Rubizmo

Business tool 4 Transformation support tool

DELIVERABLE 5.4

AUTHORS: PROQUANTIS

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Technical References

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[1] PU = Public
PP = Restricted to other programme participants (including the Commission Services)
RE = Restricted to a group specified by the consortium (including the Commission Services)
CO = Confidential, only for members of the consortium (including the Commission Services)

Document history

V	Date	Beneficiary	Author
1	20.03.2020	proQ	Gerhard Schiefer
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Summary

This report provides a short summary of the computer-based transformation support tool that is accessible through the RUBIZMO project webpage. The tool aims at supporting enterprises in gaining ideas on possible future innovative developments captured in business models and in understanding difficulties and need for actions in getting the innovative developments underway.

The development of the tool builds on the provision of business models from the project consortium, experiences on how to communicate with enterprise decision makers, and on experiences in designing software functionalities for assuring usability.

For allowing demonstration and user interaction during the early phases of the tool development, proQuantis has delineated a number (14) of experimental business models which later will be extended or replaced by the business models identified through the project consortium. However, the utilization of the experimental business models allows the early provision and experimental use of the tool through web-based access by all project partners and selected end-user groups.

The tool is not designed to provide database information but as a working tool that get its value through an interactive information exchange with users. As a consequence, sensible feedback from users cannot be expected by simple demonstrations but require engagements in actual use.

The tool is prepared for a continuous improvement process which is expected to last beyond project duration. This includes the later incorporation of tool functionalities that allow its integration into the advisory activity of individual groups who could integrate their own business models and understandings of model requirements. It is hoped that this approach will initiate a process where more and more business models related to a variety of different business environments and situative conditions could be integrated into the tool by different user groups.

Disclaimer

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I - Background

The RUBIZMO project has as one of its ambitions the provision of support for enterprises in regional environments. Indeed, changing regional development opportunities need adjustment through the move to new innovative business models. The provision of such support involves two major challenges:

1. RUBIZMO needs to identify innovative business models that could contribute to regional development while at the same time support business success and allow enterprises to move to sustainable business activities in times of change.

2. RUBIZMO needs to provide a tool that supports enterprises in finding their own business model based on an evaluation of provided alternatives, an evaluation of their fit to selected model alternatives and an identification of development needs.

Project partner proQ has taken up responsibility for providing the tool while other project partners are responsible for the provision of business models. However, as proQ has itself substantial experience in business models and chain organizations, it has provided a basic set of 14 business models derived from successful innovations in the agri-food and bio-economy sectors. This basic set had been implemented during the development of the tool and allowed its early demonstration and discussion with potential stakeholders.

It is the ambition of proQ to provide a tool that has the potential for dynamic developments and could be used for enterprise support way beyond conclusion of the project. With this in mind, proQ implemented a flexible design that will eventually allow easy addition or deletion in the set of business models, easy adjustments to changes in environments and business model designs and, in addition, will allow advisory groups to integrate their own business models into the tool for selected use in their own advisory activities.

Not all these flexibilities were required by the project and will not be operational by the time of this tool's project formal delivery date. However, they will become operational during the remainder of the project. Depending on the interest in the tool, proQ is open for extensions that could serve interested advisory groups. Some of such extension opportunities including the tool's link to other tools available in the market are already under discussion and will be mentioned at the end of the summary as "future development options".

II - The challenges

The development of a tool for supporting enterprises in the identification and adoption of suitable innovative business models has to deal with a number of complexities in the behavior and abilities of entrepreneurs. While some might just have the "feeling" that they couldn't continue as before, others might have

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advanced understandings of their enterprise's deficiencies and the need for innovative improvements. In our understanding, the use of a tool requires some analytical abilities but should keep the requirements at a low level to support easy adoption of the tool. In the analysis, we have focused on 5 challenges a tool needs to deal with. They are described in the following together with some arguments on how a tool could/should deal with them as a base for their realization in the tool design.

Challenge 1: Delineation of business models to enterprises.

The delineation of innovative business models that fit the needs of enterprises is a tricky undertaking and will develop over time in a feedback process. Business models can be considered part of a business model hierarchy with a continuum from the top to the bottom. At the highest level of abstraction there is only one model, at the lowest level we have the multitude of business model realizations (referred to as 'cases'). From a scientific point of view, a delineation would be preferred which identifies models at a higher level of abstractions while business leaders and entrepreneurs would prefer being provided with business models at a lower level, closer to their business experiences and realities. This is in line with the common approach of enterprises visiting other enterprises experience in implementing innovative models and practices.

How to consider in a business transformation tool

As a tool is to be used by entrepreneurs or advisory services with different levels of abstraction ability, a tool could consider models of different levels of abstraction serving the interest of different user groups. However, the priority should be with models closer to implementation reality as they cover a broader range of potential users. A link to the virtual library of innovative business cases developed within the project would allow to link business models with related business cases.

Challenge 2: Identification by enterprises of suitable innovative business models

Each enterprise is in a unique position characterized by its political, economic or natural environment as well as its internal focus, strengths and weaknesses. This makes it difficult for enterprises to link up with examples of business models that could never match their individual positioning. However, a range of business models can provide a basis for the generation of ideas which allow an enterprise to derive its own business development plan from a business model with a "best match" to its own ideas.

How to consider in a business transformation tool

The generation of ideas is best served if an entrepreneur can quickly switch between different models which are presented in a way that allows to quickly grasp the

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specifics and the innovation potential through graphs, videos and other communication means.

Challenge 3: Linking enterprise development interests with business model opportunities and requirements

From an enterprise point of view, an ideal situation would allow an enterprise to pick up a model, provide some enterprise data and receive a complete development plan including investment needs and financial considerations. However, this does not match reality. Firstly, a business model is not a real case but an abstraction which is not defined as a case realization. Secondly, the movement from an enterprise specific situation to a case realization linked to a model idea is dependent on a multitude of economic and other variables such as the price situation in a specific region, the available administrative support etc. which cannot be covered by a management support tool but usually requires specific advisory support.

How to consider in a business transformation tool

This problem is difficult to deal with and can only be solved through a compromise which avoids providing "nothing" when circumstances do not allow any quantifications or specific advice. One way around this problem is to use judgements of experts in a variety of proposals which, depending on the problem at hand, could either allow a comparison of model alternatives (e.g. which one is better in terms of e.g. carbon reduction), the specification of model requirements along a scale defining different levels of model requirements (e.g. defining different levels of internet access), or a comparative evaluation of implementation difficulties (e.g. providing a hint on which requirements might be easiest to deal with).

Challenge 4: Linking enterprise deficiencies with model opportunities.

For dealing with model opportunities of business models, an enterprise needs to first understand its own deficiencies or weaknesses and to link it to principal organizational structures of an enterprise model such as supply, production, sales, marketing, etc. This is the basis for being able to link up with business models and innovations in any of the organizational entities. It requires an ability for analysis and abstraction which might require advisory support.

How to consider in a business transformation tool

A tool can never replace a discussion with an advisor. However, it could guide an entrepreneur in linking his/her problems with a template of organizational entities commonly used in business model description. An option involves confronting an entrepreneur with questions regarding his/her business problem issues (the enterprise side) and providing links from the problem issues to the organizational

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entities (the model side). A common template for organizational entities is the business canvas as described in e.g. https://eship.ox.ac.uk/business-model-canvas-explained/ . A training approach is presently developed within the project (task 6.1) which could complement the use of the tool.

Challenge 5: Dealing with model opportunities that require cooperation activities.

In looking at new business models that involve changes in supplies or sales one needs to ensure that there are fitting markets or, in other words, that the chain of business activities across business borders (referred to as food chain, production chain or similar) is feasible and organized. Options could involve a joint move of business partners to new business models, a switch of the enterprise to a better fitting business partner creating a new chain or an integration of different levels of business activities (e.g. farm production and product processing activity) into the enterprise.

How to consider in a business transformation tool

A tool could focus on individual enterprises and leave the business connections to decisions outside the tool or provide models for complete chains. A compromise could be to provide models for enterprises on different levels of the chain and leave it to the users of the tool if and how the different models should be connected. Ideas on possible network connections could be derived from the network tool developed within the Rubizmo project.

III - Overview on tool concept

The user of the tool is guided through 4 major phases from a first identification of needs/problem to the specification of requirements on efforts towards realization as the last phase. This overview will not comment on features that support the use of the tool such as registration, help pages, information pages for supporting interaction or similar but will instead concentrate on the stepwise move from the beginning to the end.

As the tool is in a continuous improvement process in interaction with users, the following pages are meant to provide a rough impression of the tool's interaction pages but the latest versions might slightly deviate. The latest version is accessible through RUBIZMO's website.

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Phase 1: Identification of needs and linkage with business issues and business canvas

By asking questions on needs, the tool links to the relevant cells in the canvas which represent certain business issues. Figure 1 shows the basic questions, but the list could be extended depending on interest. Based on the identification of the business issues that are of primary interest for improvement, the user is guided to phase 2. The different colors of the canvas refer to the supply side (blue) of company activities, the customer side (yellow), the value proposition (grey), and the financial side (brown).

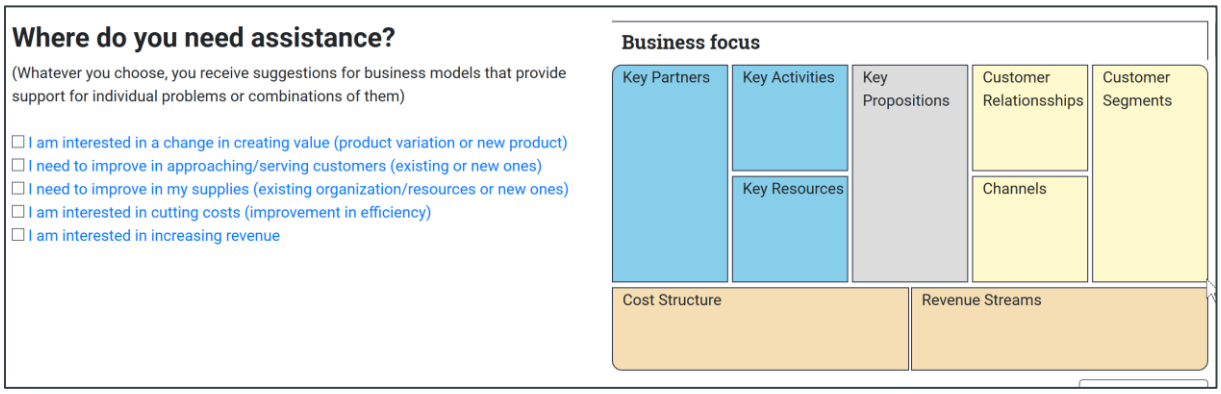

FIGURE 1: MOVE FROM BUSINESS-ORIENTED QUESTIONS TO AFFECTED BUSINESS ISSUES

Phase 2: Informing about business model alternatives and selection of interesting ones

This page links the business canvas with relevant business models that could fulfil the identified need. Impact criteria focusing on regional and enterprise-oriented success factors are associated to each business model. This is the core page which should also support users in creating their own ideas on the direction of their own future innovative development plan. The page's functionalities involve a "play factor" by allowing users to move between canvas and business models in a variety of ways which should provide a motivation for users to get engaged.

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The presentation of the models encompasses the following alternatives:

1. Each model is identified by a small specific picture for a quick overview (figure2).

2. Each model is characterized (pop-up) by a summary text and an extensive graphical display that highlights pictures of cases and internet links to information and video pages (figures 3 and 4).

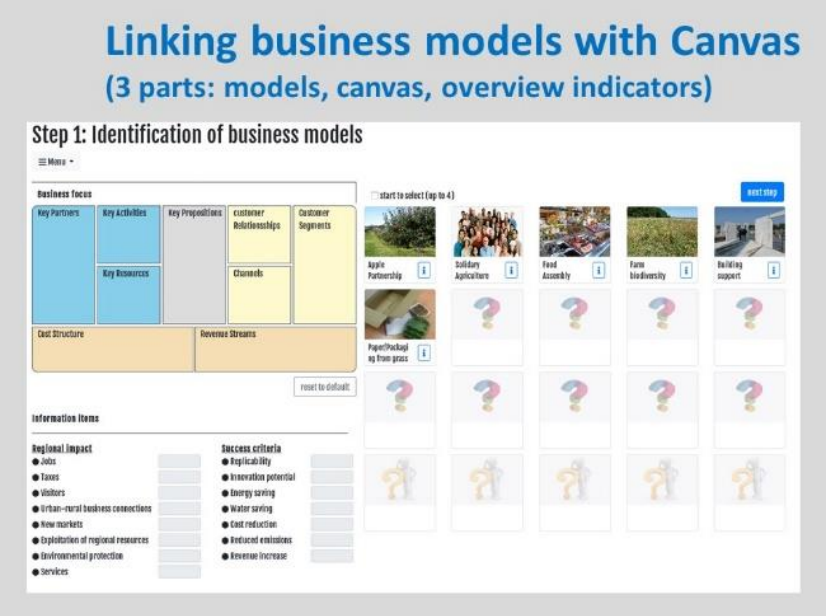

FIGURE 2: THE BASIC PAGE WITH A FEW MODELS IMPLEMENTED (REPRESENTED BY SMALL PICTURES), THE CANVAS AND THE REGIONAL AND COMPANY SUCCESS CRITERIA.

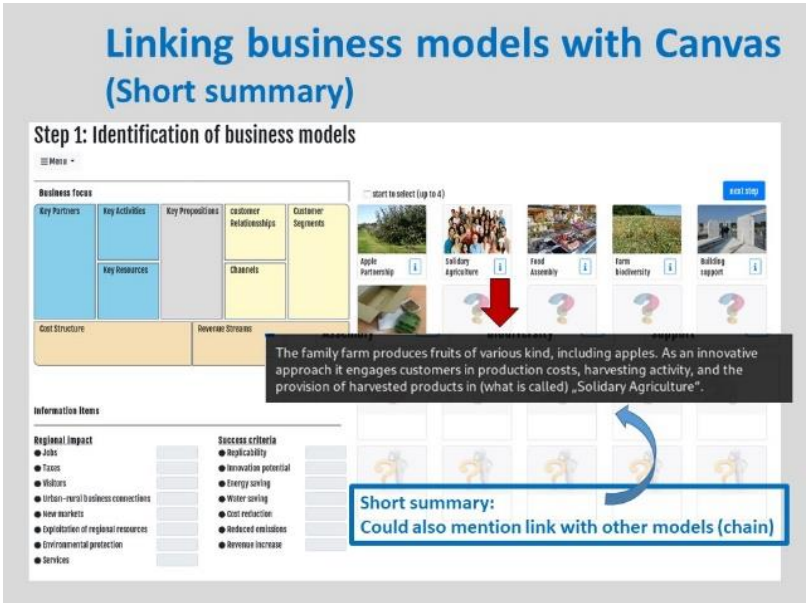

FIGURE 3: ACCESS TO SUMMARY DESCRIPTION OF MODELS.

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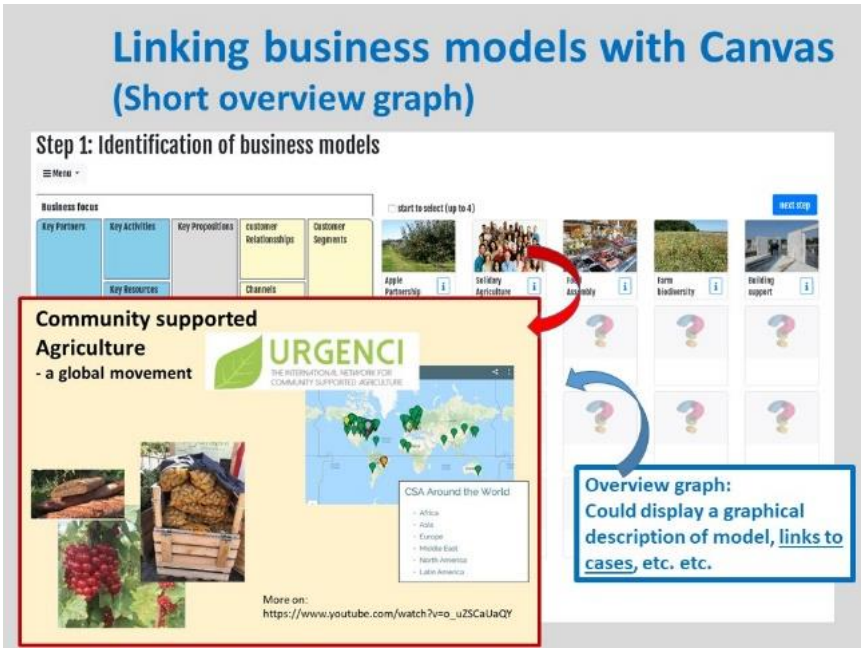

FIGURE 4: ACCESS TO A DETAILED GRAPHICAL REPRESENTATION OF MODEL INFORMATION INCLUDING INTERNET LINKS AND VIDEOS (YOUTUBE).

For linking the business canvas with models, the tool allows to either start from the model side or from the canvas side:

1. When pointing at a model (right hand side of figure 5), the canvas displays the cells where the model provides an innovative contribution (top left corner) while the list of impact criteria displays a rough comparative judgement of the model's impact (bottom left corner).

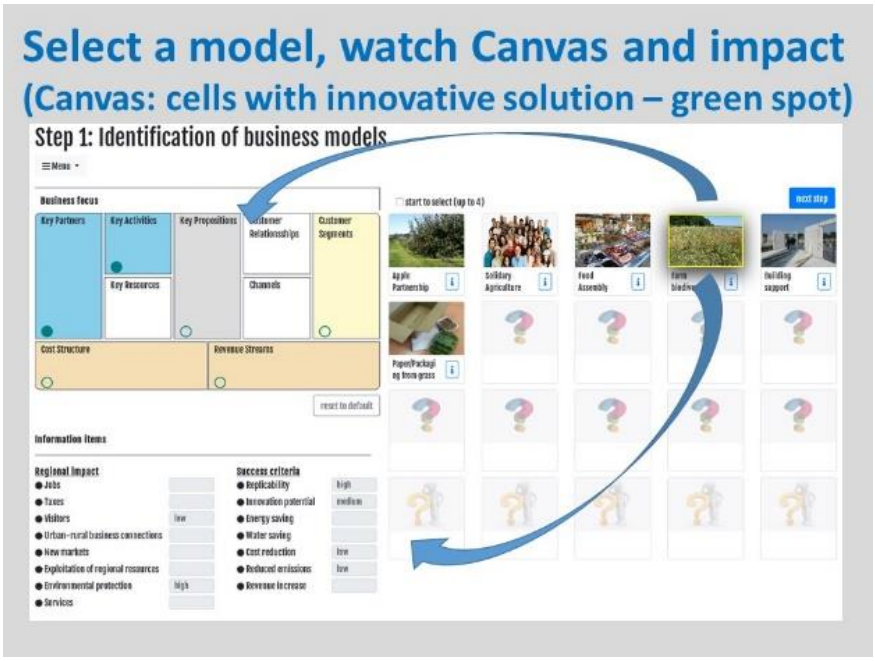

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FIGURE 5: SELECTING A MODEL OF INTEREST PROVIDES INFORMATION ABOUT AFFECTED CANVAS CELLS AND CONSEQUENCES ON SUCCESS CRITERIA.

2. When pointing at a canvas cell, the page highlights the models that provide an innovative contribution to the selected business domain (figure 6).

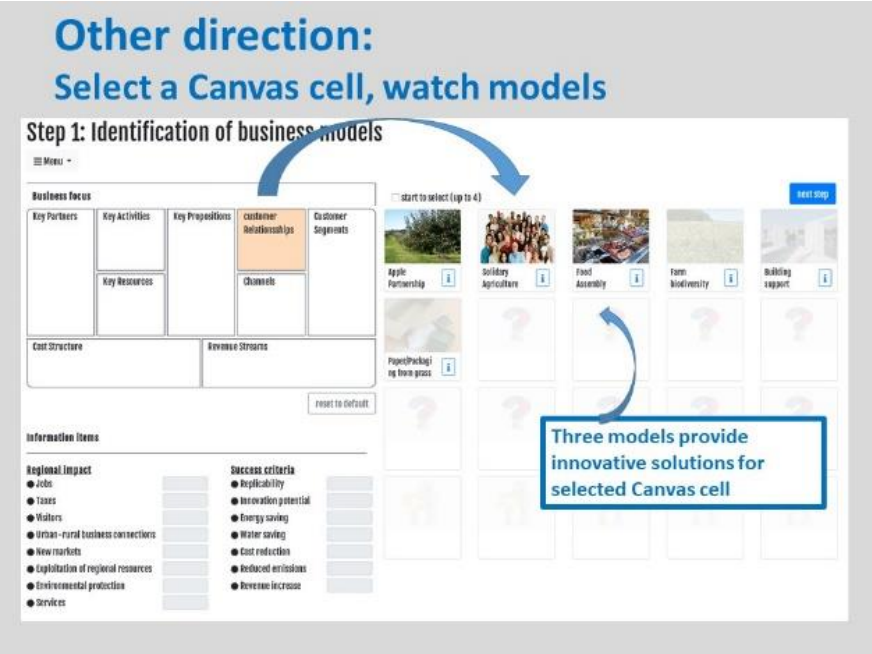

FIGURE 6: SELECTING A CANVAS CELL IDENTIFIES MODELS WHICH PROVIDE INNOVATIVE SOLUTIONS TO THE SELECTED BUSINESS DOMAIN.

In concluding this phase, the user may select up to 4 models that might be of further interest. More detailed information about these models will be available in phase 3.

Phase 3: Detailed analysis of selected business models

The phase 3 provides all available information for the selected business models in one page. The user can quickly compare the selected business models in term of impacts, success factors, and innovative approach for the different cells of the canvas (figure 7). It also provides access to a business canvas, access to a more detailed description (PDF file) and links to other information sources including internet pages and videos of case implementations and whatever might be available for each business model (figure 8). Link to business cases from the virtual library (Rubizmo's business tool 1) which are relevant for each business models can also be added.

To move to the 4th step, the user must choose one business model. This business model will then be further considered in relation to the user's own situation.

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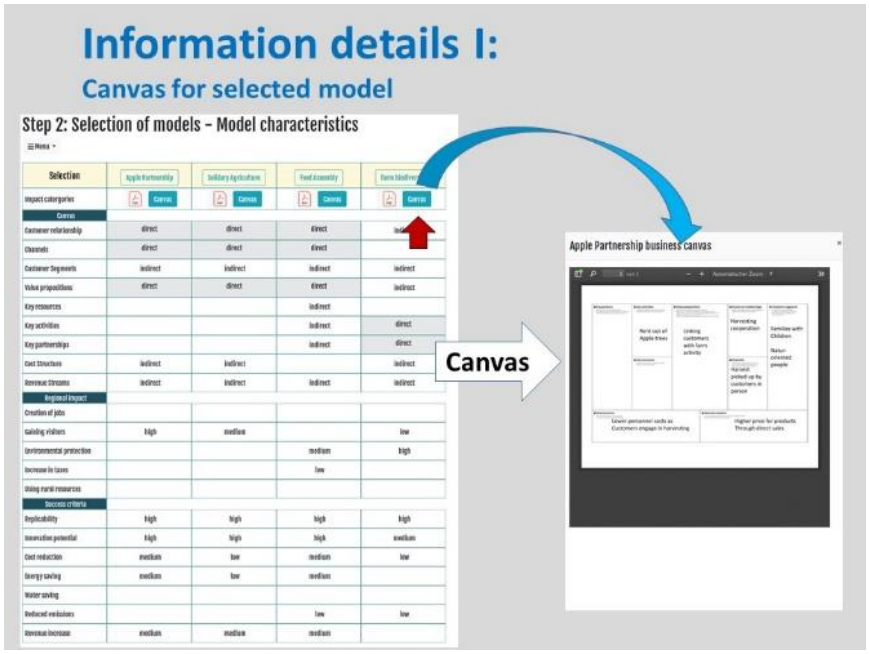

Figure 7: Overview information on the models' canvas contribution and their effects on success criteria with option to open a detailed canvas template.

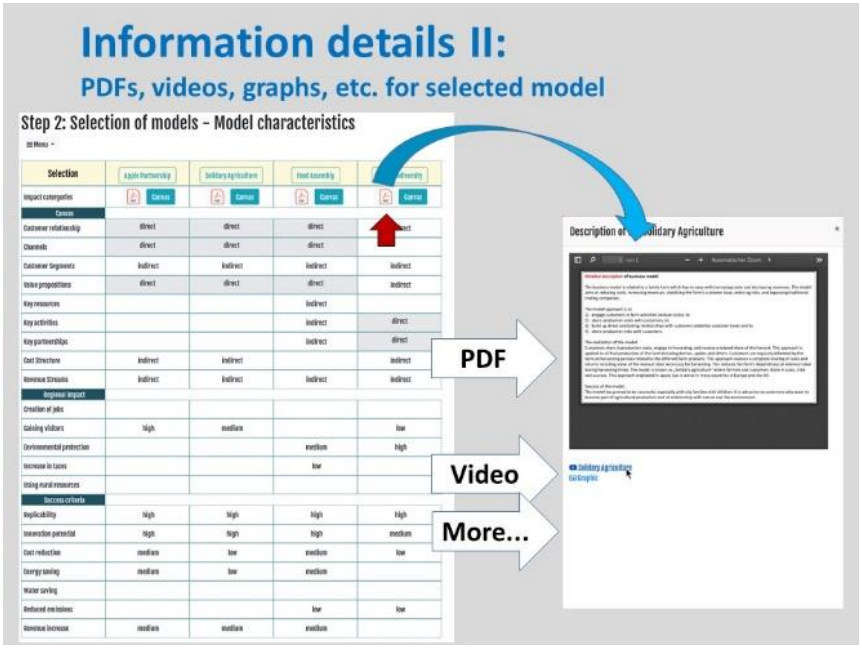

Figure 8: Providing a detailed model description and space for allocating all types of available information including web links, videos, reports, etc.

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Phase 4: Evaluating a user's opportunities to move towards a model implementation.

This phase is the most critical phase of the tool as it aims to screen/evaluate together with the enterprise its opportunities to adapt its activities to the fulfill the needs of the selected business model. The calculations or judgements follow roughly an approach that has been successfully developed for judgements in quality management and has by now been widely used on a global scale in enterprises of all sizes. It is known as *FMEA or "Failure-Mode-and-Effects-Analysis"* and identifies deficiencies in quality through various judgements based on scale evaluations. We are therefore confident that the approach will easily be embraced by enterprises.

In our case the approach (see figure 9) builds on

a) the analysis of requirements on the realization of external and internal success factors for the implementation of a given business model expressed on a scale from 1 (no requirement) to 5 (essential) and

b) the analysis of the situation of an enterprise (the user) regarding these factors expressed through a similar scale.

The interpretation of the scale values for each success factor is internally defined and provided through an information pop-up. The analysis allows the identification of deficiencies and the provision of some guidance on how to overcome these deficiencies.

The tool includes internally a *long and extendable list* of external and internal success factors. The fitting ones are linked internally (in the database) to any business model together with a weight value expressing the relevance of the factor for business model implementation. The calculation screen considers the five most relevant factors for further consideration. Combining the weight with the deficiency value provides a first hint on priorities in dealing with deficiencies. A high weight will push a deficiency value to a higher level making it more visible than a similar deficiency value combined with a lower weight

While internal deficiencies could be dealt with by enterprise decisions, the elimination of external deficiencies is dependent on the decisions of other stakeholders and might limit the move to the selected business model.

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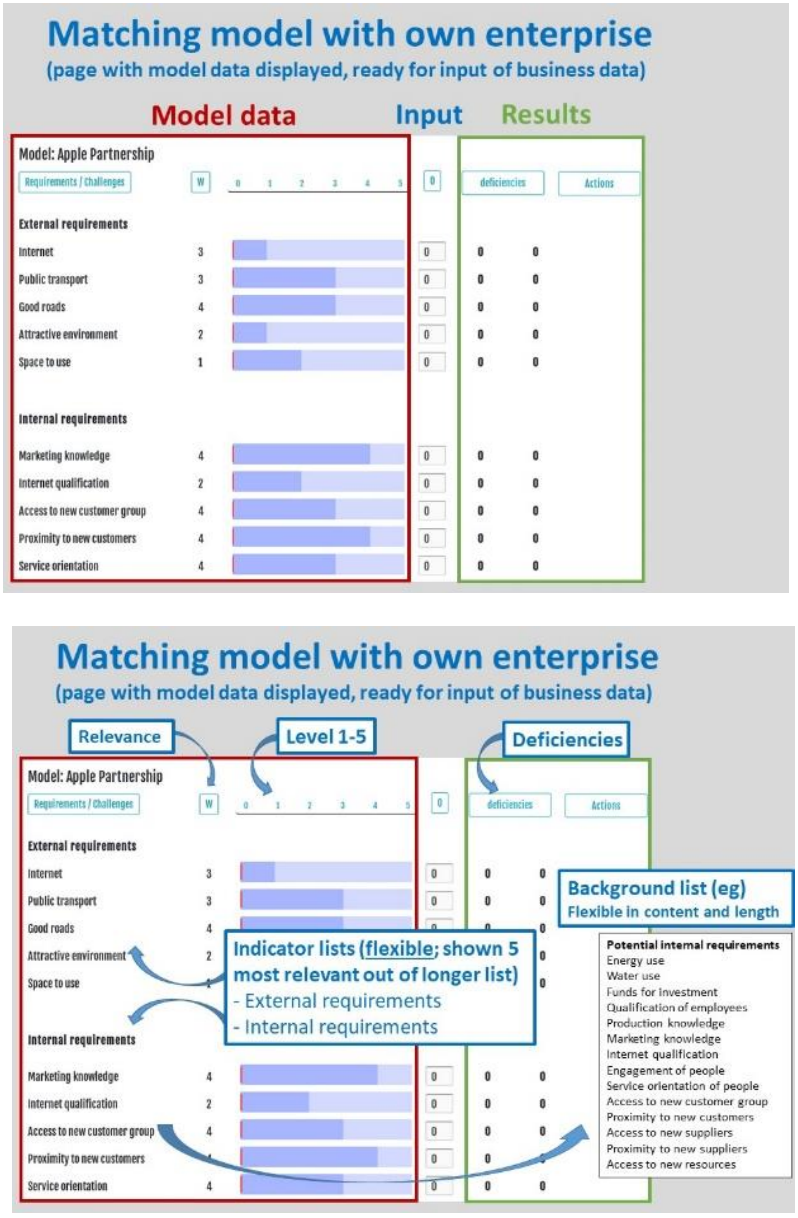

Figure 9: The calculation screen with the columns (col) from left to right: (col 1) External and internal requirements for model implementation, (col 2) weight attached to these requirements, (col 3) level of requirement needs on scale 1-5 and based on a detailed pop-up description of scale interpretation (not shown), (col 4) input judgement by enterprises regarding fulfillment of requirements, (col 5) deficiency (model requirement minus fulfillment), (col 6) weighted deficiency.

As a follow-up, the tool provides hints on *possible actions* for eliminating deficiencies together with a rough *evaluation of efforts* required (figure 10). Proposals for actions (example: figure 11) can be called up through a red alarm signal adjacent to the deficiency value, while a judgement of efforts is expressed through the number of black signs (presently expressed as wheels or related signs) linked with the alarm signal.

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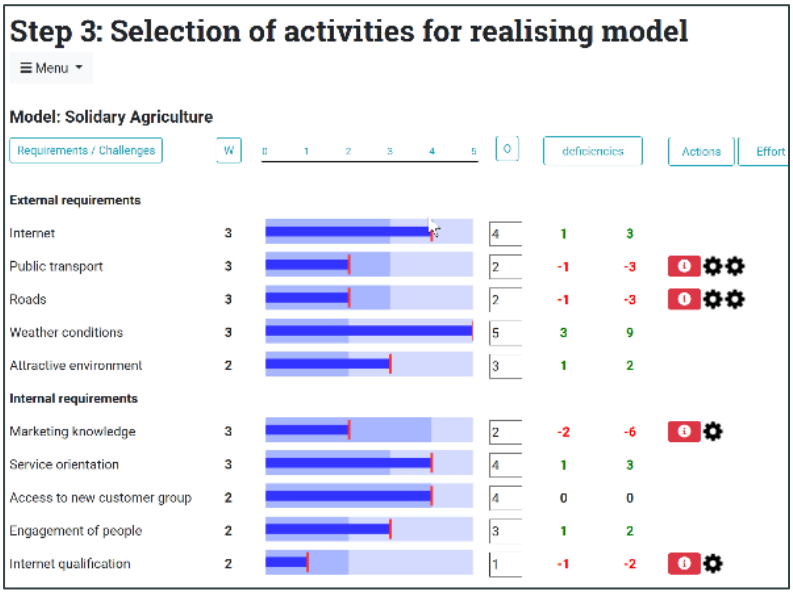

Figure 10: Calculation results showing deficiencies, red action buttons, and black effort signs.

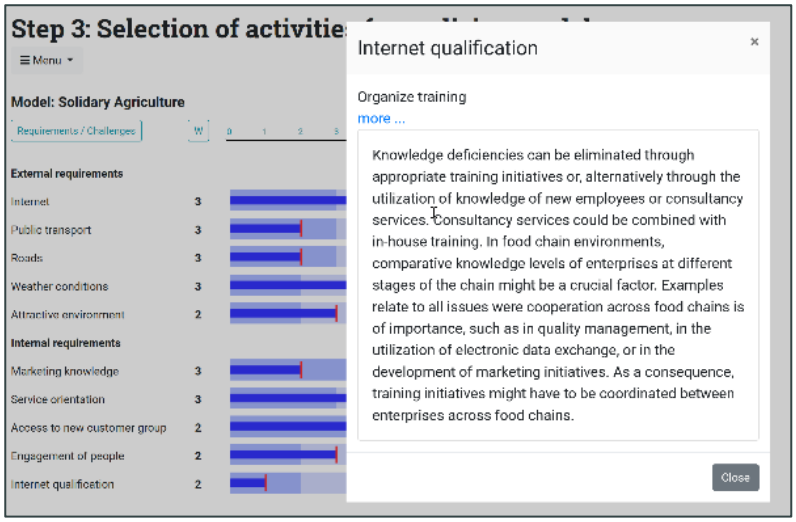

Figure 11: Example of action proposal (called up though red action button) for e.g. deficiencies in internet qualification.

As efforts in terms of finance, ability, resources etc. are very much dependent on the specific situation an enterprise is in, the judgement is just a first quick hint on what could be expected in relation between the different factor deficiencies such providing a further hint on priorities. *In fact, deficiencies with a high weight and a low comparative effort judgement are being proposed as the first deficiencies to be dealt with.*

The results are provided in a summary table (figure 12) which can be kept for future reference.

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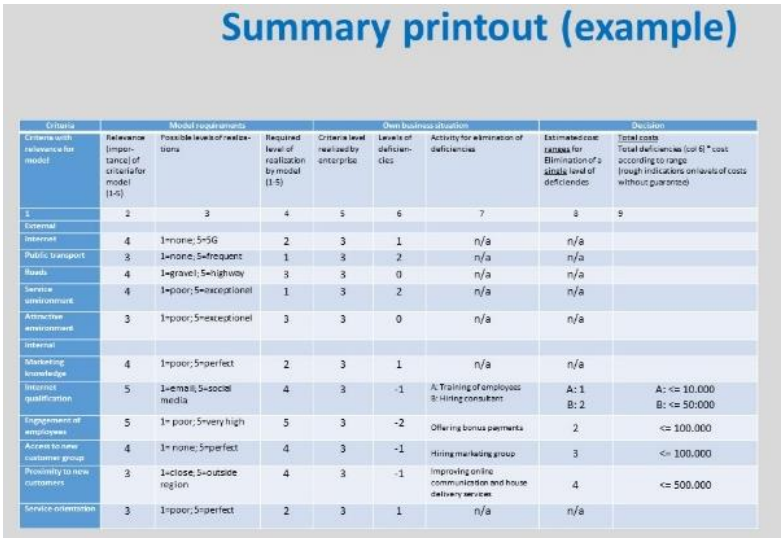

Criteria	Model requirements			Own business situation			Decision	
Criteria with relevance for model	Relevance (importance) of criteria for model (1-5)	Possible levels of realization	Required level of realization by model (1-5)	Criteria level realized by enterprise	Levels of deficiencies	Activity for elimination of deficiencies	Estimated cost ranges for Elimination of a single level of deficiencies	Total costs Total deficiencies (col 6) * cost according to range (rough indications on levels of costs without guarantee)
1	2	3	4	5	6	7	8	9
External								
Internet	4	1=none; 5=5G	2	3	1	n/a	n/a	
Public transport	3	1=none; 5=frequent	1	3	2	n/a	n/a	
Roads	4	1=gravel; 5=highway	3	3	0	n/a	n/a	
Service environment	4	1=poor; 5=exceptionel	1	3	2	n/a	n/a	
Attractive environment	3	1=poor; 5=exceptionel	3	3	0	n/a	n/a	
Internal								
Marketing knowledge	4	1=poor; 5=perfect	2	3	1	n/a	n/a	
Internet qualification	5	1=email, 5=social media	4	3	-1	A: Training of employees B: Hiring consultant	A: 1 B: 2	A: <= 10.000 B: <= 50:000
Engagement of employees	5	1= poor; 5=very high	5	3	-2	Offering bonus payments	2	<= 100.000
Access to new customer group	4	1= none; 5=perfect	4	3	-1	Hiring marketing group	3	<= 100.000
Proximity to new customers	3	1=close, 5=outside region	4	3	-1	Improving online communication and house delivery services	4	<= 500.000
Service orientation	3	1=poor; 5=perfect	2	3	1	n/a	n/a	

Figure 12: An example for a summary table (still various variations under consideration).

IV – Potential extensions

The present version of the tool (as of March 20, 2020) has integrated 14 business models provided by proQ for demonstration and discussion purposes. It will be extended (or in some cases replaced) in due time by the business models that are presently designed by other project partners of RUBIZMO. Depending on the ongoing monitoring and user validation within the project some functionalities might have to be adjusted to proposals based on the feedback to come. This will conclude the tool development within RUBIZMO.

However, for assuring the future attractiveness of the tool and in turn, its continued maintenance beyond the duration of the project, proQ is investing in two directions:

1. proQ will integrate a functionality that allows individual advisory groups to add their specific business models for internal use. This requires the development of an easy to use data input functionality and the organization of an advanced registration procedure that allows differentiated data access by different user groups.

2. proQ intends to add a template for financial calculations which supported enterprises in structuring their judgements of costs for investing in eliminating the deficiencies in model implementation requirements. This template should facilitate the linkage with specialized financial calculation tools available somewhere else.

An additional investment in moving the tool to other languages could be picked up if an organization is ready to use the tool professionally beyond conclusion of the project.

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V - Summary

The transformation tool is designed not just as a tool for information provision but for use in arriving at decisions for enterprise development. Its use depends on acceptance by the target groups, primary advisory groups but also individual enterprises. This asks for a continuous interaction with target groups and the establishment of a dynamic development and adjustment process.

As a consequence, the presentation in this report is a picture of the present situation which might change in the months to come. Any changes will be documented in an updated version of this report towards the end of the project.

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