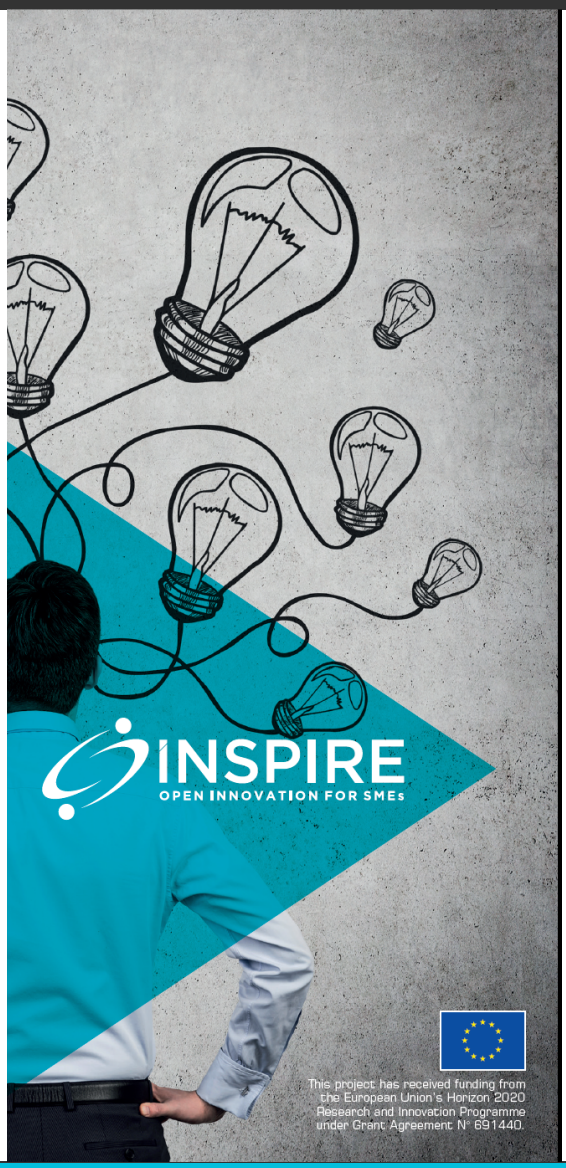

ROMBIT

Belgium, www.rombit.be

An OI collaboration initiated by a small IoT company with a big multinational opened doors for the SME and accelerated access to new markets

Executive Summary

This case involves Rombit, an SME active in IoT solutions. Rombit builds mobile applications and hardware to solve industrial problems of companies in a variety of sectors. Through a networking event they got in touch with DEME, a multinational active in dredging.

They have been developing a sensor together which can measure wear and tear in dredging pipes. The solution can generate significant benefits in the supply chain of the multinational (i.e. DEME). Rombit can use it as a platform solution for businesses in other sectors.

CASE N°: SD26

SECTOR: ICT SERVICES

TECH INTENSITY: HIGH-TECH

LIFE CYCLE STAGE: START-UP

INNOVATION VECTORS: PRODUCT, SERVICE

OI PARTNERS: LARGE CORPORATION, OTHER SME

KEYWORDS: Multinational, dredging, sensor, IoT, prototype, networking, start-up mentality

- BACKGROUND FRAMEWORK
- INNOVATION CHALLENGE & MARKET OPPORTUNITIES
- OI TRAJECTORY
- BUSINESS IMPACT
- LESSONS LEARNED

Rombit

BACKGROUND

Rombit was founded in 2012 by Jorik Rombouts as an IoT solution provider in Antwerp (Belgium). Rombit builds mobile applications and hardware to solve industrial problems encountered by companies in a variety of sectors. The solution that they offer always involves a combination of data, software and hardware which sets them apart from the competition. Their focus is on B2B and industry. The company is a rising star and has already received several industry awards. Approximately 40 people work for the company and in 2014 sales topped €1.1 million with a €99,000 profit.

Rombit intends to grow initially on a regional level and in the next year also internationally. They also want to have a stronger link with the port of Antwerp and develop apps and sensors for other ports. They are interested in continuing to provide new solutions, but wish to stay in their niche market.

INNOVATION CHALLENGE & MARKET OPPORTUNITIES

The challenge for Rombit was (and still is) to increase profitability and find a new foothold for growth. Rombit works a lot in R&D projects but they find with this type of project that they currently cannot earn as much as they would wish. They are active in an immature and early-stage IoT industry, where they struggle with a slow and difficult sales process. To be able to sell more and faster they need reference solutions ("proofs of concept", showcases) to demonstrate their abilities. They are continuously investing in technologies and customer acquisition to secure future growth opportunities.

The market for industrial applications in IoT is enormous and many industries are working on their future vision. It may take 1-3 years for potential customers to seek out partners like Rombit. The SME has therefore had to take the initiative to prove their potential and value.

The present market opportunity was discovered during informal conversations at networking events. Rombit asked DEME* about their biggest problem which turned out to be the stock management of dredging pipes and the replacement of pipes. They came to the conclusion that they might be able to develop a solution together by putting sensors in the dredging pipes. This informal conversation became formal as soon as a proof of concept existed on paper.

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*Dredging, Environmental and Marine Engineering NV (in short DEME) is an international group of specialized companies in the field of capital and maintenance dredging, land reclamation, port infrastructure development, offshore related services for the oil & gas industry, offshore wind farm installation, environmental remediation, etc. The group is based in Zwijndrecht, Belgium, and has currently operations on five continents. The roots of the group date back to the mid-19th century. DEME is committed to the practice of sustainable development.

OPEN INNOVATION TRAJECTORY

Concept development

The concept to develop involved placing a sensor in dredging pipes which would enable their client to measure corrosion and undertake the necessary maintenance actions.

- The sensor-based solution enables communication between the dredging pipe and Rombit's cloud platform. It can give automatic indications when the pipes need to be replaced and initiate an entire logistics and supply chain of dredging pipes (the pipes need to be transported from other regions, for example, Siberia to Dubai).
- This kind of platform would be integrated at DEME as a continuous pipe management solution.

The development process, IPR and competition strategy

The project developed organically. There was an active collaboration between the partners during the development process with almost weekly meetings to ping pong ideas and solutions. As a result, some changes were introduced on a technological level. The initial sensor infrastructure was downgraded to a less accurate technology which could still fulfil the basic requirements. ROMBIT, as the technology partner, developed both the sensor infrastructure and the cloud infrastructure. DEME undertook the analysis of the

business case, testing and validation. DEME sourced a third party, a German producer and supplier of pipes, to study how the sensor could be integrated in an easy way in the pipes during production.

The terms and conditions of the IP and the commercialization of the product were negotiated and fixed contractually at the start of the project (from the moment the idea was clear). The IP for the sensor infrastructure lies with Rombit. It can be used in other fields except for the dredging business (e.g. the oil & gas industry). The commercialization and full IP related to the sensor and its integration in dredging pipes is the sole property of DEME.

The product is unique in the market. The life-cycle of a pipe (which costs approximately €25,000 per piece) can be prolonged by 25%, which is a big gain. Being able to detect defects can also prevent a pipe from exploding and thereby reduces the cost of repairs.

Commercialization and follow-up

Rombit seeks to scale up by activating the sales process based on the technology platform that they have developed and by reference to the project.

Rombit did not need to restructure the company to carry out the open innovation project. However, they admit that this type of project requires more management, which the company did not have before.

As far as the oil & gas industry is concerned, the marketing of the project is in the hands of DEME. Rombit proceeded with their direct sales approach to promote projects based on their newly acquired skills, technology platform and project reference.

The product is still in the prototype phase; this will be followed by a limited production (50 sensor units) and testing in the environment before it can be launched in 2018-2019.

BUSINESS IMPACT

By solving a specific problem for one large company a business opportunity in multiple other industries was discovered. The OI partner provided a user case for Rombit's services (replacing old IT systems with cloud and sensor-based solutions).

Rombit developed soft skills on the level of interpersonal communication in a joint development project.

"When working with different innovation teams, we need to be sure that all teams are aligned. Everyone wants a change but no-one wants to change. We learned to bring everyone round the same table and agree that all partners need to change a little when working together. This is something which wasn't our concern before. Before we focused only on the technical solution."

It is too early to calculate measurable business results, but the following gains are already visible:

- Development of a unique offering with 25% efficiency gain;
- Scalable business opportunity (e.g. for oil & gas pipes);
- Prototype with a limited production is planned (50 units).

LESSONS LEARNED

This case shows how collaboration between a small company and a big multinational can open doors and accelerate access to new markets. The cooperation helped the SME to access a new market and to prove itself as a reliable partner. The shared IP negotiation offers a win-win solution for both partners. (Rombit owns IP which the company can use in other markets, except for dredging.)

Main lessons learned:

1. Informal networking is a trigger to find new opportunities for open innovation.
2. The start-up mentality of the SME - being proactive with solutions and open to collaborate - made it easy to find partners to work with, especially large multinationals.
3. Being geographically close to each other (Port of Antwerp) benefits cooperation.
4. Choosing partners with some history of working together is a preferred option (relationship based on trust). In this case, an existing partner of DEME was involved in the production of the product.
5. IP rights need to be handled upfront to prevent any discussion or disagreement further down the line.
6. As a young company, there is a need to invest in a client portfolio and technology. An open innovation with a multinational in the sector can be a springboard for further business.

Main lessons learned:

1. Knowing your partners well is critical. Understanding the exact goals, outcomes and commitments (time and resources) of each partner is necessary to be able to trust and rely on each other.
2. Agree and take into consideration the time-frame of the project. If you know a project is going to take a certain amount of time, you have to make sure all parties will remain committed for this time (through either good personal relationships or a formal agreement) and are not subject to (planned) external changes which could have a key impact on the project.
3. Before committing to an open innovation partnership, a company needs to know what it aims to accomplish during this project, set clear and achievable goals and have the means to monitor progress and the success of the partnership. Do enough research and validation before the start of the project to know you have a reasonable chance of achieving these goals within the project's lifetime. For example, for RFIDTAG the bottom-line objective was to gain additional technical knowledge and skills in this new area. They knew that there was a demand for features which could be derived from the learnings within the project. As a result, even if the overall project was not successful, RFIDTAG was able to apply its new know-how to the rest of its existing portfolio.
4. Although cooperation processes are resource and time-consuming, which is difficult for start-ups (requires significant resources, time and patience), RFIDTAG recommends the experience to other start-ups because of the potential return in terms of broadening their expertise.