Pervasive computing enables preventative care at Aarhus Kommune

Overview

- **The Challenge**
  Aarhus Kommune in Denmark wanted to explore recent technological advancements to improve quality of care and better sustain the health of its aging populace. The key challenge was to actively involve elderly citizens in coordinated care and improve management of the chronic ailments of this growing demographic.

- **The Solution**
  With assistance from IBM® Global Business Services, Aarhus Kommune developed a blueprint for an integrated solution based on pervasive technology. A pilot program called “ElderTech” provided each test subject with IBM Personal Care Connect devices and Lenovo ThinkPad X Series Tablet devices for home use over a four-month trial period.

- **Key Benefits**
  The ElderTech pilot demonstrated the potential of a flexible healthcare ecosystem solution to support the empowerment of elderly citizens and the coordinated delivery of care, which is essential to enable preventive chronic care.

The second-largest municipality in Denmark, Aarhus Kommune provides its 300,000 citizens and residents—living throughout 24 other small cities in the region—with a wide variety of services, including healthcare, home care, social, education and infrastructure services.

Eight elderly citizens volunteered to use the solution, in which they would use IBM Personal Care Connect mobile devices and Lenovo ThinkPad X Series Tablet devices to automatically capture and monitor their status. Vital-sign data was fed back via the Citizen Portal, which also monitored care plans and sent convenient reminders about medications and appointments.

“*The city of Aarhus collaborated closely with public researchers and private companies to explore and develop technology in pervasive computing. This project will help us meet the challenge of supporting our aging population by empowering our elderly citizens and improving their quality of life.*”

—District Manager
Aarhus Kommune
**Key Components**

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**ElderTech program puts mobile devices to the test**

Patients used the home devices to monitor their health. Embedded Bluetooth-enabled sensors on the monitoring devices automatically captured vital-sign data and sent it via IBM Personal Care Connect software architecture to IBM WebSphere® Everyplace® Connection Manager V5 software and onto an IBM DB2® for Microsoft® Windows® V8 data server, which accommodates 10MB of raw data capacity and stores important medical data such as information regarding patient medications.

Elderly patients were able to use their ThinkPad Tablet devices to access the ElderTech solution’s Citizen Portal. In addition to viewing new blood pressure and weight results via the portal, the patients had access to convenient reminders about which prescription medications to take at specific times or which healthcare provider was scheduled to visit the patient’s house on a specific date.

Thirty healthcare providers participating in the pilot were able to use their PCs or personal digital assistants (PDAs) to access the solution’s Provider Portal, which offered a dashboard view of patient information and ongoing patient care.

**Flexible architecture bolsters healthcare ecosystem**

The ElderTech pilot project provided Aarhus Kommune with an innovative model for developing and maintaining a flexible healthcare ecosystem solution that will support the secure exchange of private healthcare information among elderly patients, healthcare practitioners and other stakeholders.
The elderly test subjects appreciated the solution's ability to increase their awareness of their own health without needing onsite assistance. They also liked the solution's ability to support effective communication with their healthcare providers and other healthcare stakeholders.

Meanwhile, the healthcare provider volunteers for the pilot program liked the timely access to updated information on patient conditions. Expected benefits from remote tracking include the ability to treat patients proactively through preventive healthcare treatments.

The communication features tested in the ElderTech pilot will also support the delivery of unified services across all healthcare system boundaries—an added bonus that will become increasingly important in the future.

For more information
For more information, please contact your IBM sales representative or IBM Business Partner, or visit ibm.com/websphere/portal
Leveraging IBM Lotus Domino software, Advokatni Kancelar Mgr. Ivo Hala raises its efficiency and revenue while enhancing client services.

**Overview**

- **Advokatni Kancelar Mgr. Ivo Hala**
  - Prague, Czech Republic
  - www.akhala.cz

- **Industry**
  - Professional Services

- **Products**
  - IBM Lotus Domino Collaboration Express, Version 6.5

- **IBM Business Partner**
  - OR-CZ s.r.o.

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**Case Study QuickView**

Advokatni Kancelar Mgr. Ivo Hala (Ivo Hala and Associates) specializes in corporate law. The firm offers comprehensive legal advice on mergers and acquisitions, securities issues and bankruptcy and composition proceedings.

**Challenge**

Ivo Hala and Associates (Ivo Hala) had been using third-party software to manage its client contact information and documents. However, the applications did not allow Ivo Hala to share information among its multiple offices or access information from remote locations, such as clients’ offices. The firm needed a more robust collaboration solution that would enable it to easily access client information and respond to client queries as quickly as possible.

**Solution**

Working with IBM Business Partner OR-CZ s.r.o., Ivo Hala implemented IBM Lotus® Domino® Collaboration Express, Version 6.5 software to improve its collaboration capabilities.

Ivo Hala can store all of its client meeting minutes, contracts, purchases, invoices and phone call minutes within the Lotus Domino application. This information can then be securely shared among all of the firm’s branches and employees and accessed from remote locations, such as clients’ offices. Information can also be secured so that only specific employees may access it, protecting sensitive client data from unauthorized access.

**Benefits**

- Boosted revenue by 20 percent because of increased efficiency and resulting ability to take on more clients
- Reduced the time spent searching for information for clients by 30 percent
- Decreased phone bills for calls between branches by 50 percent

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“Using the IBM Domino solution, employees can access information such as a client’s entire case history with a single click of the mouse—allowing us to focus on providing timely, personalized service to our clients.”

—Ivo Hala, managing partner, Ivo Hala and Associates