



## Swift determination of pathogenic bacteria in food products.

DATE: July 2014

*"We can offer a solution to a specific problem. That has been our focus in the past couple of years – to solve specific problems that a business may have and we offer not only to give a specific solution but also to explain how the problem came about."*

**Linda Mezule**  
Senior Researcher, Riga Technical University

### FAST FACTS

**Country or Region:**

LATVIA

**University:**

RIGA TECHNICAL UNIVERSITY (RTU)

**Business partners:**

- Conelum Ltd

**Area of UBC:**

- COMMERCIALISATION

**Project start date:** September 2012

**Project end date:** On going

**Keywords:**

- Food quality;
- Rapid detection;
- Food;
- Milk processing.

**Key Objectives:**

### PROJECT SUMMARY

This case study is about Conelum Ltd, which, together with scientists from Riga Technical University (RTU), has produced a method that allows food manufacturers to conduct microbiological analysis on food products more quickly than before.

### CASE STUDY IN DETAILS

#### Project Background and Needs

To ensure quality and to abide by the law, food manufactures have to perform micro-biological tests every day. The method currently used is time consuming – it takes two to ten days to get results from such tests, which is quite cumbersome. Especially in the case of products that have a short life-span.

A couple of years ago researches from RTU participated in Commercialisation Reactor and their focus then was on methods how to determine bacteria in drinking water. The idea attracted the interest of businesspeople who later helped to co-found Conelum. The focus of the company slightly changed after research was conducted on the market needs and the new purpose was to come up with a technology that would enable businesses in the food industry to perform micro-biological testing of food products more quickly.

#### Project Solution from University's Side

Researchers from Riga Technical University have been conducting all the necessary research for the development of the product. In autumn 2014 there is a plan to receive an international certificate, which would make the selling process easier.

#### Project Solution from Partner's Side

The project partner is mostly involved in the management aspect of the cooperation. Project partner did the initial market research that defined the focus of the cooperation.

The tasks of automatization and development of software are being outsourced.

- to commercialise a method (a test) that could be used for work with food products that have short life-span. The goal was to create a method that would allow to conduct microbiological analysis on food products much more quickly than before.
- to devise a method that is practical and that could be used by employees rather than scientists.

### Lessons learned:

- The most important thing is to have a good team, whereby everybody has his or her own role.
- It is important to gather courage and get started. Everything is possible.

### University profile:

Riga Technical University is the first technical university in the Baltic countries – its history dates back to 1862 when Riga Polytechnic was founded. Long lasting traditions, advanced teaching methods, new technologies and innovative approach provide the University with the opportunity to ensure research excellence and offer exciting full-time or part-time studies in RTU in Engineering Sciences, Technologies, Natural and Environmental Sciences as well as in Architecture and Engineering Economics.

Now RTU academic staff is about 466 persons, research staff - 453 and, in total, there are 14 891 students (including foreign students).

### Achievements and Impact

Conelum is the first technology company that originates from RTU. The biggest impact of the project is the way it proves that RTU has the potential to commercialise its research ideas.

### Quantifiable Outputs for University

The outputs for Riga Technical University have been the following:

1. Conelum is a spin-off from RTU.
2. Researchers and students have seen research being commercialised.
3. Much media attention has been directed towards the university and the spin-off.

### Quantifiable Outputs for Partner (s)

The partner has gained the following from the cooperation:

1. A new product has been developed for commercialisation.
2. Imprimatur Capital Seed Fund has invested in the company.

## CHECKLIST OF PREREQUISITES TO SUCCESS

### Formal aspects

- Formal practical level Co-operation Agreement is signed between University and Partner(s) which defines particular roles, outputs, reporting mechanisms and other relevant aspects.
- Project partners have agreed on specific deliverables to be produced as a result of the co-operation.
- There is a contract with Conelum, which outlines the terms of cooperation.
- There is a contract with Conelum on the transfer of know-how (this agreement also contains provisions as to how much Conelum has to pay university in case there is profit.
- There is a contract between the university and the project partner outlining the terms of confidentiality.

### Financial and/or Infrastructure aspects

- University invests financial resources in the project.
- Co-operation Partner invests financial resources in the project.
- University invests infrastructure and/or material type (in

kind) resources in the project.

- University gains monetary benefits from the project.
- Co-operation Partner gains monetary benefits from the project.
- Co-operation Partner gains non-monetary but measurable and verifiable benefits from the project.

## Human capital aspects

- University is devoting its human capital, know-how, competence to the mutual cooperation, specifically, academic staff, R&D staff and administrative staff.
- Co-operation Partner is devoting its human capital, know-how, competence to the mutual cooperation.

## Marketing and communication aspects

- Project and/or project results are communicated within mass media channels.
- Project and/or project results are communicated within social media channels.
- Project and/or project results are communicated within internal marketing and/or communication channels within the University and/or Partner institution.

## For More Information

For more information about the case study contact Linda Mezule on [linda.mezule@rtu.lv](mailto:linda.mezule@rtu.lv)

For more information about the project "FROM BRIDGING TO SUCCEEDING. University and Business Co-operation Through Success Stories." and for more case studies visit [www.university-business.net](http://www.university-business.net)

For more information about the Nordplus Horizontal programme visit [www.nordplusonline.org](http://www.nordplusonline.org)

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