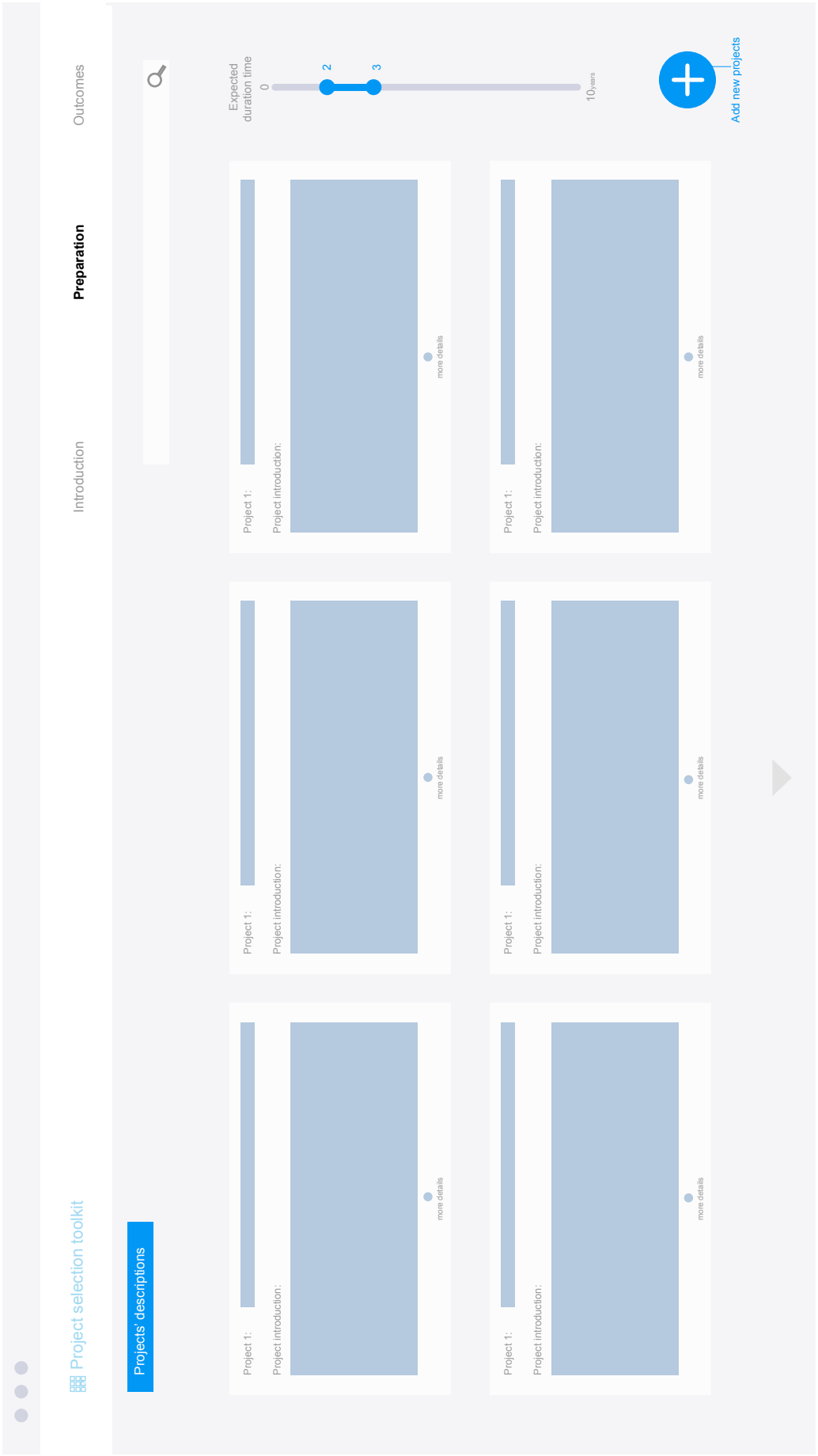

Project selection toolkit
Introduction
Preparation
Analysis
Outcomes
Template
Weights of criteria
Difference check
Main comparisons
Project performance in different aspects
Arguments for selected projects
stakeholders
Average
Hospital
Projects
1
2
score for desirability (exclude Quadruple aim), score for feasibility, score for viability and score ...
A-1
A-2
A-3
A-4
A-5
A-6
A-7
A-8
score for feasibility
score for desirability (exclude Quadruple aim)
score by criteria and project
project
project 3
project 8
cost overrun risk
critical level
financial investme...
financial return
impact on other projects
knowledge return
market impact
stakeholders
Average
Hospital
project
project 1
project 2
aspects
Desirability(...
Feasibility

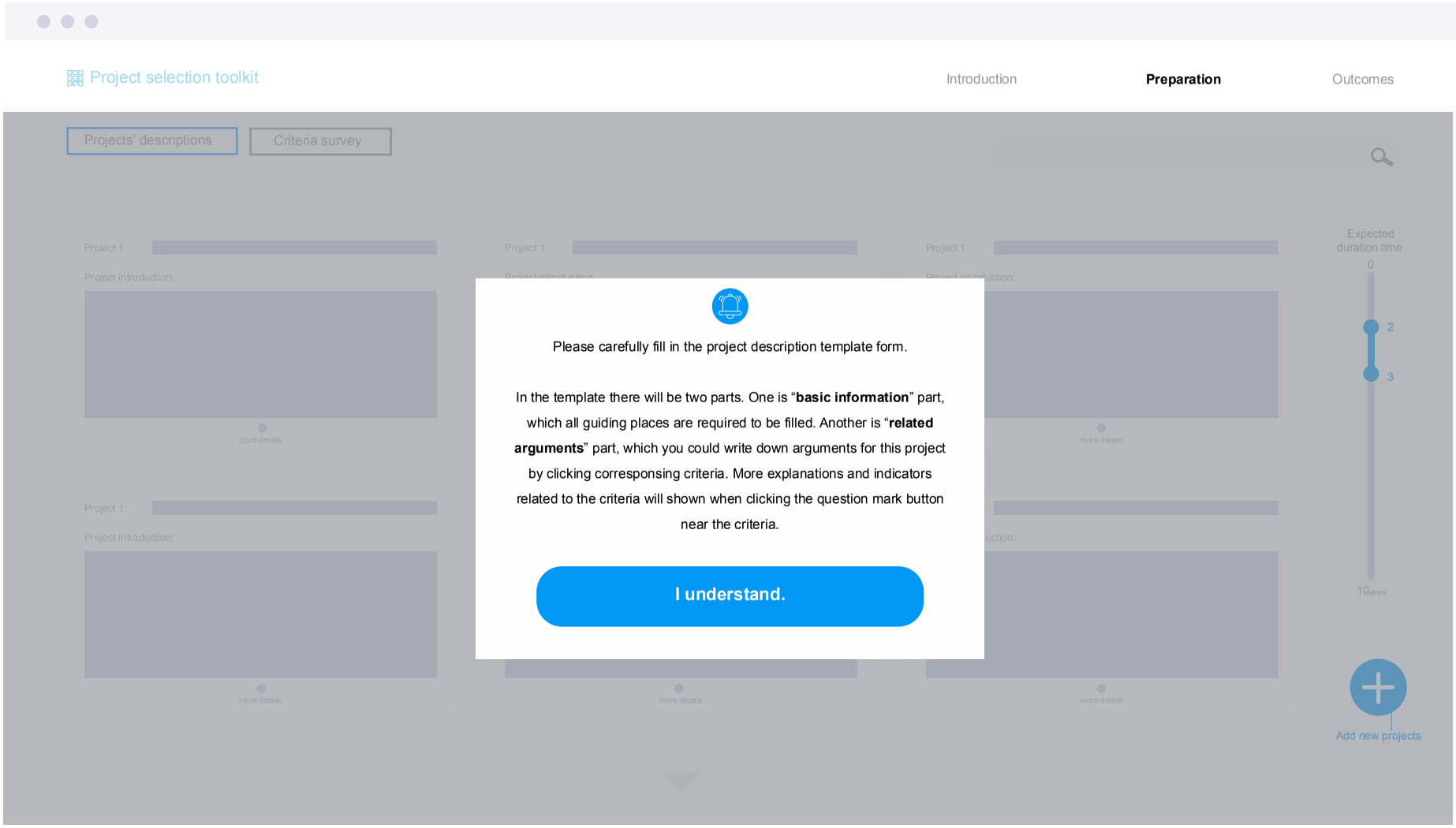

Project selection toolkit
Introduction
Preparation
Analysis
Outcomes
Template
Weights of criteria
Difference check
Main comparisons
Project performance in different aspects
Arguments for selected projects
Average scores for each project
Aspects
Desirability(exclude quadruple aim)
12
10
8
6
4
2
0
7.0
10.0
8.5
10.0
8.0
9.5
8.5
11.5
project 1
project 2
project 3
project 4
project 5
project 6
project 7
project 8
Stakeholders
Average
Hospital
Philips
Aspects
Desirability(exclude quadruple aim)
Feasibility
Quadruple aim
Quadruple aim - better health outcomes
Quadruple aim - improved patient experien...
Quadruple aim - improved staff experience
Quadruple aim - lower cost of care
viability


Project selection toolkit
Introduction
Preparation
Analysis
Outcomes
Template
Weights of criteria
Difference check
Main comparisons
Project performance in different aspects
Arguments for selected projects
Acheived by selected options
stakeholders Hospital Philips
7
6
5
4
3
2
1
0
better health outcomes
financial return
improved patient experience
improved staff experience
knowledge return
lower cost of care
criteria
better health outcomes
competence needed analysis
stakeholders
Average
Hospital
Philips
project
project 1
project 2
Arguments
Option 2
Option 6
Option 8
Selected outcomes & arguments


Expected achievements
score by criteria and stakeholders
stakeholders Hospital Philips
30
25
20
15
10
5
0
better health outcomes
financial return
improved patient experience
improved staff experience
knowledge return
lower cost of care
Expected duration time
0
2
3
10 years
criteria
better health outcomes
competence needed analysis
cost overrun risk
stakeholders
Average
Hospital
project
project 1
project 2
project 3

F.3 Digital platform for healthcare professionals & research team




Project selection toolkit
Introduction
Preparation
Outcomes
Projects' descriptions
Criteria survey
Project 1:
Project introduction:
more details
Expected duration time
0
2
3
10years
Add new projects
Please carefully fill in the project description template form.
In the template there will be two parts. One is "basic information" part, which all guiding places are required to be filled. Another is "related arguments" part, which you could write down arguments for this project by clicking corresponsing criteria. More explanations and indicators related to the criteria will shown when clicking the question mark button near the criteria.
I understand.

Projects' descriptions

Project 39 (automatic)

Save Exit

Basic information

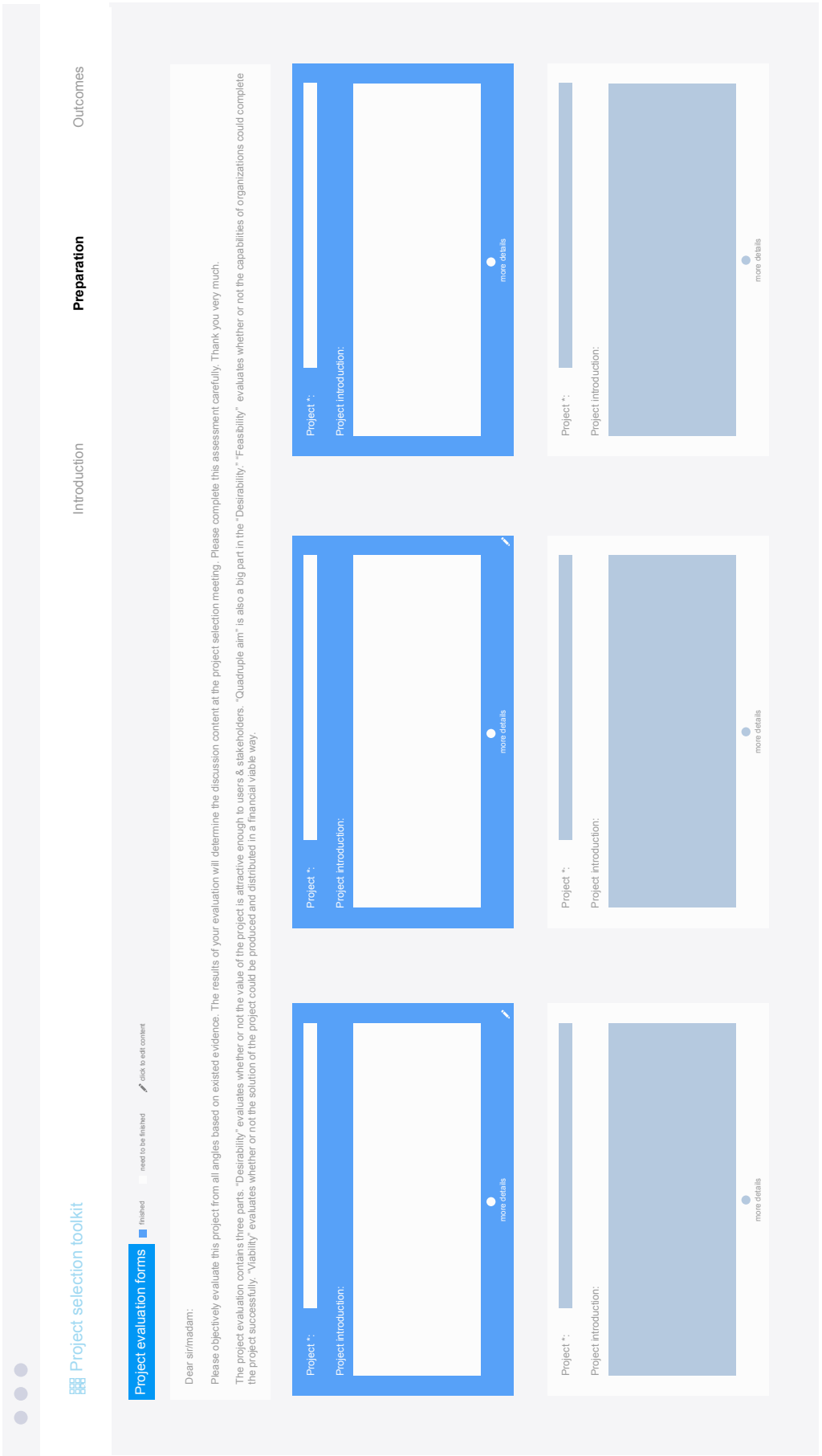
is writing finished need to be finished click to edit content

- Please use one sentence to shortly introduce this project
- Project background introduction
- Possible solution directions
- Reasons for proposing this project
- Expected duration time
- Contact person

Related arguments for the project

is writing finished need to be finished click to edit content

F.4 Digital platform for steering team



Criteria surveys finished need to be finished click to edit content

Project *:

Basic information

Please use one sentence to shortly introduce this project

Project background introduction

Possible solution directions

Reasons for proposing this project

Expected duration time

Contact person

Related criteria survey

In this criteria survey, two things need to be finished before project selection meeting. One is **giving weight** to corresponding criterion to indicate how important this criterion is from your aspect on a scale from 0 to 5. (0= no; 5= very high). Second is **scoring each criterion** based on to what extent you think this project could contribute to corresponding criterion. The scores of criteria will be multiplied by the corresponding weights as the final score. For example, the score for knowledge return is 3 , but the weight is 5, then its final score is 3 times 5 and the final score is 15 . These final scores will affect the selection and discussion of possible projects in project selection meeting. So please fill in this form as objectively as possible. **Click question mark button could know more indicators related to corresponding criterion.**

Desirability: Quadruple aim aspects

improved staff experience

Weight:

Definition:This is the experience of joy and meaning in the work of healthcare.Meaning refers to the sense of importance of daily work. Joy refers to the feeling of success and fulfilment that results from meaningful work.

1. To what extent the opportunity could contribute to improved staff experience?

1 2 3 4 5

Not at all | To some extent | To a moderate extent | To a great extent | To a very great extent

Proposed arguments:

Add your opinion

lower cost of care

Weight:

Definition: "Lower cost of care" is used to refer to the lower cost of all direct and indirect costs associated with an episode of care for a period of health care coverage (e.g., a health plan benefit year).

2. To what extent the opportunity could contribute to lower cost of care?

1 2 3 4 5

Not at all | To some extent | To a moderate extent | To a great extent | To a very great extent

Proposed arguments:

Add your opinion