



Available online at www.sciencedirect.com

ScienceDirect



Procedia Computer Science 106 (2017) 212 – 219

13th International Conference on Current Research Information Systems, CRIS2016, 9-11 June 2016, Scotland, UK

Strasbourg IHU Knowledge base: a CERIF implementation

Laurent Remy^a, Valérie Brasse^a1

^aIS4RI, 31 rue de Saverne, Haegen 67700, France

Abstract

Strasbourg IHU is a surgical centre dedicated to the management of digestive diseases, specialized in minimally invasive technologies. This organisation produces and aggregates large amounts of information, which needs to be shared within IHU. This organisation decided to create a dedicated digital service to fulfil three goals: share information stored within a knowledge base, get up-to-date pertinent news about the minimally invasive surgery sector, and allow interactions among the large variety of profiles (experts, surgeons, companies, etc.).

IS4RI is a structure that supports the design, development, integration and use of information systems to help research and innovation. IS4RI implemented CERIF as a data structure for the knowledge base, using a web-based platform and dedicated specific modules to integrate the market watch and social networking functions.

This paper describes the analysis and realisation phases of the project, with a focus on the use of CERIF as a structure for a knowledge base.

© 2017 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Peer-review under responsibility of the Organizing Committee of CRIS2016

Keywords: Knowledge base; information sharing; social networking; market watch; IHU Strasbourg; CERIF

1. Introduction

Nowadays, aggregating data seems the easiest thing to do. Big data is a popular concept that everyone wants to be part of. Connected objects flood the Internet with huge amounts of data. Even in research organizations, each person aggregates data at her/his own personal level. Complexity comes with the categorization of this amount of knowledge, at this level. For an organisation, complexity can also be increased when talking about sharing this knowledge among people or services.

¹E-mail addresses: lremy@is4ri.com, vbrasse@is4ri.com

Strasbourg IHU is an organisation which field of activity concerns image-guided minimally invasive surgery. This organisation is involved in innovation through partnerships with companies in their field. Many people in this organisation aggregate and produce data. They found they have problems capitalising on these data that are poorly shared across the organisation. So they started a project to create a platform to help knowledge sharing, and enhance this knowledge by getting relevant news concerning their specific fields.

This document will first give us an overview of the stakeholders and a description of the objectives of the project, and of the different steps of the analysis. A focus will then be done on the use of CERIF in the implementation of the platform, for one of its module. A third part will talk about the two other modules that are part of the platform, and we will close the document with some perspective for the future.

2. Project scope

2.1. Stakeholders

2.1.1. Strasbourg IHU

Strasbourg IHU² (Institut Hospitalo-Universitaire, or teaching hospital institute) is a unique medical and surgical centre dedicated to the management of digestive diseases. It combines the best minimally invasive technologies with the latest advances in medical imaging.

Its clinical activity is aligned with the one of the medical and surgical hepatico-digestive pole of the new civil hospital of Strasbourg, with a focus on the treatment of cancers of the digestive system.



The convergence of gastrointestinal surgery, flexible endoscopy and intraoperative imaging is a strategic priority. A major goal is to integrate the resources of surgical robotics and medical imaging to a new concept of hybrid surgery room.

With the status of Scientific Cooperation Foundation, IHU brings together public and private partners to develop, in the field of image-guided minimally invasive surgery, a program of excellence in care, training, search and recovery.

2.1.2. IS4RI

IS4RI³ stand for Information Systems for Research and Innovation. The goal of this structure is to support the design, development, integration and use of information systems to contribute to the advancement of research and innovation in Europe and beyond.

It stands on 4 pillars:

- Cooperation: participate to the defragmentation of European research
- Valorisation: obtain more transparency, diffusion and reuse of research results
- Education: develop a European profession of research information manager
- Evaluation: assist in measuring research performance

2.2. Project description

IHU is a worldwide reference for image-guided minimally invasive surgery. As such, it interacts with many specialists including leader experts. Through these interactions and the research programs it conducts, IHU produces and aggregates amounts of advanced information about the field of minimally invasive surgery. This information concerns the whole technology development process, from invention to distribution. This knowledge is a real value for IHU, which wants to leverage it, especially through the creation of a dedicated digital service, designed as a platform composed of three modules.

² http://www.ihu-strasbourg.eu

³ http://www.is4ri.com

Download English Version:

https://daneshyari.com/en/article/4961268

Download Persian Version:

https://daneshyari.com/article/4961268

<u>Daneshyari.com</u>