FROM THE CIMPHONI BLOG ON TECHNOLOGY TRENDS

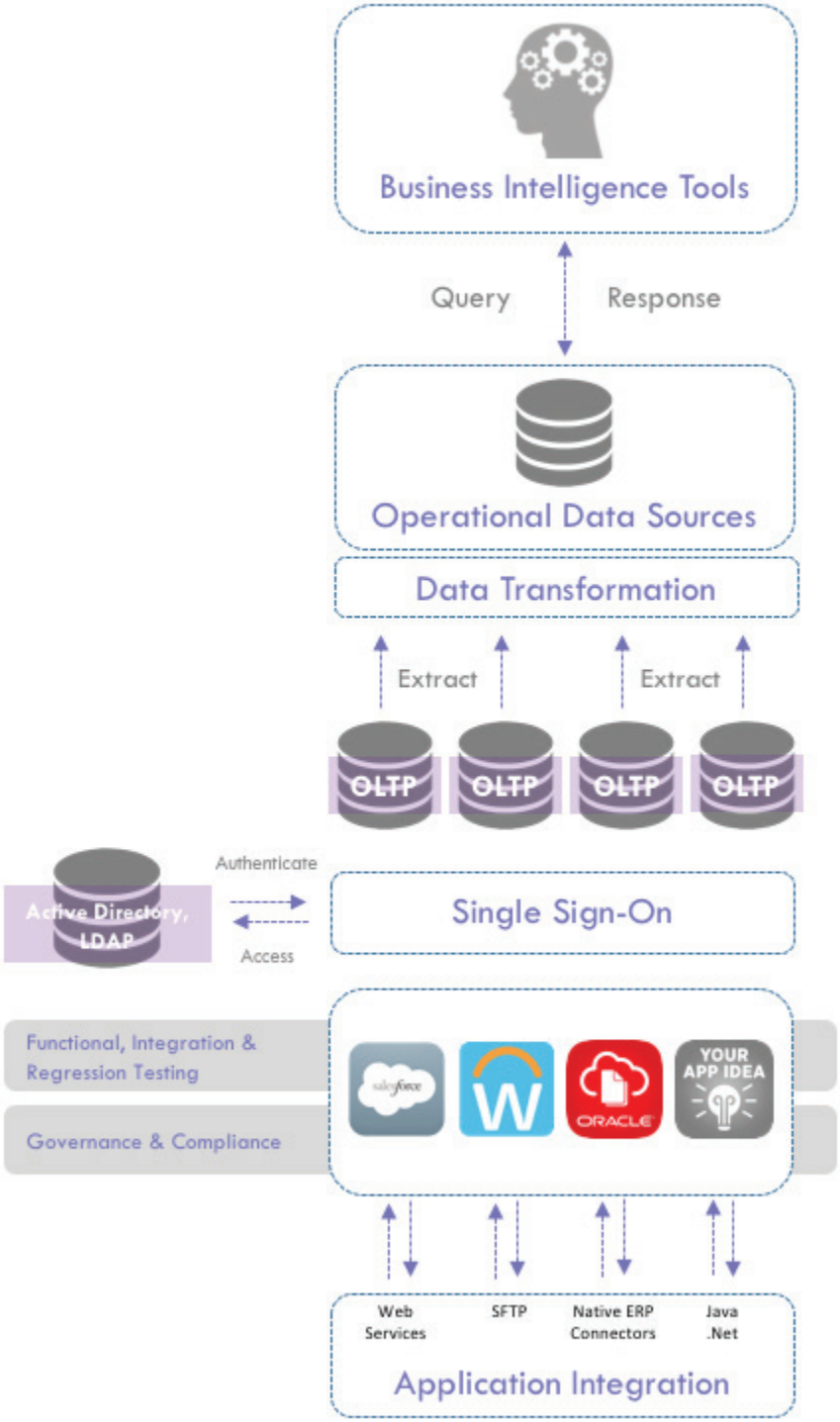
Software-as-a-Service: IT Skills for a New Generation of Computing

By Rick Davidson

With the increasing adoption of SaaS as a viable means to provision new enterprise and niche-based applications, many of the traditional skills required by IT organizations are becoming less and less relevant. Essentially, these skills have transitioned to the SaaS vendor. However, SaaS gives rise to a new set of skills that most IT organizations possess, but not to the degree required by the implementation of a mixture of SaaS and on-premise applications. So, here's the catch for mid-market companies looking to make a major investment in SaaS applications: You'll have to "retool" your in-house IT team to ensure they have the skills to support a heterogeneous application environment.

The need for this retooling is based on several realities that SaaS applications bring with them when they are plugged into an existing application portfolio. These realities will need to be proactively managed and include the following:

- **Lack of a single sign-on type of access/authentication method or approach across SaaS and on-premise applications, exposing users to multiple login schemes.**
- **Lack of a single system-of-record and a single logical data model for business entities, including customers, products, services, suppliers and employees.**
- **Lack of common reporting and data analysis tools (BI), particularly with a view across SaaS and on-premise applications that would provide a "horizontal" view of the business.**
- **Issues with ongoing application integration compatibility (e.g., EAI tools that manage APIs/web services calls) for SaaS-to-SaaS and SaaS-to-on-premise applications across asynchronous vendor release cycles.**
- **Lack of coordinated release cycles and testing regimens between SaaS applications and on-premise applications that fail to expose software anomalies from new releases, increasing the risk of business disruption.**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Meet the Well-Provisioned SaaS Platform

The limitations and issues above have been solved many times over, but doing so requires skilled SaaS talent working across several technology domains.

Here are some of the specific skills needed to adequately manage a medium-to-large SaaS and on-premise portfolio of enterprise applications:

- **SaaS application configuration skills. Business analysts will need a working knowledge of leading SaaS platforms, such as Salesforce, Workday and others, to bridge the gap between business needs and IT capabilities.**
- **Architecture skills. A thoughtful approach to architecture is even more critical in a complex mix of SaaS and on-premise applications that addresses security and access controls, application environments (development, test, production) and data models.**
- **Application and data integration skills. These would include web services (e.g., REST, JSON, XML, SOAP), cloud and on-premise integration platforms (e.g., Boomi, Mule, webMethods), and ETL tools (e.g., Informatica).**
- **Governance, risk and compliance (GRC) skills. Individuals with responsibility for IT controls, such as those required by SOX, data privacy, PCI and HIPAA, will need to manage compliance across multiple vendors and applications.**
- **Software testing skills. A working knowledge of testing regimens and testing platforms (e.g., SoapUI, Selenium, QTP) is required to ensure system reliability.**
- **Business intelligence skills. As data is distributed across numerous transactional systems, a thorough understanding of data transformation, quality, storage, analytics, presentation and management tools is required in order to provide business leaders with accurate and timely information.**

The list above is not comprehensive, it's just a minimum set of skills required.

The good news is there are many qualified resources with the skills required to get you there. And experience has proven that the quickest way to gear-up is through a combination of internall staff and external partners.

About Cimphoni

Cimphoni is built on the premise that technology, when properly applied and led, can deliver innovative solutions that transform businesses, enrich the products we use daily and improve the quality of our lives. The Cimphoni team is comprised of technology and business leaders, physicians and medical researchers with a thirst for innovation and a passion for solving problems. Cimphoni Consulting is focused on business transformation using information technology to enable new product and service offerings and improve business performance.

Cimphoni Solutions develops Internet of Things strategy, devices and data analytics, as well as custom enterprise software. Cimphoni Life Sciences creates new medical devices and solutions that address acute and chronic illnesses and improve the health of individuals.

Founded in 2012, Cimphoni is headquartered in suburban Milwaukee and has an office in Phoenix to serve customers throughout the United States. More information can be found at www.cimphoni.com.

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