

Delivering on the HRIS promise.

preos.



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Executive Summary

Technological innovation marches on at a breathless pace. New IT systems – and their bedfellows ‘new ways of working’ – promise opportunities for business transformation, improved productivity and sustainable competitive advantage. Quick fixes to age-old problems.

What does this mean for HR departments? Can new technology, in the form of HR Information Systems (HRIS), provide an opportunity to break free from the shackles of the clunky old systems they are used to? Is it a chance to redefine HR processes? Might it even result in a re-evaluation of how HR delivers value to the business and change the perception of HR for the better?

Or is it another false dawn? Another case of the Emperor’s new clothes?

The first challenge is to cut through the marketing hype and vendors’ hyperbole to get to the reality and understand which system – if any – is right for the organisation.

New HRIS are challenging traditional HR approaches and opening new opportunities for all organisations to do a better job of managing their talent. Even smaller organisations, previously limited in their options, now have the

chance to implement cutting edge technology to automate and simplify HR at a much lower cost.

Where the introduction of HRIS requires a significant investment of money and time, HR will need to build a compelling business case to support the expenditure and have a comprehensive plan in place to realise the anticipated benefits. These benefits will need to be communicated in a way that will capture the attention of the senior team and show how the value of the talent in the organisation will be enhanced and measured.

Our research shows HR should focus on four key areas to maximise the benefits of an HRIS:

- 1. User experience** – put the user at the core of the approach
- 2. Social media** – enable and embrace social media to build stronger networks
- 3. Single view** – consistent, accurate data about employees in one place
- 4. Analytics** – put people data into the hands of those making the decisions

Any new system needs to be designed and implemented with the long term in mind, supporting future ambitions and avoiding ‘lock in’ and inflexibility. This means resisting customisation, where a bespoke system is created to meet specific needs, which can lead to difficulty with support and upgrades. Instead HR leaders are advised to use a configurable system; a standard application that readily allows elements of the system to be adapted to meet local needs without impacting the underlying structure.

For most organisations this means a cloud-based Software as a Service (SaaS) model will be a serious consideration. SaaS models provide access to the latest software from specialist providers over the Internet. With no local IT requirement, beyond a fast and reliable internet connection, SaaS offers an attractive alternative to locally hosted software.

There is little point selecting a best in breed system if it is not used to its full capability. For some organisations an HRIS with basic functionality will be good enough. These single systems will simplify implementation, maintenance and training, and make the achievement of the system’s full potential far more likely.

For others, only the most comprehensive, fully functional HRIS will meet their needs - a system that offers specialist functionality, supports high volumes of transactions, is robust, dependable and scalable.

Choosing the right vendor partner is essential. The vendor should value the partnership and be prepared to commit to the full realisation of expected benefits. In evaluating vendors, it is important to take up references and to visit businesses that have experienced working with them.

Success comes as a result of careful planning and good execution. Organisations need to be honest about gaps in capability and bring in external experts where necessary.

A clear business case is vital as it will clarify what is needed from the system and can be used as the core specification for early discussions with potential vendors.

The change process needs to be managed. Those involved in the introduction of new systems and processes need to be aware of the impact this can have on people. Training and support should be provided to help employees engage with the new approach and systems. A communications strategy should be developed to explain the benefits and keep stakeholders informed.

An HRIS that is well specified, fit for purpose and delivered well can be truly transformational for a business – and for the reputation of the HR function. A combination of analytical skills and the accurate insight an HRIS can provide may help to secure HR a seat at the strategic top table.

This report combines research, expert knowledge and insight from HR professionals with first hand experience to present a realistic and pragmatic approach to selecting and implementing a new HR Information System (HRIS).

NOTE: For a briefing on HRIS and how they have evolved to meet the increasingly complex needs of organisations please refer to Appendix I.



The HRIS Promise

As business technology develops at an ever increasing pace, it presents organisations with exciting promises of improved ways of working, increased productivity and greater engagement with employees, customers and suppliers.

There is no question that, if realised, these developments increase profitability and contribute to competitive advantage.

If realised.

There are challenges and risks along the way, not least in ensuring the right solution is selected and implemented well.

Some areas of business readily embrace new technology and have the skills and experience to adapt and so capitalise on the benefits it offers. Others hang back, more comfortable with what they are used to, or become inhibited by concerns about the complexity and disruption any change can bring. They struggle to see a compelling case for change and so stick with the status quo.

“The new wave of disruptive cloud HR solutions can be introduced to the HRIS landscape with much less impact on existing IT systems and resources, supporting rapid, agile transformation in HR service delivery.”

**Jonathan Benhamou, CEO & Co-Founder,
PeopleDoc**

As a profession, HR can sometimes be accused of falling into the category of the neophobic. HR has traditionally been reliant on IT and Finance to make decisions about technology and systems and, as a result, has needed to make do with substandard and inflexible systems.

This has locked HR teams into the administrative duties that could be done by managers and employees, leaving HR with little time for added value tasks such as helping to shape strategic business decisions.

This may be about to change.

New technologies promise to reinvent HR processes and make it easier for HR to own the strategy around people systems. HR has an opportunity to create an environment where

employees manage their own data and managers drive their own processes. Such an environment would place accurate data into the hands of those who make the decisions and relieve the administrative burden on HR, so freeing HR professionals to become strategic business partners.

The first step on this journey involves a task in which many HR professionals have limited experience: building a compelling, well thought through business case to support the investment for this change.

Recent research from Lancaster University Management School, in partnership with CIPD, UKCES, Investors in People, Chartered Management Institute, Chartered Institute on Management Accountants and the RSA reinforces the need for organisations to better understand how developing and managing people drives value. The research also highlights the need to define more clearly the people metrics that should be monitored and provides a framework for reporting them.

Any individual developing a business case for an HRIS investment would be well advised to describe how such a system would enable the organisation to manage the value of its talent.

A strong business case starts with a convincing reason for change and goes on to describe the desired future state. It shows how the organisation will get there and, crucially, how the investment will be recouped over time.

“We are as lean as we can get. We’re past the ‘take the costs of two or three HR administrators out’ phase – we need to focus on the intangible benefits which are so important. We have well paid, well-qualified HR managers performing admin tasks. Think of the value they could deliver for the organisation.”

Bob Page, Head of HR, Hutchison Ports UK Ltd

Formulating a realistic set of requirements for the business case is a complex challenge for many HR teams, unless they have a deep knowledge of the HRIS market and an understanding of the impact of essential decision points.

Of course, vendors can help by explaining how their system might work for the organisation, but their advice will be subjective and potentially biased. HR can get help from their IT team, as they have experience selecting software solutions, but their understanding of HR business processes will be limited. Often it will be necessary for HR to bring in external support to provide a knowledgeable, independent and objective view to support decisions.

The scope of HRIS

The majority of HRIS are built around a core HR dataset that can range from a set of simple functionality to an organisation-wide business solution.

Users interact with this data through HR processes enabled by technology, usually in the form of specialised systems with interfaces, processes and workflows designed to complete common tasks.

Many vendors package related processes that can be used as part of a single HRIS or integrated into systems that use the best in breed solutions for each function. Organisations can combine these HRIS building blocks to create the system they need.

The expansion, improved availability and reduced costs of HRIS have given small and medium organisations the opportunity to benefit from these powerful technologies.

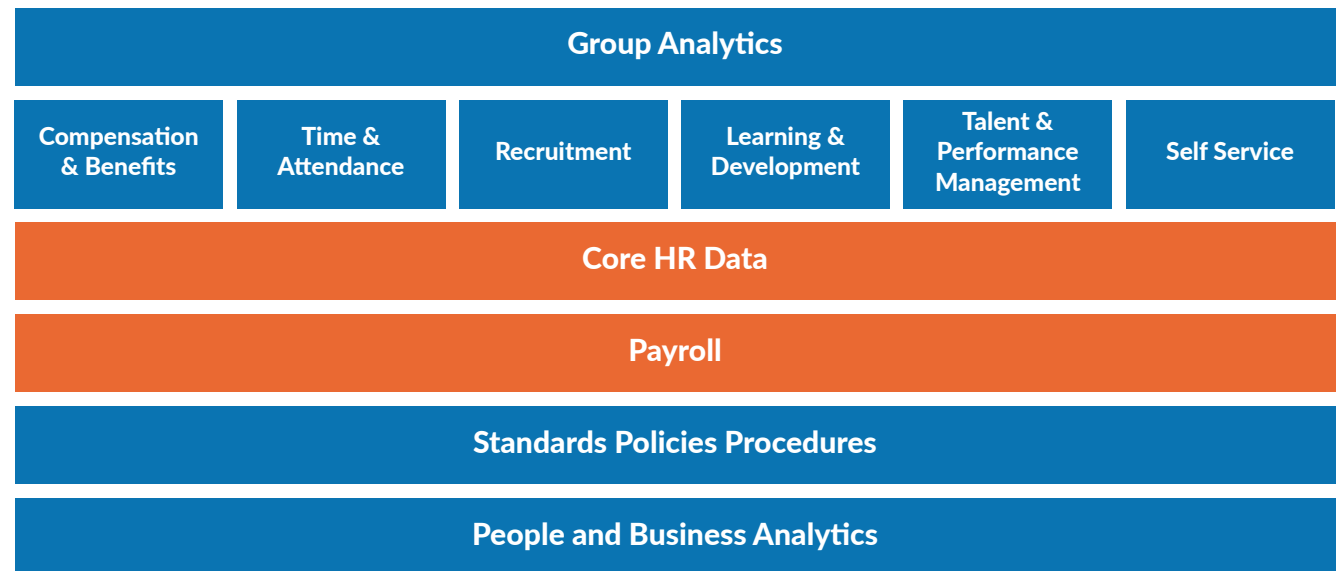


Figure 1: Integrated HRIS. Source: Preos

Open technologies allow agile vendors to drastically reduce the development time for HR applications. There is a growing market for these simple, low cost, apps that use existing HR systems to access and store data and provide the users with a slick, branded interface and new workflows to carry out HR tasks. The low cost and short development time means apps can provide quick solutions to issues without the need to carry out a wholesale technology upgrade.

System selection

New technologies offer the opportunity to introduce new processes. Many organisations find they can redesign their HR systems and processes around a new HRIS and implement the solution in a relatively short time.

However, when the promise is not realised, for example through lack of functionality, limited configurability, poor testing or inadequate planning, the process becomes expensive and can ultimately derail the programme - and careers.

It is critical that organisations select the right solution and the right vendor to meet not only current requirements, but also with a consideration of future needs. It is important that those investing in an HRIS satisfy themselves that the system will provide the functionality promised by the vendor and in the marketing material. It is recommended that buyers take up references and visit organisations that have the system in place.

Equally, it is important the vendor has sufficient resources, knowledge and experience to support the implementation and that they value the client relationship and are committed to help realise the expected benefits.

Implementation of HRIS

Implementing a new HRIS is a significant project for most organisations and should not be underestimated. A successful implementation will need a dedicated team tasked with taking the organisation from initial planning and scoping of requirements, through transition to business as usual. The team should be given sufficient resources and time to dedicate to the programme. Larger, more complex implementations benefit from being led by an experienced Programme Manager.

It is also important to manage the wider impact on the business through an effective change management programme.

Drivers of HRIS success

The authors of this research paper have considered the theory and practice of HRIS, reviewed case studies and interviewed HR and business experts with hands on experience of implementing HRIS to identify the four key drivers for HRIS success. These are:

1. **User experience** – put the user at the core of the approach
2. **Social** – enable and embrace social media to build stronger networks
3. **Single view** – consistent, accurate data about employees in one place
4. **Analytics** – put people data into the hands of those making the decisions

In the second section of this report, we describe these key drivers in detail. We recommend that organisations should explore each driver as part of their business case to support the selection and implementation of a new HRIS. In addition, there are a number of critical system design and implementation decisions that need to be made to enable organisations to prepare for a successful deployment of a new HRIS. These are described in the Design Considerations section of this report.

Finally, successful organisations plan carefully for success; it doesn't just happen. The key considerations for planning a successful HRIS implementation are described in the Planning for Success section.

Our recommended approach is summarised in the model below.

HRIS Success overview

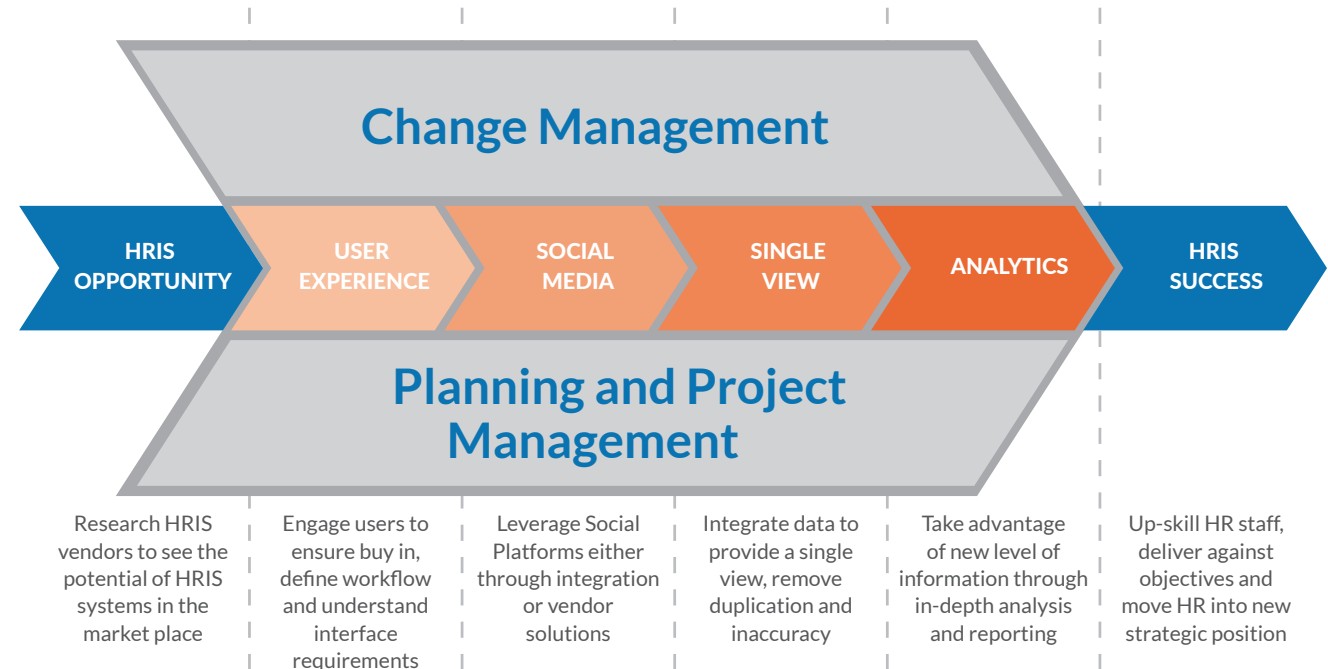


Figure 2: The HRIS implementation process.

Key Drivers

Driver 1: User Experience

“Focus on the user and all else will follow.”

Google

Perhaps the key measure of success for any system is that it is universally adopted by users with a minimum amount of persuasion.

For this to happen any system has to deliver the functionality the user is expecting, in a language and format that works for him or her. The user needs to know, as intuitively as possible, how to get the information and results they want.

“According a recent Aberdeen report, 40% of companies are blaming inefficiency in HR on solution disparities and low levels of usability. Translation: You can’t expect to accomplish anything if you can’t even use your brand new software investment.”

Aberdeen HR Solutions: Usability, Efficiency, and Adoption, 2017

A thorough understanding of the User Experience is critical. The investment of time needed to understand how people will use the system should not be underestimated.

Analysis of the User Experience has an impact in several phases of a system’s design, configuration and implementation, as shown below.

Early stage involvement and observation

HRIS implementation should not be rushed. Potential users need to be involved at an early stage to develop a comprehensive understanding of the organisation’s needs. This form of consultation offers the additional benefit of making people feel they have a stake in, and influence over, the design of the system, helping to secure their buy-in early in the process.

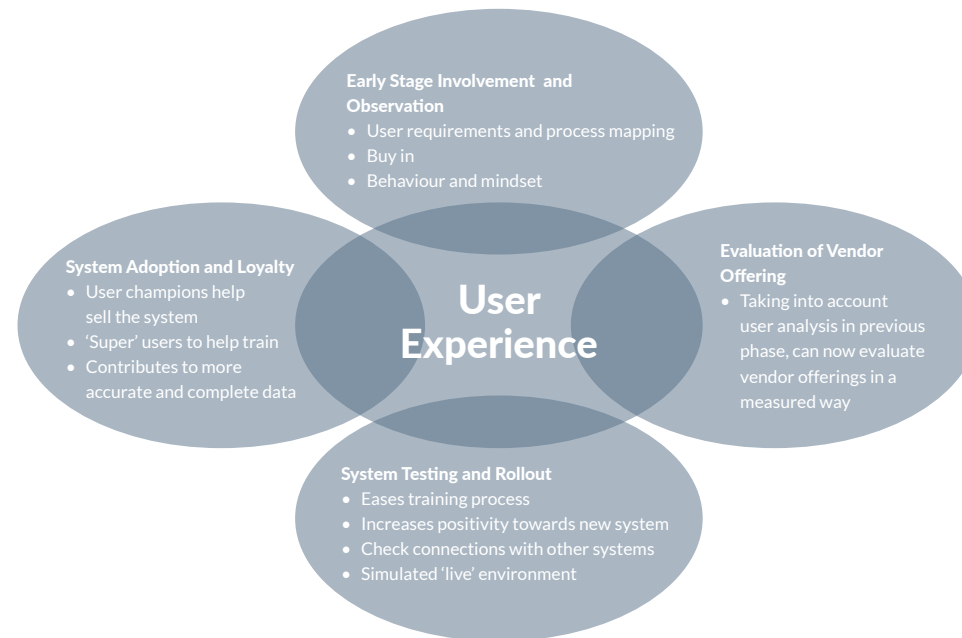


Figure 3: The importance of the User Experience.

“Although SaaS makes the implementation quick, you still have to do the change management stuff, the user experience piece, from the start. It must be iterative and is a huge thing.”

Han de Groot, Former Group People Services Director, Rentokil UK

Process mapping at this stage helpfully identifies key dependencies, roles and responsibilities within current processes. These process maps can be used to evaluate the functionality of new systems, ensuring they can be configured to support the current and future processes.

There is also the opportunity to adapt and improve HR processes with the implementation of the new HRIS, although it is advisable that the potential impact is carefully considered. Organisations should not rely on the roll-out of new software to transform processes without supporting training, communications and change management.

“Communicating via the Internet helped us engage with a geographically dispersed workforce, most of whom do not have access to computers at work. We now have 80% of 30,000 employees registered on the rewards website.”

John Aitchison, Director, User Experience & Communications, B2E Technologies

As HR systems become more sophisticated, it can become more difficult to balance the need for user-friendliness with the endless possibilities some systems can offer. Organisations may be tempted to ask for additional functionality, leading to greater complexity and expense, without any real understanding of how it will be used. It is a temptation that should be resisted.

Evaluation of vendor offering

An understanding of the user experience requirements and current processes allows for an informed and objective evaluation of an HR Information System's interfaces, ease of use and functionality. We explore considerations for vendor selection later in this report.

System testing and roll-out

Going live with a new system can be a nerve-racking time. The risk of problems can be greatly reduced by asking users to thoroughly test the system to ensure it functions as expected in a process known as User Acceptance Testing.

UAT also helps achieve user buy-in and supports preparation for the live roll out. It is essential to check the system for stress testing (i.e. how well does it cope with large numbers of people logging in at the same time), data transition (i.e. how accurately does historical data transfer to the new system), security and functionality to reduce the risk of problems on launch.

Careful planning of the roll out is critical. For some organisations the big bang approach, where the whole system goes live for everyone at the same time, works best. For others, a phased roll out, where individual business units,

regions, or managers get access to modules or functions in a controlled schedule is preferable. In both cases a carefully planned change process, with training and communication, is essential.

System adoption and loyalty

The more people who use the new HRIS, and the more frequently they use it, the more complete and accurate the data collected becomes. This means system adoption and loyalty are critical to the HRIS's long-term credibility.

It is here that one of the key benefits of UAT is realised. Presenting a system that is easy and intuitive to use, and that delivers the information the user needs quickly and easily, greatly improves the chance of it being used now and in the future.

Early adopters who have a positive experience can be the most effective way of ensuring the system is adopted more widely. These champions help to sell the system to their peers and can also act as super-users to help with the support of the system.

Recommendation

Put the user at the core of plans. Focus on engaging with users throughout the process and thoroughly plan to get a successful implementation

Driver 2: Social Media

Social media has emerged as a powerful tool for HR and presents two complementary opportunities when considering HRIS:

1. Using data about employees and potential employees from social media platforms to complement and inform internal systems and processes.
2. Using social media style functionality to make HRIS easier and more intuitive to use, and to promote interactivity and communication.

Using external social media data in internal processes

When integrated with internal data (and with the full consent of the individual), the information available on social media has the potential to generate much more rounded pictures of individuals. As one HR director commented, “LinkedIn knows more about our employees than we do.”

This is not about some Orwellian plan to monitor employee’s activity outside of work. Getting a better understanding of an individual’s competences can result in enhanced career prospects for the employee and improved use of the skills available across the organisation. For many years, organisations have tried to keep a record of the skills and experiences of their employees. LinkedIn has shown that, given the right system, people are willing to share and maintain detailed career information. Perhaps a

social media approach will encourage them to do so in the workplace.

This is little different from the now common practice of using social media, and LinkedIn in particular, as a recruitment platform. New HR systems are making the integration of external social media and internal work flows more seamless, including activities such as the posting of roles and processing of applications. This benefits potential new recruits by simplifying the recruitment process and making it easier for them to find roles and engage with the organisation.

Social media also allows organisations to build an employer brand proposition from an early stage. Indeed, many organisations use LinkedIn groups to develop a talent pool of potential employees for future opportunities.

Using social media interfaces and functionality to increase adoption and engagement

So ubiquitous has social media become, the interfaces and language used (Likes, Shares, Comments and so on) have set a standard for navigation and usability. Designers of HRIS are increasingly looking to social media when designing the look and feel of their systems as a way of building engagement and loyalty.

“The social networking aspects of HRIS are essential for getting people engaged with the software. If you make the HRIS a tool like Facebook or Twitter people will use it in the same

way, increasing uptake.”

Alan Bailey, Programme Consultant, Gemini HR Transformation project, GSK

The influence goes beyond the purely cosmetic. Social media functionality is increasingly being adopted in internal communications and knowledge sharing.

“We find many people are more inclined to post questions on a blog we host than via official routes.”

John Aitchison, Director, User Experience & Communications, B2E Technologies

HRIS has the capacity to enable organisations to build communities of practice – informal groups of individuals with similar interests - connecting employees and letting untapped expertise emerge.

Social media also has a role to play in analytics, where trends in social data can be used to gain a deeper understanding of the drivers of performance in the organisation, help target resources and make decisions.

The benefits of a social approach are tangible, but the medium brings with it a number of caveats. Users who like the informality of the social interface might use the function to bypass more formal channels, for example as a way of asking for IT support.

Equally, inaccurate, imprudent or informal responses can incorrectly become seen as the official corporate line or result in policy being made up on the hoof. One doesn't have to look far to see the consequences of an unguarded comment on social media.

Most organisations have yet to grasp the opportunity a social approach can provide, but what is clear is that those that do realise significant benefits.

“HR Service delivery applications that incorporate social collaboration capabilities can leverage the wisdom of the crowd, gleaning the knowledge of a peer-to-peer network, optimizing content and providing answers to typical questions on the fly. In the context of sensitive HR policies, however, it would be essential to have HR service delivery personnel constantly monitoring the social channels”

Digital Workplaces Create New Demands for HR Service Delivery, Gartner, April 2014

Recommendation

Embrace social throughout planning. Find sensible ways to build social into processes, but be realistic and don't overuse it.

Driver 3: Single View

One of the major drawbacks of having a number of loosely integrated HR systems is that organisations can often end up with different answers to basic questions, depending on which system is interrogated. A benefit of an integrated system is that it offers a single view of the data, one version of the truth.

At every level of an organisation's hierarchy, information is needed to inform decision-making. A good information system pulls together accurate data from across the business, synthesising it and delivering it to the right people when they need it.

Good quality information is accurate, complete for its purpose, timely in its delivery and offers benefits that outweigh the costs of creating it.

HR systems in many organisations have grown over the years through the addition of individual systems to add extra functionality as required. Some businesses have invested in a number of best in breed systems that offer excellent stand-alone functionality but simply don't fit together. This 'bolt on' approach results in a complex network of disparate systems that lack integration or shared process, and often carry a high run cost.

Payroll systems are often the backbone, as they tend to have the most accurate people data and are one of the first requirements of any growing organisation. However they are not designed to support broader HR processes.

Traditionally, the alternative was to invest in a larger HR system, but these were complex, difficult to configure and expensive to maintain. They were also limited in what they could do, requiring additional specialist systems and consultants for all but the most basic functionality.

The impact of this in many organisations has been a duplication of data and processes at best, and incomplete, inaccurate data at worst.

Until recently there has been no simple way to get a single view of the data.

New data standards, open database technology, the cloud and more integrated systems mean there is now the chance to get reliable data, providing a single view of each employee across the organisation. Systems work together seamlessly to share data and processes and so maintain a single dataset.

For multinational organisations, getting to this single view will have its challenges. Overcoming data protection rules is the first hurdle and may require that some data is still stored locally. Payroll systems are notoriously difficult to centralise across multinational organisations due to currency differences, multiple time zones, regulations and a lack of truly global payroll systems.

For small and medium organisations, there is now a realistic opportunity to optimise HR processes to support the delivery of value from talent. There are many vendors offering simple, low cost solutions targeted specifically at this market. Integrated HR, a single view, self-service, workflows, automated processes and mobile access are now a realistic option.

Achieving a single view requires the whole organisation to agree and maintain a set of standard definitions. If these do not already exist the task of defining them and ensuring widespread adoption can be a challenge, especially in multinational organisations, where the burden of local legislation further complicates the issue.

Once standards are agreed and built into a new system, the challenge becomes migrating historical data. This is a major part of the implementation and needs to be carefully planned, with data cleansing and comprehensive testing to ensure data integrity.

“We needed to spend a disproportionate amount of money on getting the data clean. Don’t underestimate this would be my advice. ...In some countries we ran missing data campaigns which worked well – explaining the benefits.”

Han de Groot, Former Group People Services Director, Rentokil UK

This is by no means an easy part of the process, but the benefits are great. Once a single view model has been implemented, the organisation is much better placed to handle increased scale and organisational change. Having a single data repository means new data can be imported more easily, reducing the cost of transition and helping the organisations to get back to business as usual much more quickly.

Recommendation

Aim to get a single view of each employee’s data across the organisation, removing duplication and improving accuracy.

Driver 4: Analytics

“Not even 50% of CEOs believe the information they get from HR is comprehensive.”

PWC, 15th Annual Global Survey

HR and its key functions like recruiting, retention and learning must move to dramatically increase their measurable business impacts by adopting analytics and data-driven decision-making.

Big Data, data lakes and data analytics are the hot topics of the moment. Vendors of HRIS emphasise the analytical capabilities of their systems, highlighting the ability to create dashboards and drill down through complex information. This enhanced functionality provides opportunities for HR to proactively meet the needs of managers and provide greater insight into their people.

“Predictive analytics tools from many HR technology vendors have arrived, making it possible to analyse data regarding recruitment, performance, employee mobility, and other factors.”

Deloitte 2017 Human Capital Trends

When drawing up the business case for a new HRIS, it is important to understand and articulate the potential benefits. Our research shows that the extent to which HRIS can improve analysis is not always anticipated by those who will ultimately benefit. Once managers and leaders understand the data they can get, their appetite for information increases and they readily embrace the capability.

“Our HR systems are piecemeal, and there doesn’t seem to be much business analyst capability when it comes to data requests so we spend a huge amount of time fire-fighting responses. We have a tangible demand for data which could be made so much easier.”

Mark Warner, Director of Human Resources and OD, Buckinghamshire Healthcare NHS Trust

HR is not traditionally seen to be a source of business intelligence to feed into strategic discussions. HRIS are starting to change this perception and organisations are taking note. The best performing companies demonstrate that acting on insight from HRIS has a direct effect on attraction, retention and talent management. We confidently anticipate that more CEOs will be demanding the sort of data HRIS can provide.

“In 2015, 64% of CEOs felt that HR was unprepared for transformational change and that doubt still lingers; in 2016 60% of CEOs say they are rethinking the HR function.”

PWC, 20th CEO Survey

This suggests HR is now expected to be more strategic and analytical in future. Although HRIS can help provide analytics and data, there is doubt at the top of organisations about HR professionals’ ability to interpret the data, explain

the strategic impact on the business, and so capitalise on this opportunity.

This means HR needs to understand and sell the benefits of this approach. They need to hire people who understand analytics and use the models effectively. They also need to be able to sell their corporate executives the value of investing in this new HR approach.

Perhaps HR staff are being recruited as much for their analytical capabilities as their people skills, and job titles such as Data Scientist or Statistician will become common within the HR function.

Dashboards

Dashboards have been used to summarise key business data for many years. Traditionally, it has been difficult to develop bespoke dashboards for HR data, often needing specialist and expensive reporting tools to bring together data from several systems, analyse and present the output in a digestible format.

HR reporting has often involved spreadsheet consolidation, data cleansing and de-duplication, and the manual creation of charts in reaction to an urgent demand. The inevitable inaccuracies have undermined the reputation of HR functions amongst their peers for years.

HRIS offer great opportunities for improvement. New systems have dashboard capability built-in, using simple drag and drop technology to enable users to design their own customised dashboards. Managers can build their own

reports as they need them and drill down into the data to get to root causes.

“Dashboards are the answer, enabling you to drill down on the individual. Although the ability to analyse HR Data is changing rapidly, many organisations don’t even know the exact number of FTEs they have!”

Alan Bailey, Programme Consultant, Gemini HR Transformation project, GSK

Dashboards can provide real-time insight to the business and put the data into the hands of the people making the decisions. HR’s emerging role will be to provide deeper insight to the implications of the data and explain how the data can be used to improve strategic decision-making.

HR should start the conversation about the metrics, or Key Performance Indicators (KPI), that will need to be tracked early in the HRIS selection process. This will clarify the requirements of the system and the KPIs will help with the design of dashboards and can be used to compare prospective system.

Recommendation

Agree a set of KPIs leaders want from the HRIS. Use this to help drive requirements. But remember this will change and grow once leaders start to see what they can get.

Sample Workday Dashboards





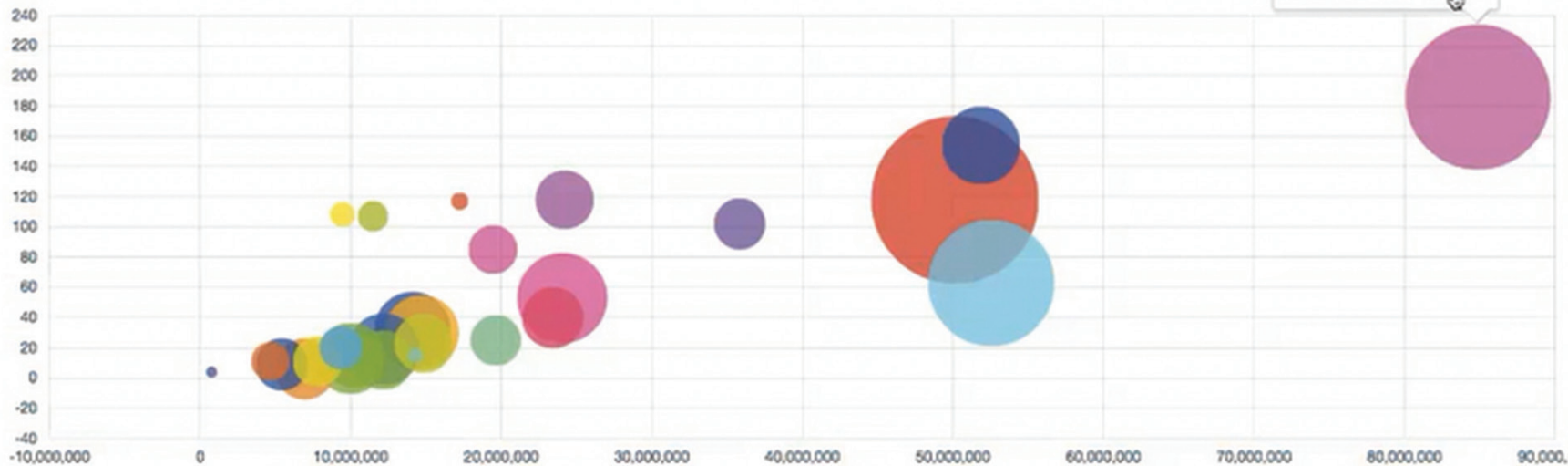
Q bubble



Sales Invoice Analysis

Company Consolidation - Corporate

Bluestar Corporation
 Invoice Amount 84,872,420
 Count 186
 Amount Due 6,680,889



Invoice Amount

- | | | | | |
|---------------------|------------------------|----------------------|-------------------------|------------------|
| America Movil | Atlas International | Bluestar Corporation | British Telecom plc | Chopra Tech |
| Cyberdyne Systems | Deutsche Bank AG | Dharma Initiative | Dunder-Mifflin | Initech |
| Jack Rabbit Slims | LexCorp | Maple Systems LTD | North Tahoe Power Tools | NowTech |
| O'Hare Technologies | Omni Consumer Products | Sterling Technology | TelSat | Teldar Paper |
| Thomson Services | Tyrell Investments | Veridian Dynamics | Warren Systems | Wayne Industries |
| Wise Financial | World Financial | | | |

Amount Due 44,563,802 Invoice Amount 588,595,498 Count 1,593

31 items

Customer - Corporate

Total

Design Considerations

Organisations must make important conceptual design decisions early in the HRIS selection process if the system is to meet their needs.

There is no one-size-fits-all and decisions should be based on a thorough understanding of the organisation's specific requirements, the context and future aspiration. However, there are important core design considerations common to all HRIS selection processes.

Recommendation

For all but the biggest organisations, Cloud-based applications are undoubtedly the future. This should be the aspiration.

From SaaS to PaaS

Organisations can still be drawn towards bespoke solutions, or heavily customised third-party solutions, despite the well documented proof that they can lead to high development costs, long implementation times and a large support and maintenance overhead due to complexities, difficult upgrade paths and a dependence on specialist knowledge, often held by a small number of in-house resources.

Many therefore advise strongly against being caught in the trap of believing that the organisation's bespoke processes are unchangeable and should be upheld above the benefits of delivering a more standardised solution.

“Resist customisation at all costs. Most systems change failures are due to excessive customisation. Drive commonality where you can.”

Mike Taylor, Former Group HR Operations Director, Vodafone UK

Configurable SaaS solutions however don't always provide all the answers or provide a reassurance that they will be flexible if the requirements change in the future.

Enter Platform as a Service (PaaS).

Sitting logically between Software as a Service (SaaS) and Infrastructure as a Service (IaaS), PaaS creates an environment in which developers can create any number of solutions to specific requirements and make them available to application administrators in the form of optional services that can be implemented with immediate integration.

Gartner analysts, Yefim Natis and Paul Vincent, in a review of PaaS found a growing market in which strategic adoption of PaaS is increasing and vendors are continuing to innovate and introduce change. This led them to conclude that PaaS has shown the most impressive growth across the entire enterprise software market.

Gartner found that enterprise customers are adopting PaaS for increasingly strategic initiatives, and more customers believe that it will be the primary form of platform delivery in future.

IDC also reported that, “SaaS will remain the dominant cloud computing type, capturing nearly two thirds of all public cloud spending in 2017 and roughly 60% in 2020. However, spending on IaaS and PaaS will grow at much faster rates than SaaS with five-year CAGRs of 30.1% and 32.2%, respectively.” (Worldwide Public Cloud Services Spending Forecast to Reach \$122.5 Billion in 2017, IDC, Feb 2017)

Application leaders responsible for architecture and infrastructure should understand Cloud platform market trends to exploit them for competitive advantage.

Vendors such as Atlassian are not only developing their core products as Cloud-based offerings, but have a thriving marketplace through which additional functionality can be rapidly deployed. These plugins not only overcome the constraints sometimes associated with SaaS solutions, but also provide vendors with a means of expanding their own products via the platform. Plugins may be developed in-house or through approved external developers.

Although these systems and plugins are seamlessly integrated to the user, they tend to run and be managed independently. This reduces the risk associated with adding new functionality; if one element or feature has problems then it does not impact the performance of the core system. Similarly, core system upgrades and patches do not impact the customised components.

Recommendation

Resist customisation where possible and invest effort in exploring the growing possibilities offered by vendors who offer PaaS Solutions. See how the combination of core products and flexible add-ons could build a complete application to match the organisation's needs.

In the HR function, Workday or SuccessFactors can be prohibitive for some businesses due to the time, complexity and expense involved in implementing their solutions. PaaS has the potential to provide small and medium enterprise businesses with the opportunity to buy simpler

and lower cost alternatives. In the UK, a number of vendors are using the Salesforce.com platform to design and deliver HR solutions that are faster to implement and have a lower lifetime cost, although they also offer less opportunity for configuration changes and lower levels of functionality.

Integration

An integrated system that brings together data, workflows and processes is often one of the key promises of modern HRIS.

The level of desired integration is a key decision for organisations. Full integration can be achieved by selecting one single HRIS or by linking different components from various vendors to provide a single view of each employee.

Even in systems that offer end-to-end HR processes, there is often a need to connect with other systems such as payroll, time and attendance and finance. These connections can be the Achilles' heel of the new HRIS, requiring regular maintenance and testing.

When integration works well, however, it noticeably simplifies data input, processes, workflows, maintenance and reporting. PaaS solutions also provides the possibility of creating 'connectors' into other systems to seamlessly bring them together in one user interface.

"Talent acquisition leaders are discovering how PaaS may become the new SaaS allowing HR professionals to identify, test, manage and report on all of the solutions their business needs from one integrated system, one platform of record. Talent data management doesn't have to be a mystifying process anymore."

ICT Monitor Worldwide, August 4, 2016, SaaS, PaaS and the Next Iteration of Talent Acquisition Technology

Recommendation

Minimise the number of connections, make integration of systems, processes and data a priority.

Best of breed v single system

Organisations will sometimes have a host of legacy systems, each one the best in its field, but which do not integrate.

Is it possible for one system to do everything? The majority of organisations in 2015, 33% of companies have 10 or more HR systems for their employees to use (Deloitte Global Human Capital Trends, 2015) suggesting that, for many, one single vendor cannot provide the ideal solution to all their needs. For others the ability to rationalise suppliers and simplify implementation, processes and upgrades seals the business case.

47% of companies will replace their multiple HR systems for one unified solution and 67% of software buyers will select a system based on its ease of use rather than the quality of its features (Ten Disruptions in HR Technology in 2015, Bersin by Deloitte.)

Often, the single system is good enough on core processes to support the business. As the business matures, best of breed systems can be added to build on the core system and offer improved functionality. There is, however, a danger of returning to the days of disparate interconnected systems.

In selecting multiple suppliers, organisations should ensure they have experience of working together and are committed to maintaining the connectors between their systems. In particular, it is important to understand how they align upgrade paths to ensure the connectors always work as planned.

This is often a key challenge for organisations exploring the HRIS market and there is no simple answer. It requires clarity on requirements and an open mind to adapting processes where necessary. And often, a great deal of compromise when it comes to non-core functionality.

Recommendation

Keep to the minimum number of suppliers and systems. Ensure the suppliers have an established history of working together. Priority is to ensure the core HR data system is fit for purpose and build from that.

Mobile Access

Many employees now expect to access work information via any device and the increase in remote working will only accelerate this expectation. Previously, this would have involved significant investment and was rarely considered a priority. However with newer technologies and cloud delivery, mobile access is becoming a requirement rather than a nice to have.

Most vendors have anticipated this development and are offering interfaces to view HR information, manage data and update workflows on smart phones and tablets.

“Be as brave as you can be and break traditions. Make information available to all anywhere and everywhere, in the right language and in a simple way. Our ambition is to switch off paper and switch on digital.”

Donna-Maria Lee, HR Director, Burberry

New vendors in particular are using mobile accessibility as a key feature of their system. Some can build mobile functionality on top of established HR systems through open interface technologies, vastly simplifying the task of adding mobile access to older systems.

Mobile access is not yet on the top priority list for many organisations as the benefits case still is unclear. We believe this position is myopic.

Recommendation

Even if there is no obvious current benefit, make mobile access a requirement of the system. People will find a way to use it and it will make them more productive and accelerate adoption of the system.

Vendors

When choosing a vendor, the following should be considered as a baseline requirement:

- Does the vendor have a proven track history of successful similar implementations for which they can provide references?
- Is the vendor financially strong and stable?
- Does the vendor have a sales and support presence and experience in all the key regions for the organisation?
- Is there ready access to consulting expertise to support all stages of the selection, design, installation and implementation as required?
- Is the relationship with the organisation important to the vendor?
- Does the vendor understand the organisation and its challenges?
- Can the vendor provide a fully functioning sandbox environment (a test environment that replicates the real world but allows for safe practising with real data) for testing and training prior to launch?
- Can the vendor provide access to reference clients who use their solutions?
- Does the vendor have a committed development track for the solution?

- Does the vendor's solution meet the current and future key requirements of the organisation?
- Does the vendor's solution integrate with key legacy systems and is there commitment to maintain the links for the life of the contract?
- Does the vendor provide suitable training for users?
- Can the vendor assist with data transition from legacy systems?

Consideration should be given to the current consolidation activity in the market and the likelihood of acquisition of a vendor. In the short term, this may not be an issue, but in the longer term could have a great impact on the future development and support commitment for the particular solution.

For some organisations it may be appealing to select a new entrant to this market to provide the HRIS. Cloud-based storage and application systems like Amazon Web Services, Salesforce.com and Microsoft Azure provide technology companies with enterprise ready environments to host their applications.

These environments give assured scalability, reliability and security. They enable new vendors to develop and implement enterprise-ready cloud-based applications more easily. Organisations should therefore keep an open mind to using solutions from new vendors, providing the solution meets the requirements.

Often, these solutions provide significant enhancements and cost benefits over established providers.

Agreeing a sensible and mutually fair contract between the vendor and the organisation is important. The organisation needs to ensure it has expertise available to negotiate suitable terms and exit clauses and to adequately protect both sides.

Recommendation

Invest time to pick the right vendor for now and for the future. Find a credible third party to fill internal expertise gaps.

Preparing for Success

The Standish Group (www.standishgroup.com) has published its annual CHAOS Report on the state of software development since 1994. The annual report is often cited as a key metric for the industry's performance and progress and it draws much attention. Analysing the long-term trends provides an interesting perspective.

Over the past two decades, there has been little change in the headline results. On average:

- 29% of projects “succeed” in delivering the desired functionality, on time and on budget.
- 48% of projects are “challenged” and do not meet scope, time, or budget expectations.
- 23% of projects “fail” and are cancelled.

Without thorough planning for change the risk of failure in implementing HRIS is high. To reduce this risk, organisations may consider bringing in external support to fill the gaps in their own competence or capacity. The champions for an HRIS will want to establish a solid business case to secure investment and senior level engagement in the project. Many will also wish to take the opportunity to review and optimise HR processes across the board.

Changes of this magnitude require focused attention as part of a carefully planned change management programme that includes a communication plan and engages all key stakeholders.

This section explores these concepts in more detail.

Assessing the need for external help

The systems analysis, requirements gathering, system selection and implementation of complex programmes require skill sets that many HR departments simply will not have in-house.

Very few people have broad experience and expertise selecting and implementing the latest HRIS – even within the big consulting firms – because the market is moving so fast.

Once an HRIS is implemented the HR team has to develop expertise in new fields such data analysis, access and storage, integrated HR processes, and the user interface experience.

It is important to know when help is needed and who to go to for it. Equally important is whether

this skill is needed for a defined period or if it is a skill set that needs to be built into the HR team for the long term.

Does the HR team have experience designing and delivering complex transformations and change programmes? Does the vendor provide training support? Does the HR team have the capability to learn new ways of working? Can the skills be provided by the Finance or IT team?

“HRDs should be savvy about knowing where weaknesses are in knowledge about the technology offerings, and the skills required to implement it successfully. Where there are gaps, you should get the expertise in.”

Mike Taylor, Former Group HR Operations Director, Vodafone UK

If the HR team has skills gaps, organisations should consider bringing external expertise in to help. Doing so will significantly increased the likelihood of a successful programme and leaves the in-house team with the capacity to keep the business running effectively during the transformation process. In addition, the in-house team should learn from the external experts through a focus on knowledge transfer.

Establishing the business case

HRIS can represent a large investment decision for organisations. The business case to support the decision has to be well presented, thorough and complete – and demonstrate a clear return on investment.

The very process of developing a business case is useful in itself because it helps the HR team become clear about what is really needed before they begin the process of engaging with key stakeholders. By articulating a compelling case for change, the business case is also a powerful tool to get key stakeholders on-board and committed to the change.

Projected cost savings, through improved efficiency and simplified processes, are one of the more significant potential benefits of a new HRIS. The business case needs to clearly identify how the financial benefits have been calculated and how the benefits will be realised over time if it is to convince a Financial Director.

The business case should include a clear summary of the context, the case for change, the costs – not just the cost of the system, but also of making the whole change happen - and the plan for addressing any business disruption and realising a return on the investment.

It is an unfortunate truth that a business case from HR will often be subject to greater scrutiny than one from an operations function. For this reason, the business case needs to be particularly convincing.

Process Improvement

Technology is simply an enabler to allow processes to run more efficiently. If a badly designed process is implemented by an efficient system it does not become a better process. The same mistakes still happen, only faster.

The requirements analysis phase of the programme presents the opportunity for processes to be analysed and potential improvements identified. This is a complex activity and can also be a political challenge where employees have a strong sense of ownership of the current solutions and micro-processes they may have developed themselves.

Giving the as-is due attention, co-creating new processes with users, and not rushing to implement are all vital factors if you are not going to risk destroying more than you create. Over the years, Standish Group has consistently identified the people aspect of projects as being the top factor for project success – citing ‘user involvement’ as the top factor in their 2014 survey.

Organisations often turn to external experts for an objective perspective and advice for process transformation. It can be easier for an external professional to question current practices and develop processes without it being seen as a critique of performance.

Any new processes need to be developed and implemented with consultation, communication and training to enhance the chances of success.

“We achieved significant savings on the HR spend. However, the benefits were more about having a common standard approach to things like talent management, cleaner data, a global view of recruitment and compensation. These benefits are harder to quantify but will make the organisation function more effectively.”

Mike Taylor, Former Group HR Operations Director, Vodafone UK

Programme Management

It is important to decide who will lead the programme of work to select and implement a new HRIS.

Organisations often fall into the trap of assuming an internal resource, because of their knowledge of the business, will be able to manage the programme of work alongside their day job. The alternative is to bring in external expertise for the duration of the programme.

There are two key questions that should be asked in this situation:

1. Are the skills and experience to lead the programme really available in-house to effectively deliver against the demands of this role?
2. Is it possible for an internal resource to properly allocate the time needed to 'work on the business' when they already have a full-time commitment to 'work in the business'.

It is essential for the Programme Manager to set up a clear programme structure, covering all the necessary work streams, and an appropriate governance model to support the delivery of the HRIS transformation.

Experienced Programme Managers will have an armoury of tried and tested programme management approaches from which they can select the best solution. Organisations should consider the following responsibilities for the role when assessing the suitability of in-house resource against the skills and experience available when sourcing externally:

- Choosing an agreed development methodology for the solution - this will require knowledge of different approaches, for example an Agile methodology where fast paced projects are divided into shorter cycles.
- Developing a detailed plan with clear phases for each stage, including:
 - Gathering business requirements
 - Agreeing the terms of reference
 - High level design
 - Detailed design
 - System integration testing, capacity and stress testing and user acceptance testing
 - Cutover and go-live planning
 - A set of key milestones per stage
- A robust change control process so that when a design solution is agreed it is stuck with.

- A single accountable owner for the solution – reporting into the Programme Manager and the Programme Sponsor.
- Usual governance processes such as weekly reporting, weekly team meetings, design authorities, steering groups, risk, actions, issues and decision logs etc.
- Quality standards for the solution set by whoever leads the test management processes.

Each of the above can require the Programme Manager to work with different teams with specific skill sets.

Change Management

In focusing on the financial and technical aspects of an HRIS System, the fact that implementation represents a significant business change can be overlooked. Yet effective change management is essential if the benefits of an HRIS are to be realised. Change management is not a new concept, but not all organisations have the internal capability or capacity to do it while delivering day-to-day operations.

A clear and realistic change plan, from the earliest stages of the programme through to the transition to implementation and widespread adoption, will greatly enhance the likelihood of a successful outcome.

During the requirements gathering phase, it is important to consider all perspectives and the broader impact of the changes on people and processes. All major changes will have an impact on people. As part of the business case, it should be clear how the proposed changes will be managed. This will give confidence to leaders and ensure top down leadership support for the changes.

“To be successful in your deployment, you need to work directly with HR teams. We had 50 people qualified as change agents working with HR teams in different countries agreeing what the HR activity will be locally.”

Han de Groot, Former Group People Services Director, Rentokil UK

An HRIS change programme requires a senior sponsor to communicate the case for change and help clear blockages preventing progress.

The change management plan should include a clear communication strategy for all levels of the organisation. Good communication ensures everyone knows the role they need to play in the change and provides an opportunity to gather ongoing feedback. It helps achieve improved engagement from the organisation.

Effective communications and engagement brings any internal resistance and fear to the surface, so they can be managed and resolved. This also allows for the escalation of issues that can be dealt with before they have an impact on the programme.

The change management process continues beyond go-live. There should be a focus on the transition to business as usual and to ensuring adoption across the organisation. This is critical to the full realisation of benefits and management of post implementation enhancements.



Conclusion

When we spoke to a diverse group of HR directors during the course of our research, we commonly received the same message: “I recognise the value of introducing an HRIS; it’s convincing the board that is the challenge”.

Yet evidence suggests that those HR directors who manage to secure investment in HRIS, and who implement it well, benefit from an improved level of strategic influence in their organisations. If gaining investment in HRIS sometimes feels like a battle, then it is one worth fighting.

This report aims to help HR professionals to present the relevance and benefits of an HRIS system to their colleagues. Cost savings and efficiencies can be compelling in themselves, but they are only part of the story. Some additional benefits are often clear and readily achievable; others are more subtle.

And there are risks too.

“Companies are willing to spend a lot of money on HRIS which is atypical for HR investments. HRIS is however a disruptive and high-risk intervention. Any company contemplating a HRIS implementation has to be really clear on their business rationale as where there is fall-out, the implications can be massive.”

Jim Crawley, Former Director, Reward, Talent & Communication Towers Watson

Those with experience in implementing HRIS have realised the value of communicating one clear and consistent message: that implementation takes time and any shortcuts will undermine benefits in the long run.

In fact, in the short to medium term, any rush to implementation is likely to bring pain and risk a drawn out process, leaving the system in limbo or requiring ‘innovative workarounds’, as one HRD put it, from the outset.

It’s not surprising to discover that careful planning and effective programme management are the keys to a successful transition. What might surprise some is the importance of change management to the success of the new HRIS.

Organisations that fail to plan for how people’s roles, responsibilities and ways of working might be impacted; how processes will need to change; how changes will be communicated; and how stakeholders will be kept informed, significantly increase the risk of failure.

But change management and IT implementation skills are not traditionally associated with the HR profession. These skills need to be rapidly developed or brought in to support the internal team. In fact, it is often beneficial to have an external expert view that challenges the norm, is not hindered by internal politics and can make a full-time commitment to the project.

This is an exciting time in the HRIS market. The number of vendors is growing exponentially, each offering a bewildering array of options, often described in remarkably similar ways. SaaS systems have emerged as highly credible alternatives to locally hosted solutions, with many additional benefits.

The option to implement a very powerful HR system is now a realistic consideration for even the smallest organisations. Automated performance management, for example, would have been an expensive, time consuming and complex implementation up to a few years ago. Now, an online performance management process could be live in the organisation within a matter of days for the cost of a few licences.

Even the largest organisations are now revisiting existing HR systems and processes as new technologies emerge. Many are prepared to move away from entrenched legacy systems in which they have many hundreds of thousands of pounds invested to implement new, cloud-based systems.

Our research tells us that there are four clear areas on which to focus that can elevate an HRIS from a good upgrade to a successful transformation. These are:

- **User Experience** – Focus on the interactions users will have with the system. Getting interfaces, processes and workflows right, simplifies people’s jobs and makes it easier to do things. As a result people will embrace the system.
- **Social Media** – Explore how to build social networking into core HR processes to help people to share and connect more easily. Provide the tools and let people find ways to use them.

- **Single View** – The system should provide a single view of the truth and a single view of the employee. This drives efficiency and effectiveness of processes and analytics. It simplifies the system structure and makes future scalability and changes easier and more cost effective.
- **Analytics** – HRIS puts people data analysis into the hands of the managers in a way that has not been possible before. Combined with a single view of the truth, this allows for powerful analysis and correlation of data across the business. This can help drive more strategic decision-making and help change the perception of HR in the business.

Getting these elements right will make a great contribution towards ensuring the HRIS improves the performance of the whole organisation, achieves cost efficiencies and helps HR get the strategic influence with the board that it should have.

Recommendation

Take your time, plan well and execute effectively.



Appendix 1 - The evolution of HR Information Systems

Organisations are advised to consider not only current needs, but also future requirements for automation and integration when considering the most appropriate system. The HRIS Maturity Curve (Figure A1 below) is a useful check for where organisations feel they are now and where they want to be.

Stage 1: Ad-hoc HR data

New organisations will often use simple spreadsheets for their HR analysis. Reporting tends to be ad hoc and requires a great deal of manual data input, maintenance and manipulation. It is disruptive, time consuming and inefficient, yet this approach can have a surprising longevity.

Stage 2: Consistent HR data

As organisations mature and grow, they develop an HR database often built around a payroll system. Significant manual work is still required for analysis but such a system offers the benefit of consistency in how data is maintained and stored. Systems of this type are low cost but are difficult to adapt and scale. There is limited automation of HR processes.

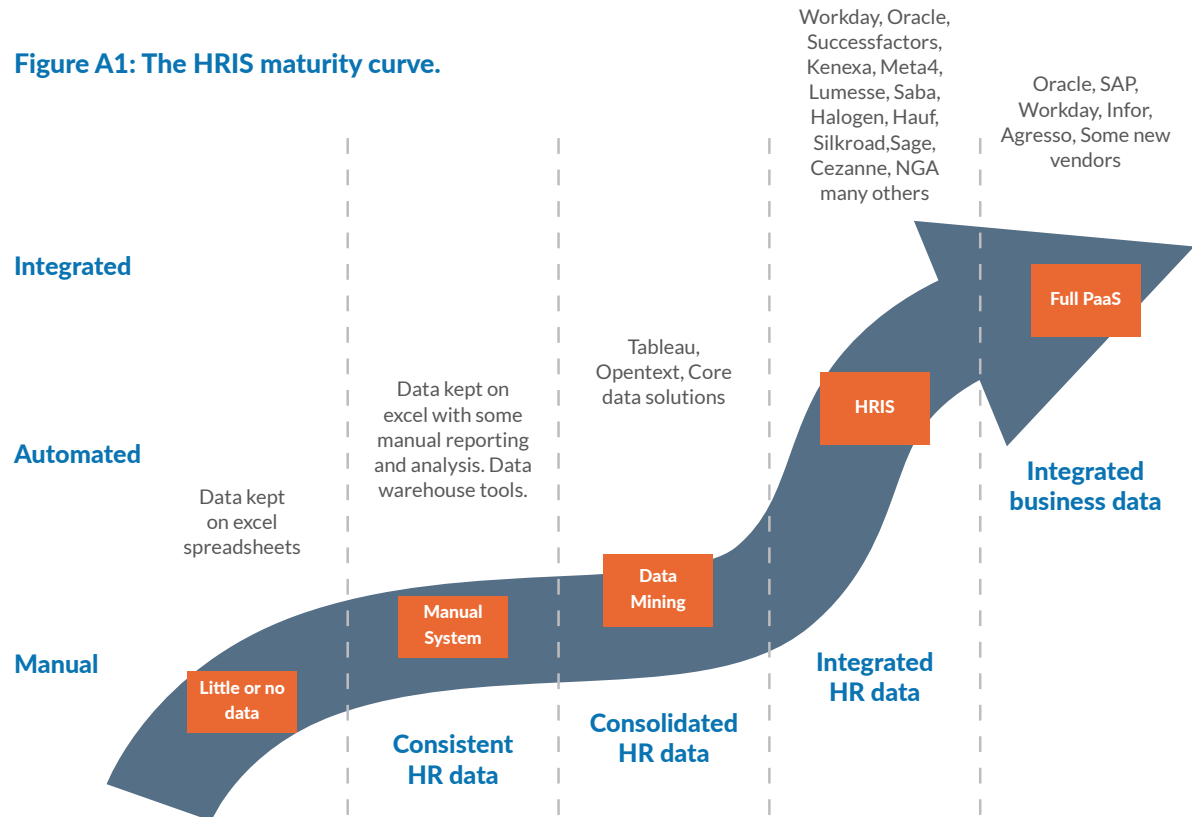
Stage 3: Consolidated HR data

At this stage systems will have some automation in the consolidation and reporting of data but still

need manual intervention. Software packages can interface with several data sources and consolidate the information for reporting. These

offer real benefits in reporting but still suffer from inconsistent data standards, questionable data accuracy and process inefficiency.

Figure A1: The HRIS maturity curve.



Nevertheless, technology is advancing in this space and can now offer automated workflow and processes.

Stage 4: Integrated HR data

Implementing an HRIS is the next level of maturity offering greater integration of HR data. At this level, systems offer more automation of processes and workflow to remove duplication and simplify data update and maintenance.

This can be achieved through one system, or a number of systems that are integrated to share HR data, processes and workflows. Advances in technology are making it easier to integrate systems leading to extensive growth in this area.

Stage 5: Integrated business data

The most mature model is a full Enterprise Resource Planning (ERP) solution. Here, a single system is used to operate the organisation including finance, logistics, customer and supplier relationship management and many other business processes, including HR. Detailed data about employees are held in the system and integrated with other data allowing for simplified data management and processes, and more powerful analysis.

These systems are usually highly complex and costly to implement and maintain. Traditionally these have only been appropriate for large, complex organisations but new vendors are increasingly introducing more cost effective solutions.

The mature, integrated systems are generally more expensive to buy, licence and implement. Training and support costs are also higher as they require more specialist knowledge. So organisations need to have realistic ambitions for where their target maturity should be.

The ultimate objective may be best achieved through a number of incremental steps over time, or as a single implementation. Practical short-term decisions can help achieve the objective over time without locking the organisation into a lower maturity level.

Credits and Acknowledgements

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Thanks and Acknowledgements

Preos thanks all those who have contributed to this research who include: Alan Bailey (GSK), John Aitchison (B2E Technologies), Jim Crawley, (Former Director, Towers Watson), Donna-Maria Lee (Burberry), Mark Warner (Bucks NHS Healthcare Trust), Bob Page (Hutchison Ports UK), Mike Taylor (Former Group HR Operations Director, Vodafone UK), Toby Hunt (Pebblecode), Han de Groot (Former People Services Director, Rentokil UK), Su Oakley and Nick Holmes (Lumesse), Fiona Macpherson and Toby Tarczy together with others who wished to remain anonymous.

About Preos

Preos specialises in Workday Optimisation. Our expertise has been developed over many years' involvement in making Workday happen across a broad range of organisations and sectors. It is enhanced by our research programme and our insights into the Workday roadmap.

Bibliography

An evidence-based review of eHRM and strategic human resource management

(Janet H. Marler, Sandra L. Fisher DOI: 10.1016/j.hrmmr.2012.06.002)

How strategic considerations influence decision-making on eHRM applications

(Renè Schalk, Volken Timmerman, Sjoerd van den Heuvel DOI: 10.1016/j.hrmmr.2012.06.008)

HR Solutions Usability, Efficiency, and Adoption report

Aberdeen Group, 2017

Digital Workplaces Create New Demands for HR Service Delivery

Gartner Research, April 2014

Standish Group Chaos Report and surveys

<http://www.standishgroup.com> and www.scrumalliance.org/community/articles/2016/october/what-we-really-know-about-successful-projects

PWC 20th CEO Survey 2017

<https://www.pwc.com/gx/en/ceo-survey/2017/deep-dives/ceo-survey-global-talent.pdf>

Gartner, The Key Trends in PaaS, January 2017

<https://www.gartner.com/doc/3587224/key-trends-paas->

IDC Press Release - "Worldwide Public Cloud Services Spending Forecast to Reach \$122.5 Billion in 2017", February 2017

<http://www.idc.com/getdoc.jsp?containerId=prUS42321417>

Managing the value of your talent, July 2014

Lancaster University Management School

HR Systems Survey

CedarCrestone 2013-2014



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