The Computerworld Honors Program

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Final Copy of Case Study

LOCATION:
San Jose, CA, US

ORGANIZATION:
Cisco

YEAR:
2011

ORGANIZATION URL:
http://www.cisco.com

STATUS:
Laureate

PROJECT NAME:
Connecting Sichuan

CATEGORY:
Health

PROJECT OVERVIEW

In response to the devastating May 12, 2008 earthquake in Sichuan, China, Cisco contributed US$45 Million over 3 years to aid in the rebuilding effort in the areas of healthcare and education. This corporate social responsibility program is known as "Connecting Sichuan". In partnership with government, local organizations, and community healthcare professionals, the program seeks to improve quality and access to patient care through the implementation of information and communications technology (ICT) solutions. With more than 375,000 individuals injured as a result of the earthquake, a huge demand arose across Sichuan for healthcare services such as physical and psychological rehabilitation. Yet, more than 20% of existing healthcare facilities had been totally destroyed. This created tremendous pressure on a healthcare system that was already struggling with 3 key challenges: 1) low quality of services due to a shortage of qualified healthcare professionals 2) low accessibility due to the lack of a primary care network and the difficulty of treating patients living in remote, mountainous regions 3) limited affordability of care as a result of insufficient health financing and a low-income rural population. Connecting Sichuan aims to address not only the short term needs resulting from the earthquake but also to develop innovative and sustainable IT models for future replication. Appendix 1, (Program Overview Powerpoint Presentation) Connecting Sichuan implemented ICT solutions around cloud, video and collaboration using the network as the platform: • Smart hospitals – green, smart regional medical centers: utilize energy efficient building technology and Medical Grade Networks to support hospitals and rural community healthcare centers and provide integrated healthcare applications. These applications include information systems for clinics and laboratories to improve quality and efficiency and an Electronic Medical Record to enable continuity of information throughout the continuum of patient care. • Regional health cloud – foundation for health care transformation: features centralized regional data centers and broadband networks to provide cloud-based services to hospitals, township healthcare centers and other institutions in rural areas. This shared resource model delivers improved services at lower costs. • Multi-purpose

Mobile clinic – transports care to where people live, work and learn: serves resource challenged rural communities with advanced medical equipment, diagnostic and collaborative counseling. These solutions together with high quality video (TelePresence) enable virtual collaboration between multi-tier medical institutions for a comprehensive set of TeleHealth services, including tele-consultation, virtual patient case studies, collaborative radiology, and remote professional training. Appendix 2 (Year Two Video) The post-quake situation was a significant challenge as the solution and timeline needed to align with the Chinese government's overall post-quake rebuilding plan, and was also dependent upon on other infrastructure readiness factors such as road access, broadband implementation, and new hospital facilities. It was also difficult to find local IT staff or practitioners who were familiar with the new technologies. Cisco brought extensive resources to fill this gap, including in-country industry experts to plan and implement the program, equipment donations to build out the architecture and extensive training of local workers to ensure the long term sustainability of these efforts.

SOCIETAL BENEFITS

Connecting Sichuan provides replicable and sustainable models of healthcare in China, bridging urban and rural communities to improve access and quality of care. It contributes to a healthy society by supporting a sustainable workforce and the well-being of its citizenry. The solution serves 58 million residents and 43,000 patients daily.

PROJECT BENEFIT EXAMPLE

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diagnostic and collaborative counseling. These solutions together with high quality video (TelePresence) enable virtual collaboration between multi-tier medical institutions for a comprehensive set of TeleHealth services, including tele-consultation, virtual patient case studies, collaborative radiology, and remote professional training. Appendix 3 (Year Two Video)http://www.cisco.com/assets/csr/mov/Sichuan_YEAR_2_LOWRES.mov The post-quake situation was a significant challenge as the solution and timeline needed to align with the Chinese government's overall post-quake rebuilding plan, and was also dependent upon on other infrastructure readiness factors such as road access, broadband implementation, and new hospital facilities. It was also difficult to find local IT staff or practitioners who were familiar with the new technologies. Cisco brought extensive resources to fill this gap, including in-country industry experts to plan and implement the program, equipment donations to build out the architecture and extensive training of local workers to ensure the long term sustainability of these efforts.

IS THIS PROJECT AN INNOVATION, BEST PRACTICE? Yes

ADDITIONAL PROJECT INFORMATION

The Connecting Sichuan program is committed to ensuring the sustainability of its efforts. Cisco is contributing collaborative networking solutions, equipment, and employee expertise in IT architecture, project management and financial resources. Another intangible investment is the level of change management and training provided to the key stakeholders to ensure sustainable impact in the region. For instance, CISCO has trained 2,200+ healthcare workers to use the donated equipment and applications to manage system configuration and operational maintenance; training also included leadership development and technical seminars. The model also incorporated appropriate governance structure. In fact, another key contribution to the region is how key officials in local governments and hospitals view the role of IT. As one measure of success, many now recognize the impact of collaborative technologies in healthcare and are now planning to leverage such technologies in other areas of public service, such as social security. – "Healthy Wenchuan project provides collaborative methods of healthcare delivery, enabling timely, open access for patients while improving the quality of care and lowering costs. I believe the program truly contributes tremendous value to China's current efforts to advance and reform its healthcare systems." — Dr. Gordon Liu, Professor and Chair, Department of Health Economics and Management, Peking University Guanghua School of Management Listed below are technologies in detail: 1. Smart Hospital/Healthcare Facility : In a "smart hospital" Cisco technologies are integrated with hospital management applications to provide the right information to clinicians and patients at the right time, throughout the care continuum. Equipment includes: Switches and routers BMS (Building management system) Wi-Fi IP Video Surveillance Unified Communications Digital Media 2. Regional Health Cloud: Regional health networks connect urban with rural healthcare organizations within a geographic area and feature a centralized regional data center for shared IT services and integrated electronic health records. Equipment includes: Data Centers Switches and routers Call centers IP Video Surveillance Unified Communications 3. TeleHealth Networks : Tele-health networks use technologies/applications to enable virtual collaborative care for diagnostics and improved patient outcomes. Collaborative care examples include tele-consultation, tele-radiology and professional development. Eqiupment includes: Cisco TelePresence Unified Communications IP Video Surveillance Digital Signage Webex Conferencing 4. Mobile Clinic : Mobile health clinics are mobile vans equipped with a range of technologies and solutions to enable portable, location-specific care, health education and emergency

response. Equipment includes: TelePresence Unified Communications WiFi IPICS IP Video Surveillance Select digitized medical devices (ultra-sound, digital radiography, etc.)