

SATAKUNTA AND PIRKANMAA

Regional Information System Enhances Patient Care

FINNISH HOSPITAL DISTRICTS

HIGHLIGHTS

SOLUTION:

Unified Information Portal

PRODUCT:

BEA WebLogic Server™ 8.1

INDUSTRY:

Healthcare

PARTNER:

Fujitsu Services Oy

COUNTRY:

Finland

BUSINESS PROCESS CHALLENGE

Two major hospital districts in Finland, Satakunta and Pirkanmaa, were challenged with sharing patient information between all the relevant healthcare professionals and organisations. A fragmented flow of information led to overlapping consultations, inefficient treatment, and additional cost.

SOLUTION

Using BEA WebLogic Server 8.1, the two hospital districts created a next-generation regional information portal, called FIALE, which integrated patient information from various backend systems in a unified portal solution, efficiently and securely.

RESULTS

The first phase launched after just six months of development. Today, 150 doctors in five municipalities can easily and securely search and manage patient data from their workstations. Soon, up to 700,000 citizens will be included in the FIALE system.

CUSTOMER BRIEF

The hospital districts of Satakunta and Pirkanmaa are large regional healthcare providers governed by federations of municipalities. They provide primary and specialised healthcare services in clinics, health centres, and hospitals for up to 700,000 Finnish inhabitants in 57 cities and towns.

BUSINESS PROCESS CHALLENGE

In Finland, there are approximately 30 million visits annually to the country's healthcare centres, clinics, and hospitals. Thousands of patient examinations and consultations, medication prescriptions, x-rays, and laboratory tests are conducted each day. Almost every one of these care episodes is recorded in various databases and information systems, resulting in a reliable source of information on patients.

The two regional healthcare providers were challenged to share information between different healthcare organisations and individuals. Information stored in the back-end systems of a health centre, for example, could only be accessed within the specific organisation, and not by all the professionals involved in the treatment process. This information gap often led to a significant number of overlapping tests and treatments, lengthening patient queues, and inefficient use of time and money.

An additional challenge related to information security. How could the healthcare providers ensure customer privacy and meet the strict

legal requirements that regulate the social and healthcare services?

SOLUTION

To improve the information exchange between the different healthcare organisations, two major Finnish hospital districts, Satakunta and Pirkanmaa, with a total population of over 700,000 people, created a regional information system, based on BEA's technology. It was called 'FIALE'.

The FIALE system enables healthcare professionals to review patient information and treatment history from a variety of back-end patient systems, including primary and specialised care units. This information is available in seconds via a Web portal. FIALE also helps to identify and define patients ongoing treatment programs, thereby accelerating and enhancing the long-term treatment of patients illnesses, such as diabetes, allergies, and dementia. The system also enables healthcare staff to deliver a seamlessly connected treatment process.

The FIALE project went live following just six months of testing. Currently, FIALE serves healthcare centre doctors in the Satakunta hospital district and all 25 municipalities participate. In Pirkanmaa, FIALE is in use within seven municipalities. It will gradually be implemented among all doctors and other healthcare staff in the two hospital districts.

Within two years, it is anticipated that the system will encompass the entire regional population. Eventually, the social services organisations will be integrated in

"FIALE is designed to strengthen inter-organisational collaboration between the different healthcare organisations and create a seamless service chain for customers."

Mika Tervonen, Director, Fujitsu Services

the system. The result will be an exceptionally large, seamless and collaborative network spanning all health and social organisations.

RESULTS

The solution represents one of the world's most advanced electronic healthcare solutions. It enables patients to benefit from faster treatment processes and increased privacy. Healthcare professionals themselves are benefiting from a more efficient information flow between organisations.

"We wanted to provide healthcare staff with an information system which allowed them to be more efficient in their role," says Tuire Mikola, IT Manager, Hospital District of Satakunta.

Using this regional information system, which was developed in partnership with Fujitsu Services and BEA, a hospital doctor no longer needs to make extra phone calls to obtain treatment history information from a healthcare centre. Instead, he or she can log into their workstation and receive the data that he needs without any delay. As a rule of thumb, every third patient that visits a doctor needs further examinations or treatment. If the doctor can focus on finding the right cure or medication immediately, without having to order further examinations, we can save a lot of time and money, and introduce more efficiency in the treatment process.

The heart of the FIALE regional information system is a reference database, which includes the source information of customer data and treatment history. Fujitsu Services was responsible for the integration of the reference database with the various back-end systems, as well as the development of the information services, document management, user identification, and the user portal, all of which is powered by BEA WebLogic Server 8.1. Fujitsu manages the service provisioning, including system capacity, usability, and the management and monitoring services. FIALE also offers the data conversion, message brokering, and system monitoring functions.

“FIALE is designed to strengthen inter-organisational collaboration between the different healthcare organisations and create a seamless service chain for customers,” Mika Tervonen, Director, Fujitsu Services explains.

“It leads to greater efficiency in the process, and also enhances customer privacy and satisfaction. With BEA’s proven technology and their strong commitment to work in close partnership with us, we were able to build Finland’s first seamlessly integrated, regional information service in a relatively short time. As a result, FIALE is now the only truly instantly deployable, proven, finalised service concept. It is playing a crucial role in helping hospital districts to rationalise their operations and improve cost efficiency,” he concludes.

ABOUT BEA

BEA Systems, Inc. (Nasdaq: BEAS) is a world leader in enterprise infrastructure software, helping enable companies to improve business responsiveness through service-oriented architecture (SOA), a software design approach that more closely aligns IT with business objectives. With 15,000 customers worldwide including the majority of the Fortune Global 500, BEA and its WebLogic® and Tuxedo® brands are among the most trusted names in business technology. Headquartered in San Jose, Calif., BEA has 75 offices in 36 countries. More information on BEA products and services is available at www.bea.com.

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