



Competitive Edge Technology  
White Paper

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# Platform-as-a-Service the New Horizon for HR

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## Introduction

Whenever a new technology comes along we need to take a look the way we do things now and ask ourselves is there a better way of doing things by applying the technology. Human resource (HR) processes are a perfect example: The human resource management practice has been the beneficiary of technology ever since payroll production was automated. Technology cycles have been getting shorter with each new generation and we have moved from mainframe to client server, then to Software-as-a-Service (SaaS), and now to Platform-as-a-Service (PaaS) almost before we have had time to catch our breath.

This White Paper looks at what PaaS offers and focuses on the potential to eliminate the “big bang” approach to system replacement and adopt an incremental change process in its’ place.

## The Platform-as-a-Service Model and New Opportunities

Platform-as-a-Service takes the Software-as-a-Service model and extends the scope from hosting vendor applications to hosting companies’ entire information technology (IT) infrastructure and provides a development environment for companies to build their own applications. It is the development environment that is of particular interest to HR.

Most companies are not into building software applications: That is a specialist function and companies prefer to buy pre-packaged applications or rent a pre-built solution from a SaaS provider. However, when viewed in the context of the all encompassing process of replacing an aging human capital management system (HCMS) the build or buy economics change: It is time to review options and broaden the scope from HR impact. The all-of-business economic model must be evaluated to recognize the interruption to business due to product replacement and the costs incurred by every unit within the organization when change occurs. PaaS offers a new way to incrementally introduce change and minimize the cost impact.

The issue of how to build systems is also revisited when evaluating of PaaS opportunities. The ability to build on a development platform that has audit, security and network capability pre-built for the developer places the application design and construction in the hands of the business power user to build their own composite or mashup solutions. The ability to build custom applications is common practice amongst early adopters of the development platform, such as CRM and Facebook users. HR is now equipped to follow: There is a common data model and pre-built framework for mashup development available. That means the practice of assembling systems from component products and reusable code is back on the table for consideration to extend the functional capability of the principal SaaS HR system or as alternate entire solution for smaller companies.

## The Current System Replacement Approach is a Flawed Process

When describing the flaws in the current system replacement model this White Paper describes reality: Intentions are always good but outcomes are what is important and the message in this

White Paper is the traditional method of selecting and implementing HR technology has always been flawed: There is an opportunity to fix it.

- We don't have to be limited to a vendor's best-practice model and change our HR processes overnight to fit with their model.
- We do not have to disrupt the business with a system replacement and a big-bang implementation.
- We can now make incremental changes to the business when each unit is ready to change by introducing technology that provides the capability to change as required and eliminates the need to change when the current product releases a new version or becomes obsolete.

Platform-as-a service allows companies to introduce the features and flexibility to change as required. In other words you no longer buy pre-assembled "systems" you buy "capability to change" based on assembly when needed.

## Current HCMS Replacement Methodology

The following steps are usually part of a flawed methodology to replace a current human capital management system:

- A project team is formed. The areas impacted such as HR, Finance (Payroll) and IT are all represented.
- The team searches out where the problems are and what is driving the need for change.
- The business case is prepared and costs and benefits are analyzed to see where the total cost of technology ownership can be reduced and processes improved.
- The team interviews users of the current system to obtain their wish-list of improvements and documents all of the system requirements. The focus of the project team is to change from the "as is" method of performing tasks to an improved "to be" way of doing things. The rationale is you do not want to automate inefficient practices.
- The deliverable from the project team is the Request For Proposal (RFP).
- The team then sends the RFP to the vendors that they are aware of.
- After responses the products are evaluated to see if they are suitable.
- A product is selected and then implemented.

## Flaws in the Current Project Methodology

Some of the more common flaws are:

- Project teams usually are not aware of all of the HCMS products on the market and tend to focus on a popular few. There may be better and cheaper solutions with a higher functional fit but they are not given the opportunity to participate in the tender process.

- The new product always looks different from the incumbent system, the interface and system operation is new but usually the system is built around a vendor's best practice model and requires change to the way current processes are carried out.
- The new SaaS model has its' limitations. Depending upon the type of multi-tenant architecture the ability to customize the product to suit the client's business operation is restricted. There may be a common instance that is shared with other clients and the provider will not change or individualize the product to suit one client.
- As part of the requirements gathering phase users are asked what they would like to see in a product to improve the way they carry out processes. Usually they don't know. Users are not always familiar with the latest technology features in HR products. The project team often makes that determination for them based on product marketing material.
- Users are usually unaware of what they will not have in the new system. Current processes collect data for a purpose and that data may not be available in the new system.
- There are multiple business areas affected by a system replacement. Some may not want to change at all. For example, the payroll unit may be happy with the current system or the recruitment unit may not want to change. Change should not be forced upon these units simply because the new product provides features that address payroll or recruitment.
- When resistance to adopting a new system occurs the result is often that the old legacy system lives on with an interface built to the new product. Interfaces give rise to all sorts of other problems from data duplication and lack of synchronization to multiple licensing and support.
- System implementation timetables are usually phased and modules to support the more strategic HR functions such as career and succession planning are often excluded from early releases. Sometimes because of:
  - Stakeholder politics
  - The desire to do the easy stuff first
  - To get points on the board by going for the "low hanging fruit" early
  - An additional payment associated with implementing modules.
  - "To be" functionality that the business was not ready to introduce. However, the cost to re-convene the project team and implement the modules later grows substantially and the modules are often dropped off the plan.
- The all-of-business costs are rarely calculated for project planning and auditing. For example:
  - The costs associated with re-learning applications are often excluded
  - Loss of staff due to fear of change and dislodgement from comfort zone
  - Loss of productivity during the transition period

- Even staff time for user testing is often not costed.
- The down-time associated with implementing a new and different system is never estimated and most calculations focus on the licensing, hosting costs or the easy to measure items.
- Process improvement gains are usually credited to an HR division led project but many workflow and self-service benefits are achieved back in the line operational unit involved in the process and follow up measurements are rarely taken to see if gains were achieved.

## System Options

The main flaws in current methodology relate to a timetable being imposed on all areas of the business, whether they are ready for change or not, and the necessity to make decisions on subjects they know little about. Unfortunately, the results are irreversible once a system purchase is made.

- a) One option is to go with a SaaS model with an individualized instance of the provider's application and hosted on a dedicated server. That may allow customization but it is expensive to make changes and maintain. That option does not overcome the forced "big-bang" change.
- b) The preferred option is to move to a hosted assembly platform where the customer can replicate what they have now and then progressively move to the features that enable process improvement when they are ready. It may appear to be backward move but it is a way of consolidating before moving forward.

## The Solution

The solution is to buy for capability to change not for functional compromise and enforced implementation timetable. Make the change process incremental when ready: Not when the HCMS project replacement dictates.

## New Project Methodology

The requirements gathering process in the new methodology abandons the "as is" and "to be" approach. The first step is to map the data and features of the current system to the new system. In other words re-create what you have now into the new environment and leverage off current investment. The data validation rules in the current "legacy" system can be reverse engineered to match the new system, of course with changes to syntax to match the programming and application protocol. Once the new framework is in place, and tested, the data can be migrated across to the new system. The end user may experience some minor change to screen layout but the positioning of data elements, system behavior and background logic would all be the same as the old system.

The benefit of that approach is:

- There is a minimal effort to re-train for the new system
- Users do not have to be surveyed to discover what they want. All they need to do is state what they have now and provide the supporting input documentation.
- The data requirements can be accurately compiled from knowing how the current system operates and what data is manually collected.
- A review of the current system can identify what is not being used at present.
- It is a far more precise way of determining fields required and data that needs to be migrated than trying to map to an unfamiliar structure in the new system.

Once the new platform has been established the ground-work is in place to start building. As units are ready to change they have the option of assembling a new solution from pre-written components in the marketplace or build their own. The new development platform offers easy to design and construct solutions and there is a new emerging marketplace that offers specially designed products for the new paradigm. The end result is:

- The company can choose from pre-built components or build their own if they are resourced to do so.
- The overall impact is less disruption
- Less resistance from the affected business units to change
- A more studied approach to what is required
- The ability to interchange components or develop new ones if the requirements change
- The ability to offer the company integrated access to new technology (such as social media) on a single platform as it becomes available.

No one knows what will be available in twelve months time: all we know is we would like to have the ability to embrace the new technology features without having to replace the entire HCMS.

From a risk-avoidance perspective, if a product is chosen for the wrong reasons mentioned earlier, it is not too late to dismantle a component assembled solution. Rarely would everything be wrong: Maybe some of the pieces need to be replaced and exchanged for a more suitable component but that represents a fraction of the cost of replacing the whole thing.

### The Way Forward

As the platform development approach matures and more companies are attracted to the benefits the need for participation in a supporting ecosystem grows. Competitive Edge Technology is the only company to provide a total developer support ecosystem for HR component assembly. The ecosystem is built around the Force.com platform (from Salesforce.com) but the principles are adaptable to any platform. Competitive Edge Technology's ecosystem consists of:

- A packaged framework application (HCM Mashup Builder) given to clients to start building solutions. It is a walk-up start for developers.

- A new component marketplace for developers to list their products: The Commercial Component Registry (CCR) for micro-component product and the Global Component Exchange (GCX) for traditional HRMS products.
- A Component Assembly Model (CAM) for development, product specification and market structure.
- A database of HRMS product functional capability down to three levels (Function, Process and Data). Also, languages supported, countries sold and technical features.
- An online specification portal to select the components needed from the GCX marketplace or to assemble a solution.
- A Best Fit Analyzer (BFA) to automate the matching process between what the client has specified and what is available in the marketplace, based on product capability in the database.
- A list of over 700 HCMS “traditional” SaaS and On-Premise products available to choose from in the global HCMS marketplace
- A gap analysis facility to identify the functional gap between requirements and product capability.
- A list of specialty component products to integrate into a solution, based on functional gap.
- A requirements “map” to configure the HCM Mashup Builder framework application if that is the best solution
- A map from the requirements structure to other products in the marketplace to help configure and identify customization needs.
- A Global Component Factory (GCF) that defines component properties to copy and paste to the application on the Force.com platform. For example, picklists, validation rules, and formulas.
- A Wiki repository space to clone from the component registry and install on clients’ own Confluence (from Atlassian) instance.

It is time to take a realistic look at where we are now and identify what is not working and how it can be changed. The way forward is to think laterally about finding a solution and make the fundamental shift from buying someone else’s pre-packaged best practice model to buying the necessary tools that provide the capability to build to your own business model and to be able to change incrementally as the business becomes ready.