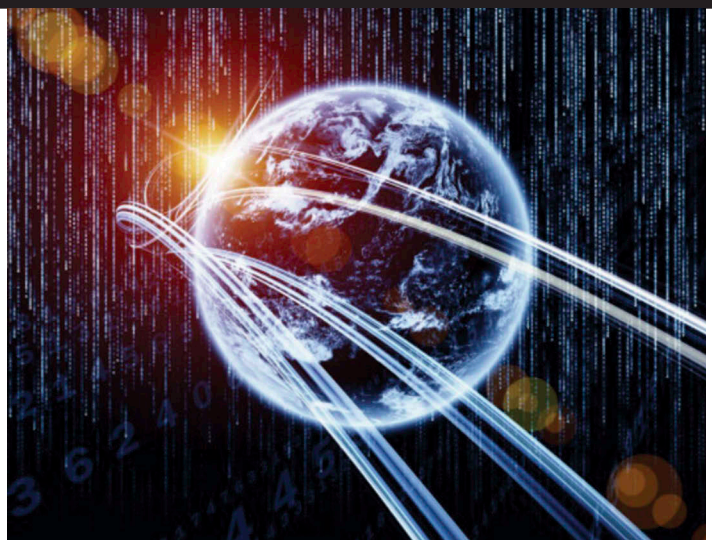

Moving in Different Orbits: The SaaS Effect on HR and IT

By Patrick Crane, Jeitosa Group International

My television has 1,095 channels and yet I spend 95 percent of my television viewing time watching just three. One of them is the Science Channel. A recent feature explored the relationship between the earth and moon; their common beginnings, the violent impact exerted on each other throughout astronomical history, and their tight co-dependence. Neither of them would be the same without the other in place. Without the moon, the earth would be such an unstable planet that human life would be unsustainable. Without the earth, the moon would careen through space, eventually slamming into a much larger celestial body.

I have spent the majority of my 25-year career working in the field of HR technology, primarily as an implementation consultant/project manager or as the leader of an HR technology/HR operations organization. I've had dozens of opportunities to observe how HR Systems departments and Corporate Information Technology (IT) organizations work together on both new HR technology implementations and the production support/optimization of those solutions. I have seen the relationship between these two organizations within the same company be confrontational, cooperative and coldly indifferent. I have also seen this relationship change significantly over time, largely in reaction to changes in HR technology platforms and how these platforms are delivered. Through it all, these two organizations have maintained a strong co-dependency, serving as both customers and suppliers for each other, often at the same time – a great metaphor for the historical relationship between the moon and the earth.

The most commonly held belief amongst astronomers is that the earth and the moon were once a single planet, until a fateful day when an enormous asteroid smashed into it, permanently altering it and dislodging a huge portion of it. This chunk of the planet dispersed into many pieces which were scattered randomly into the orbit of the planet, which would become the earth. Eventually, gravitational forces pulled these scattered bits of planet together to form the moon.

The period of time when the earth and the moon were one is analogous to the relationship between HR Systems and Corporate IT prior to the advent of enterprise resource planning (ERP) client-server technology in the late 1980s. At that time, few HR organizations had technology departments. The development of HR technology strategies, implementation services, system delivery, system administration, and production support resided almost entirely within Corporate IT organizations. The role of HR was limited almost entirely to being just the user of the technology provided by IT.

This division of responsibilities was driven largely by the nature of the technology being deployed. At that time, the HR technology landscape was dominated by mainframe systems either built internally or purchased and then customized by Corporate IT programmers. Responsibility for every aspect of the systems had to be fulfilled by IT because the systems resided on IT's hardware and, essentially, all system changes required reprogramming.

In the early 1990s, the ERP asteroid hit the HR technology industry. Just as a celestial object permanently disrupted the structure and nature of the Earth; commercially available, client-server ERP applications disrupted the structure and nature of Corporate IT organizations. Also, just as a cosmic collision jettisoned a huge chunk of our planet into its own orbit – eventually creating the moon; ERP technology jettisoned a huge chunk of Corporate IT organizations into their own orbits – eventually creating HR Systems departments.

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and maintain both transactional, and non-transactional reference table data (a fancy way of saying "setup" table data), and some system configuration. The availability of these security roles created a question which could not be ignored: If the HR staff has the ability to maintain setup tables and system configuration on their own, with no risk to the structural integrity of the system, why aren't they?

The argument for non-IT staff taking a more active role in the management of functional systems is supported by the need for efficient labor cost management, enhanced data integrity, and maximized process efficiency. Maintaining setup table data and system configuration are not particularly challenging technical tasks and are, therefore, better performed by less expensive HR Systems analysts than by expensive IT programmers. In addition, HR staff members are more intimately familiar with their company's HR data and the business changes that drive modifications to that data. Corporate IT organizations have, at a minimum, one degree of separation from this information. No one wins when the people who need to have data changes made type up what they need to just give the piece of paper to someone else who will then rekey what was documented. This is a time-consuming, wasteful and error-prone process. Data management efficiency and data integrity are maximized when those who own the data are given the ability to maintain the data.

If the proliferation of ERP client-server HR systems had been limited, then their impact on Corporate IT organizations would not have been significant. Information Technology would have taken the introduction of these systems in stride and would have made internal structural changes to support their deployment. If only a few companies had purchased ERP systems, there would have been no business drivers to create HR Systems departments. However, just as the asteroid that hit planet earth was enormous enough to permanently alter it, the wild popularity of HR ERP systems was enormous enough to permanently alter Corporate IT organizations. One chief HR officer lamented that prior to the introduction of ERP, the only function that was a lower priority for IT than Human Resources was Legal.

With HR organizations creating their own systems departments to support their ERP-delivered HR systems, the beginning of a love-hate relationship between HR Systems departments and Corporate IT organizations fell firmly in place. HR Systems departments needed Corporate IT for database administration; installation of patches, fixes, and updates, and application customizations. Corporate IT organizations needed HR Systems departments to adhere to the enterprise's system architectural standards and strategic direction. Information Technology's need for this adherence in these areas is not just a scheme to ensure that they remain a relevant player in the greater organization. When technical things go wrong, people call IT no matter how directly or indirectly related they are to IT's actually responsibilities. Information Technology's need for adherence to corporate system standards is a legitimate requirement if IT has any hope of supporting HR organizations when technical things break.

Having formed an autonomous body, HR Systems departments settled into an uneasy orbit around Corporate IT organizations. Each organization continued to exert pressure on the other and yet both realized that they would not be the same – they could not thrive – without the other. Adding to the tension between these rivaling partners is the fact that over time, HR Systems departments steadily increased their technical capabilities and self-sufficiency. Enterprise resource planning providers responded by adding more sophistication into their HR functional security roles. Of course, an argument could be made that HR Systems departments developed great technical skills because the functionality available in their security roles became more complex, challenging them to become more technologically sophisticated users. Regardless of the cause, the effect was the same. Human Resources Systems departments moved beyond maintaining system tables and configuration data and began optimizing system functionality and developing complicated reports and analytics.

The HR Systems department's orbit around the Corporate IT organization simultaneously exerted great stresses on each organization, while also keeping the relationship in balance. Each organization benefited from the existence of the other and neither would be the same without the other.

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HR Systems departments and Corporate IT organizations. The impact of SaaS technology on this relationship is an order of magnitude greater than that of the ERP asteroid.

Before describing the extent and effect of this impact, it's important to establish a clear definition of what SaaS technology is. Software-as-a-Service applications are delivered entirely through the Internet. All customers subscribing to a SaaS application share the same exact instance of the code and, therefore, have the same functionality. With SaaS, the software application is updated at the same time for all customers. Therefore, all customers remain on the same system release. Also, expensive, time-consuming, customer-determined upgrade cycles associated with client-server ERP systems are replaced with streamlined, regularly scheduled, vendor-determined upgrade cycles. The data that is specific to each customer is compartmentalized to adhere to security and data privacy requirements. This separation of data within the same software system is known as multi-tenancy.

The difference between SaaS and client-server is significant. A true, multi-tenant SaaS application is not simply a customer-specific version of an application which is hosted externally (not residing within the customer's firewall and on their hardware). Multi-tenant SaaS applications enjoy lower overall cost of ownership in the short-term, largely because the infrastructure costs of having all customers on the same system is less than having to host a company-specific system on a dedicated hardware platform. Hosted systems may be marketed as SaaS solutions because they are delivered through the Internet. However, they do not enjoy a lower cost of ownership because the system maintenance and hardware infrastructure expenses are not eliminated; they are simply transferred to the software vendor.

Another important feature of true SaaS technology is that customizations, or programming changes made by the customer or by the vendor on the customer's behalf, are not possible. These systems often provide very sophisticated, extensive, and flexible system configuration capabilities, but none of the underlying code can be modified for a specific customer's use.

The feature of SaaS technology that dealt the epic blow to the relationship between HR Systems departments and Corporate IT organizations is that their need for Corporate IT support is profoundly diminished. Specifically, the following items, which were traditionally IT deliverables, are now the obligations of the vendor and are no longer needed by SaaS customers:

- Network system access or security administration;
- System customizations;
- Application of patches, fixes or upgrades;
- Hardware infrastructure; and,
- Database administration.

In fact, depending on the data integration requirements, it is now possible for an HR organization to purchase, implement, and support a SaaS HR application without IT ever knowing about it. Through SaaS technology, HR System departments now enjoy an unprecedented level of autonomy and self-sufficiency. At one organization where we implemented a SaaS application as the single, global HCM solution, a VP of IT Enterprise Solutions grieved that the role of IT will eventually be reduced to just writing checks to SaaS providers.

Although that perception may become popular, there remains a significant role that Corporate IT can and should play in a new world dominated by SaaS technology. Corporate IT can be an invaluable partner during the business case development, system selection, and vendor evaluation phases of a SaaS implementation. In areas such as vendor network and infrastructure security, vendor disaster recovery processes, and vendor systems performance optimization, IT is able to provide meaningful expertise while HR Systems departments are left floundering. In addition, IT organizations often make a significant impact on the success of SaaS implementations through their project management skills, experience and methodologies.

Finally, although no customizations are possible with a true SaaS solution, there are technical requirements that can only be fulfilled by IT developers and systems architects. For example, some integrations, particularly with internal systems, can be complex and will require the technical development skills of professional programmers. Several SaaS providers are attempting to address this requirement by providing more delivered integrations between SaaS providers, aka cloud-based integrations, and by delivering intuitive integration development tools, which allow non-programmers to build fairly sophisticated integrations. While great progress has been made in these areas, the need for IT developers to assist with integrations still exists.

Another example is the deployment of *single sign-on* (SSO). While many SaaS vendors provide extensive documentation on how to enable SSO within their applications, customer IT systems architects need to design internal solutions and to ensure that all the pieces work together. In addition, IT can play a vital role in the data conversion phase of a SaaS implementation project. They are able to bring to the table advanced data cleansing techniques, tools to enhance data integrity of converted data, and approaches to retire legacy systems, while providing access to

their archived historical data without incurring the cost of maintaining them.

Even if IT retains some level of involvement in SaaS implementations and production support, the reality is that HR Systems departments are now significantly more self-sufficient and have much less reliance on Corporate IT than they had in the past. The HR Systems department's new-found independence will inevitably extend to the development of HR technology strategies. Once the practice of defining strategic technology direction shifts from Corporate IT to HR systems, it will be as if the earth began to revolve around the moon.

I recently learned of two organizations that were pursuing very similar global implementations of the same SaaS HCM solution. Both companies had employee populations of over 5,000 in more than half a dozen countries. However, the IT organizations in each company were very different. The company with a more traditional IT orientation approached the implementation using a standard software development life cycle approach and assumed responsibility for essentially every aspect of the implementation, save requirements definition. The implementation struggled and role clarity between the HR Systems department and Corporate IT was never achieved.

The other company had an IT organization who understood the new reality created by SaaS technology and accepted that their role was different from what it had been in the ERP world. With that understanding, they focused their contribution to the implementation on those areas where they possessed unique expertise, e.g., infrastructure security assessment, integrations, SSO deployment, etc. They also assumed an advisory role in other areas of the implementation where the primary responsibility fell directly to the HR Systems department. The HR Systems department and Corporate IT formed an effective partnership and ultimately the implementation went smoothly.

The shift in responsibilities for providing production support of a SaaS HR system will also drive a shift in head count. The IT head count that supported HR systems using an ERP platform will go down and the HR System department head count will go up. While the loss of IT head count will be greater than the gain in HR Systems' head count, the difference may not be significant. One area that is typically understaffed by HR Systems departments that have moved to a SaaS solution, is the review, analysis, and testing of new functionality available with each release. Since all SaaS customers are on the same release, all customers must move to the new release at the same time. The staffing requirements to adequately prepare for each release are often overlooked by SaaS customers.

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In the past 40 years, the relationship between HR Systems departments and Corporate IT organizations has endured momentous change and turbulence. At one point, they were together in a single organization. They experienced a violent separation with the HR systems falling into a balanced, yet stressful orbit around IT. With the introduction of SaaS technology, the roles have been reversed and Corporate IT organizations are beginning to revolve around functional systems departments, including HR. The Science Channel ended its program on the earth and the moon by informing its viewers that the moon is drifting away from the earth by a few inches each year. The metaphor is alive and well.

About the Author

Patrick Crane brings over 25 years of HR technology consulting and HR operations experience to his role as regional vice president for Jeitosa Group International. Prior to joining Jeitosa, he was the director of HR Operations for Dollar Financial Group (DFG) and director of HR Services for VWR International. For both organizations, he led the effort to create global HR shared services organization, enabled by the implementation of cloud-based, global HR technology solutions. His core competency and passion lie in establishing strategic direction for enterprise-wide global HR solutions, as well as their implementations and optimizations. He has an MBA in Human Resources Management from the University of Connecticut and B.A. in Social Psychology from the University of Rochester. He also holds a Project Management Professional (PMP) certification from the Project Management Institute (PMI). He can be reached at ***pat.crane@jeitosa.com***.