



***Which markets will provide the best opportunities for tech companies in the next five years and why:***

One of the most important emerging trends in software today is true healthcare IT innovation. Traditionally, innovation and healthcare infrastructure simply did not go together. Innovation in healthcare was in drug discovery and medical devices. Healthcare IT was the red headed stepchild, dominated by legacy vendors. It would be as if Siebel still ruled the CRM roost.

A new generation of companies is changing that, driving new investment dollars and interest into the sector. A combination of demographics and regulation are creating an appetite in the healthcare industry for change.

First, there is the unavoidable math of an aging population and expanding healthcare needs. The cost pressures are far outstripping anyone's budget expectations. As a result, innovation in how information is shared and used is a natural option for trying to control costs.

Second, the government has pushed the healthcare industry to develop more open standards and share more data. Putting aside the most controversial elements of the healthcare reform, the Government already pays more than 50 cents of every healthcare dollar in reimbursements. As a result, government mandates to share information and to provide more visibility in pricing and healthcare results will not go away.

As a result of these trends, hospitals are changing the way they think about the role of healthcare innovation and are starting to consider SaaS systems to give them the same flexibility that other enterprises have found with innovations in CRM and ERP.

The next five years will be a critical time as these innovations take root and find their own particular place in the healthcare universe, where privacy concerns and other factors make it a

challenging, but very rewarding IT environment.

***How do I see the role of the IT department evolving:***

In no area is the IT landscape changing faster than in healthcare. For years, healthcare IT was not considered the sexy part of healthcare. Drug discovery and medical devices captured the VC innovation dollars. Although IT supported these advances, the IT Departments were not center stage.

That is no longer true as the best and the brightest find themselves attracted to the challenges of healthcare IT and its critical role in controlling costs, improving patient access and ensuring lifesaving information can be delivered to and shared by those who need it.

As a result, the healthcare IT departments are finding themselves in uncharted waters. Most importantly, they are moving away from traditional enterprise systems and exploring cloud-based solutions. These take the form of SaaS software solutions as well as hybrid cloud solutions, where highly-available configurations enable large amounts of data to be available closest to the point of care.

Cloud solutions are essential for the reducing cost, but IT teams need to understand the privacy and access control implications of these solutions. Granular business rules and innovative authentication schema (think on-line banking) are enabling healthcare departments to grant access to those who need it, while safeguarding privacy. Regulatory mandates, such as HIPPA, require that healthcare providers not only abide by rigorous privacy regimes, but maintain audit records so that they can prove compliance.

Pure cloud solutions, however, do not always work for healthcare, simply because of the amount of data involved and the just-in-time nature of healthcare delivery. Although some healthcare record data resembles any other piece of business data, healthcare information, such as diagnostic imaging, produces immense file sizes in complex formats. Imagine that you are a surgeon working in an operating room and you need to see an MRI right away. If that MRI was done at your hospital, the logical thing is for you to be able to access it locally. Alternatively, if you are working with a patient, who has been transferred from another hospital, you want to be able to access that image from the cloud, so that you can avoid physically

transferring a film or CD from another hospital. This is the perfect kind of scenario for a hybrid cloud solution with business logic to ensure that images are always transmitted in the most intelligent way.

Challenges about data access and sharing are going to continue to accentuate the strategic importance of healthcare IT departments. Seeking innovative solutions is going to be a top priority. Successful implementation will be core to a hospital's success.

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