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## FOODLAB Business Tool to Foster Entrepreneurship in the Agrifood Sector

Patrizia Busato<sup>1</sup>, Remigio Berruto<sup>1</sup>, Alessandro Sopegno<sup>1</sup>, Marco Rosso<sup>1</sup>

<sup>1</sup>University of Turin - DISAFA, Largo Braccini 2 – 10095 Grugliasco, ITALY

[patrizia.busato@unito.it](mailto:patrizia.busato@unito.it), [remigio.berruto@unito.it](mailto:remigio.berruto@unito.it), [alessandro.sopegno@unito.it](mailto:alessandro.sopegno@unito.it), [marco.rosso@unito.it](mailto:marco.rosso@unito.it)

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### ABSTRACT

The FOODLAB project develop a project-based learning approach and an entrepreneurial spirit in students, foster interactions between stakeholders in Food innovation and guide the development of innovative projects for Ecotrophelia, the European competition on food innovation that bring hundreds of students to compete at European level with their idea. The FOODLAB project enable the setting up of a European Foodbusiness Transfer Laboratory to create/help future entrepreneurs, with dedicated modules to promote interactions with food companies, technical centres, research centres or business companies.

In FOODLAB project is we reach the aim to provide an innovative tools to help to build business models, business plans to serve students, high education institutions, and SMEs.

The tool built for this purpose is a client server application, highly customizable to follow the target needs. It allows to setup a complete business model and business plan providing template, defaults sentences, available example of business plan. The tool incorporate in a customizable template and related information to built-in high quality business plans, and provide kind of expert knowledge base for those who need a business plan or document to promote their idea or agrifood product for development.

The tool was validated with success by a team of students that participate to Ecotrophelia Italy 2016. Training modules and guidelines are also available to facilitate the use of the tool.

The tool can be used by students of High Education Institution, or workers and managers for training by also for business model and business plan implementation.

The tool showed a great potential to develop of targeted, standard business models and business plans that could be transferable to other domains or tailored to a specific type of product or food innovation.

**Keywords:** *business model; business plan; innovative products; agrifood*

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### 1 Introduction

The FOODLAB project develop a project-based learning approach and an entrepreneurial spirit in students, foster interactions between stakeholders in Food innovation and guide the development of innovative projects for Ecotrophelia, the European competition on food innovation that bring hundreds of students to compete at European level with their idea. The FOODLAB project enable the setting up of a European Foodbusiness Transfer Laboratory to create/help future entrepreneurs, with dedicated modules to promote interactions with food companies, technical centres, research centres or business companies.

There is a lack of knowledge regarding business model and business plan implementation. There is no specific tool to address business plans and business model for innovative food products. Some general tools are available over the web and usable (e.g. canvas business model), however they do not address the specific field of food innovation, and they do not provide any guidance to the completion of business models and business plans.

One of the outcome of the project is to provide an innovative tool that allow performing a complete check of the food innovation proposed for what concern the aspects related to business model and business plan. The output of the tool will produce a formatted report usable by the team working on the food innovation.

The tool will cover four steps:

- 1) The business model, where we describe all the activities we make around a business case, which is referred to a innovative food product setup.
- 2) The business plan which is linked to the business model, where many aspects are analysed (including financial ones)
- 3) The financial plan, where financial data are computed. These will be included in the business plan.

All these three components are described in Figure 1, with link and interconnection that are implemented in the tool.

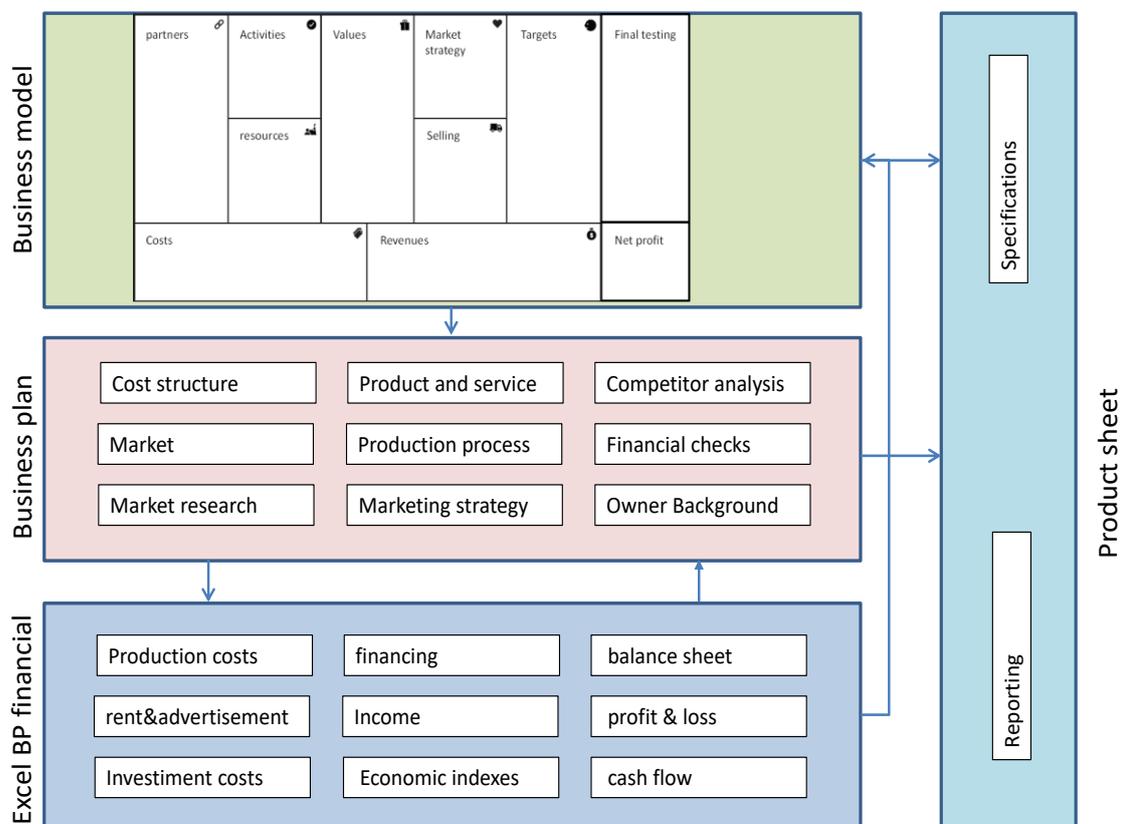


Figure 1 – Logic layout of the business tool and connections

## 2 Tool implementation

The tool is a windows® client server application, made with Delphi® language and using remote SQL server database for data storage.

All the development of both database and the tool was carried by DISAFA, University of Turin.

While the excel remain saved on a local PC, protecting the safety of financial data, only the common output of financial data is safely saved in the database to make the report at the end the elaboration.

The tool require internet connection and excel installed on the machine to work properly. It is a client-server Window® application, Users with Mac® need to install a Windows virtual machine to run it.

The tool interface that reflect the diagram of figure 1 is presented in Figure 2.

All functions are presented here: there are three main buttons to access the business model, the business plan and the financial data; excel sheet filling, password change, export to RFT document, configuration, support and help. In the help session there are short videos that explain how to use the tool functions. In addition, in the top right there is help, information and exit button.



Figure 2 – Tool main page

Each component main component presented in this top layer (business model, business plan, financial) is made in the level below by groups of questions. The questions appears once in a single section, but could appear as well in another section of another component. For example, the suppliers of raw material could be filled-in in the business model, and appear completed in the business plan. However the user can still go inside and change content.

Every section and demand respect the following color role:

- Green: correctly and fully filled in
- Yellow: partially filled in, you must answer at some remaining question or disable them
- Red: Empty field

In this ways the user has a quick view of what is done, and what is still missing. This is for all the levels of a business plan and business model interface.

## 2.1 Business Model

As shown in the Figure 3 there are 10 sections presented in the business model section:

1. Customer segments
2. Value proposition
3. Channels
4. Customer relationship (market strategy)
5. Revenue stream
6. Key activities
7. Key resources, capabilities and core competencies
8. Key partners
9. Cost structure
10. Final Testing

They reflect the canvas formulation. The tool provide at this level the status of completions for each group of issues: for example, if we look at channels, we have a total of 14 questions, 9 were disabled by the user, while 5 were managed and filled. So for the tool the section channels of the business model is complete and it is shown in green color. If we look at partners (yellow color) we could see that out of 12 questions, 3 were disabled and 6 managed, so we still need to make 6 of them.



Figure 3 – business model layer

The interface is quite intuitive, and the user at this level can see where work is still needed, and where the section are complete.

Each block is then filled with some specific question, made with the help of some business plan experts that the user can decide if compile /enable or disable, as presented in Figure 4. The work could also be made simultaneously by a team of people, all working on the same document and set of questions.

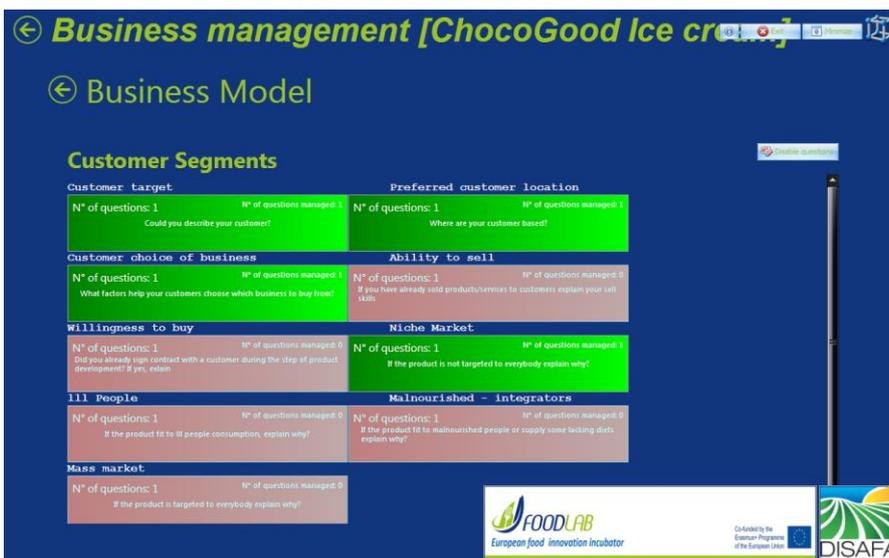


Figure 4 – Customer segments questions

The Figure 4 report an example of question group visible in the customer segments section. In this case some question are correctly compiled (green color) and other are disabled (pale red). That means the user could hide some questions he/she may think is not important for his business model.

However, the great value of the tool is the ability to make customized business plans and business models. Even starting from a common template users could able/disable questions. The color at each level remind the user which are the questions done (green) the ones to be done (red)

By clicking the question box is possible answer at the question typing text or inserting images or tables. An example of filled question is reported in Figure 5. The text could be plain text or RTF text.

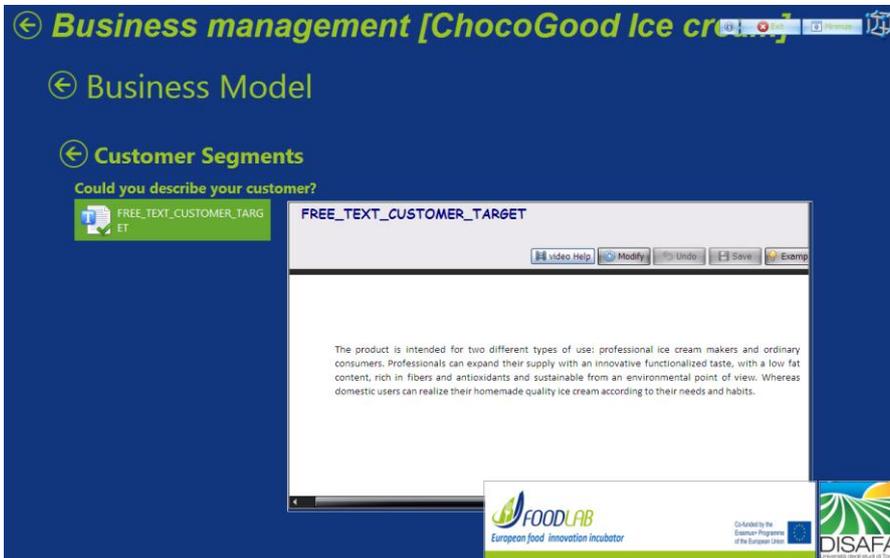


Figure 5 – Customer segments answer

The answer section include also an example of answer taken by a real example of one food product and also a help section in which are reported some advice for help the user to correctly fill in the answers.

## 2.2 Business Plan

As shown in the Figure 6 there are 9 sections presented in the business plan component:

1. The business plan summary
2. Owner background
3. Product and service
4. Market
5. Market research
6. Marketing strategy
7. Competitor analysis
8. Production process
9. Management and Organization

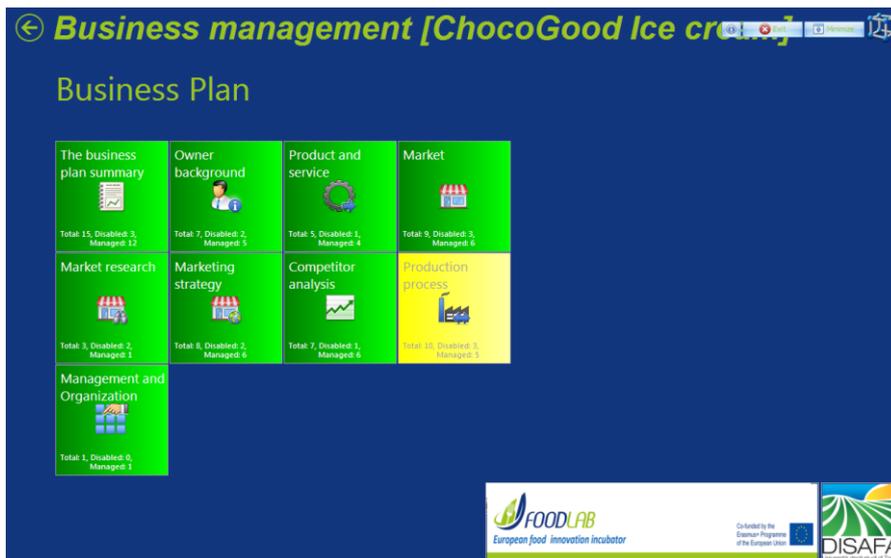


Figure 6 – Business plan main layer

The operation is the same described for the business model because each block is filled with some specific question that the user can decide if compile /enable or disable. In addition in to the business model the business plan section include also the financial plan

To compile this section is possible use 3 different type of excel (English, French, Spanish). Despite the use of French, Spanish and English business plan models, the tables will appear in English in the business plan report and will be built inside the tool, to avoid problems due to change in excel version and replacements of the excel file. This will make robust the tool over the years and not dependent from the third part software like Excel, and will reduce the work of user to copy and paste data from excel to the business plan.

### 2.3 Help provided

A variety of help is provided. For each sentence we provide a description of what the sentence is about and what should be written in the form. Secondly, we provide an example on the content.

The help is also provided through short videos that help to describe how to configure the tool, use the excel and change the password and all task are presented in the videos.

### 2.4 Creation of a report

The business model and the business plan reports are made automatically by the tool by extracting and formatting items/questions filled by the user inside the business model and business plan component. The report will come out in RTF format so still editable by the user after saving. The question/answers configured and enabled by the user will be in this report. So only enabled questions will be exported in the RTF document. The ones still not completed will appear with the indication not filled in red in the report.

The report in RTF format has a section for business model and a section for business plan, including main financial data.

## 3 Conclusion

The tool incorporate in a customizable template and related information to built-in high quality business plans and business models related to food innovation, and provide kind of expert knowledge base for those who need a business plan or document to promote their idea or agri-food product for further development to banks and investors. So it cover the lack in knowledge on making business plans and business models.

The application is available upon request for testing and usage by sending an email to: [remigio.berruto@unito.it](mailto:remigio.berruto@unito.it).

Future implementation will provide a teacher login that can supervise a number of users/student so he can control and promptly send a feedback to the user on the status of their document formulation.

The application could be used as a game to train workers and entrepreneurs to make a good business model and business plan.

It is a very valuable information for teachers, students who wants to develop a nice business model and business plans. The tool, although specifically built to do business model and business plan of innovative food products, is actually made in a way that can help, through different templates, to build on purpose business models and business plans. This is extremely helpful for teachers, who want to set-up a particular business model (e.g. for food sustainability), and use it with students to exercise. So it is a general purpose tool to make business models and business plans, including the financial aspects of business plan.

The application could also be translated in different languages to make it usable by the workers in agri-food companies in all countries since English is not so well known among technicians of the agri-food industries in Europe. It will probably become part of summer training courses 2017 within the KIC EIT Food since University of Turin is partner of the KIC.

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