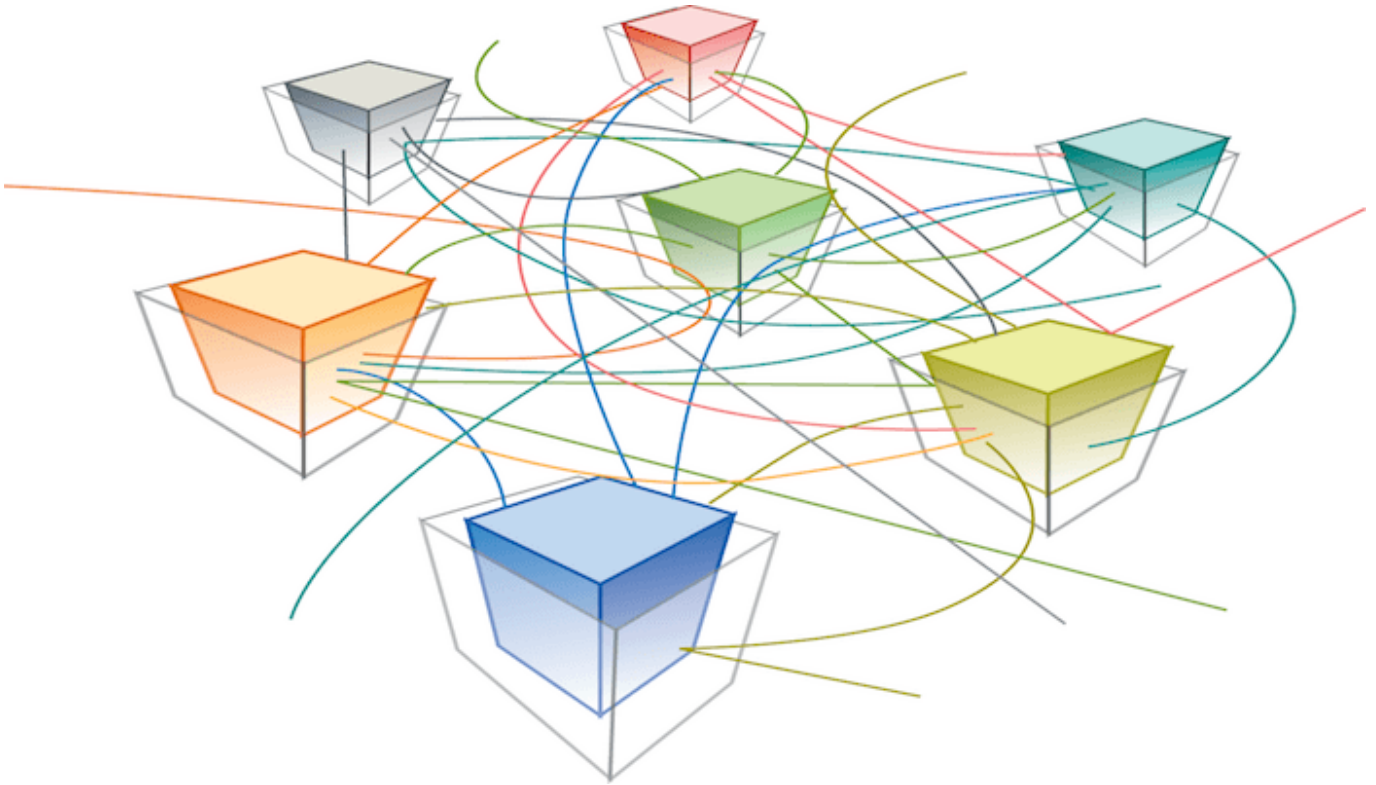




Will System Integrators Become Services Integrators?

BY LUIGI DE BERNARDINI | TUE DEC 22 2015

When I look back on my experience as a system integrator and apply the changes I see taking place today, I see two competing issues affecting the future of industry.

On one hand, as I watch industry interest move away from ownership and toward the service model, I suspect it will impact the way complex solutions for industry will be created. The rapid acceleration of this change is particularly noticeable today in the software world.

On the other hand, independent of any technological change or existing business models, the specificity of a company's manufacturing processes constitutes a significant part of its competitive edge. Therefore this specificity is a value that must be preserved, nurtured, and valued.

Based on these two, somewhat opposed, realities, my first thought is that it will be very difficult for suppliers to market any new, complex system to support more efficient production as a packaged service that could also be tailored to specific business needs.

Manufacturers still require a high level of system customization to adapt them to their culture, organization, and/or processes.

Therefore, I suspect that, at least in the short term, the proliferation of available solutions as a service will solve simple problems that are well defined and repetitive rather than those problems that are more specific and complex.

Looking at the development of new solutions as a service from this perspective—as solutions to more simple problems—helps see how they could be useful components upon which more complex solutions can be built. I believe this path is the more likely one to be followed by industry because companies tend to deploy such services in a progressive manner, i.e., avoiding big projects, but solving specific, small problems one by one. This approach provides manufacturers with immediate benefits and enables them to dilute their investment. When manufacturers look to implement more complex systems, they typically do so only after having already implemented a diverse set of services based on different technologies—often offered by different vendors and without a common standard for easy integration.

This means that system integrators will need to be able to combine and harmonize this heterogeneity to create a unique system from a collection of disparate systems. At first glance, this is nothing different from what system integrators have always done, i.e., integrating different systems to create solutions. However, there will be a key difference moving forward: As services adapt specific features for various industries and processes, new sets of skills and approaches will be required of integrators.

The first of these skills will involve knowledge of public cloud systems. More specifically, integrators will need to become familiar with the different data access modes used in the cloud, which differ from those normally used in the integration of local systems. Because the need to ensure proper data partitioning of users makes any direct access to databases impossible via the cloud, the data is only accessible through Web-based services or via export. And exporting data makes it impossible to maintain true real-time access to information.

To ease this issue, standardizing information exchange formats will continue to acquire increasing importance. The more shared formats and practices emerge, the greater the spread of services.

The next set of new skills required of system integrators will deal with the asynchronicity of systems. Mixing local systems with cloud services, each characterized by its own cadence and over which there is no control, could require the development of solutions that align information to ensure proper time consistencies. In addition, integrators will have to prepare for lack of access to information, related to connection problems, which could become more frequent and require greater sophistication of systems in terms of buffering and post processing capabilities.

These highlighted skill sets are just two of the new challenges that system integrators will face as the “solution as a service” concept spreads. I expect that these skills will be gradually achieved as system integrators become services integrators.