

Innovation Across Borders – Forum VBO-FEB

Innovation Case Preparation Form

WHO

- Welke onderneming(en) werd(en) hierbij betrokken? (grootte, bedrijfssector,...)?
- Met welke partner(s) (clusters, O&O-centrum, spin-offs, hubs,...)?

Osimis' mission is to use open source software to re-wire medical imaging. The company was created alongside Orthanc (orthanc-server.com, FSF 2015 Award for Advancement in Free and Open Source Software winner) to help it tap a wider market.

In addition to providing consulting, custom development and training services in connection with Orthanc, we also develop a SaaS product, lify.io, that allows users to store, view, process and share medical imaging on local devices as well as in the Cloud.

We work with other companies and research centres across the globe, especially with regard to lify.io:

- IRCAD, France
- UCLA, USA

On a more general note, Orthanc, being open source, is currently being used in a great many hospitals and medical institutions.

We have implemented Orthanc for clients in France, South Africa, the USA and the UK.

We have a partnership with Médecins Sans Frontières at global level. All members of the MSF network can use our solutions for free in exchange for their good reputation.

WHAT

- Wat was de doelstelling van de innovatie?
- Waarin bestaat precies de innovatie (toepassing, soort innovatie – product/procedé/businessmodel/support diensten/management,...)?

Orthanc offers open storage and management of medical images:

- Open source: removing interoperability issues caused by medical image solution vendors using closed source solutions.
- Open architecture: custom plugins can be added. Anyone can therefore develop their very own tools.
- Open data: Orthanc has a REST API, which grants easy and standard access to data.

Orthanc uses a GPL v3 licence. Osimis holds a dual licence and can therefore write code that is not disclosed to the general public if we or our clients would not like to do so. In most cases, though, we put our code open source, therefore enabling open innovation. There is no sense in re-inventing the wheel.

Osimis has a dual business model:

- Services: we provide consulting, development and training services in connection with Orthanc.
- Software as a service: lify.io
 - This is a web platform that lets clinical teams, radiologists and hospitals to cooperate with regard to medical images.
 - Viewing, storing and sharing medical imaging exams is still complex due to proprietary standards and storage silos, which is why CDs are currently still the standard.
 - lify.io lets users collect medical imaging exams through ingestion (CDs or drag'n'drop) or via connection to a PACS that is simple to set up. Imaging modalities can also be connected straight to lify. The full medical imaging scope is covered, from radiology to pathology and video.
 - The imaging exams can be synched to the Cloud as well as stored on local devices. Once stored on lify.io, the user can organise the studies thanks to intelligent folders, tags and automation.
 - Studies can be viewed with basic as well as advanced viewing functionalities. The images are rendered at an optimised low bandwidth.
 - Entire imaging studies can be shared among users both inside and outside the organisation in a matter of seconds. Moreover, a live sharing capability allows users to share screens instantly with multiple users through a live multi-cursor conference call.
 - Finally, since the application has a public API, it is simple to integrate with other clinical solutions.

IMPACT

- Voor de business/ de onderneming (verwerving van een nieuwe markt, groei, kostenvermindering,...)
- Op de markt (eindafnemers, tussenpersonen)
- Over het geheel genomen, ten aanzien van de maatschappelijke thematiek

Our customers now have efficient solutions that are sustainable and cost-effective.

Hospitals are no longer stuck with vendors' solutions and can now freely chose to select a new provider or decide on system evolution by themselves.

We create a new way for clinicians to collaborate. It is a faster and more reliable way of working.

Patients can now easily receive, store and transfer their medical images, therefore increasing patient empowerment.

KATALYSATOREN & OBSTAKELS

- Hoe verloopt / verliep de ontwikkeling van het project (duur, algemene indruk)?
- Wat vergemakelijkt / vergemakelijkte het verloop van het project (katalysatoren)?
- Wat zijn / waren de moeilijkheden en uitdagingen waaraan het hoofd moet /moest worden geboden (hinderpalen)?

In 2011, Sébastien Jodogne, a member of the Liège university hospital staff, started creating a medical imaging server named Orthanc to serve the needs of the university hospital's radiotherapy department.

As the research into these developments had been sponsored by government funds, the decision was made to open up the source code. It has since been downloaded over 25, 000 times.

Orthanc has won multiple awards, including the 2015 Award for Advancement in Free and Open Source Software awarded by the Free Software Foundation at MIT in Boston.

Osimis was created alongside Orthanc to help it tap a wider market. Our services and products help medical specialists and industrials around the world to foster innovation in medical imaging.

LESSONS LEARNT

Wat kon er / had er kunnen verbeterd worden om deze innovatie te vergemakkelijken? (enkel invullen indien van toepassing)

- Organisatie/management van het project
- Samenwerking/partnerschap
- Beheer van de intellectuele eigendom
- Lancering van de innovatie op de markt
- Financiering van het innovatieproject (fiscaal beleid, beschikbaarheid van kapitaal, investeringsubsidies, enz.)
- Andere beleidsaspecten /regelgevingsaspecten

Open source speeds up innovation. It was hard to find a business model that fit, but once we got the ball rolling it unfolded well.

Partnerships with major key opinion leaders (MSF in our case) really help to find the best market for the product.

The medical sector is known to move slowly. Even though this is a fact, running lean has enabled us to respond to acute issues quickly.

Product CE marking and company ISO certification are a real cash drain.