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TAPPING THE FULL POTENTIAL OF
HUMAN RESOURCE INFORMATION
SYSTEMS – SHIFTING THE HR
PARADIGM FROM SERVICE DELIVERY TO
A TALENT DECISION SCIENCE

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Tapping the Full Potential of Human Resource Information Systems –
Shifting the HR Paradigm from Service Delivery to a Talent Decision Science

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Introduction

The technical capabilities of human resource information systems (HRIS) are undeniable. HRIS vendors, service providers and their customers constantly find new ways to enhance the speed, capacity, accessibility and global reach of their systems. It is increasingly possible to capture HR data as it is entered into the system, making instantaneous data updates possible. Data warehouses are increasingly flexible and responsive, making it possible for a growing array of HR and business decision makers to have deep access to the information, on a real-time and global basis. Data interfaces are increasingly web-based and intuitive, allowing users to easily construct custom reports that slice and present HR data in virtually any form desired. A dizzying array of statistics, ratios and descriptions of the HR function, HR processes, and employees are potentially available to virtually anyone at any time. Organizations are investing millions of dollars on HRIS design, implementation and service.

Perhaps this is all quite justified. It is no secret that the human element of organizations is increasingly important to global organizational success (Boudreau, 2003; Boudreau & Ramstad, 2002; Boudreau, Ramstad & Dowling, 2003), and there is an increasingly rich array of measurement products designed to organize and interpret the data from HR information systems (Boudreau & Ramstad, 2003). Organization leaders increasingly encourage and support efforts to make the human element of the business more quantified, precise and numerical. There is huge pressure to reduce unnecessary expenditures in HR, and if better HRIS can identify where those cost savings can be attained, the sizable investment in them can be justified.

Yet, the promise of HRIS remains in many ways unfulfilled. The most recent data from an ongoing study of the evolution of the HR profession by the Center for Effective Organizations at the University of Southern California (Lawler & Mohrman, 2003) suggests that while HR professionals largely believe that their activities and role have changed in the last five years, and that they have shifted toward more strategic and less administrative tasks, when they are asked to indicate the percentage of time they spend on various HR activities, the proportions have changed very little. For example, the time spent "Maintaining employee records" was 15.4% in 1995 and 14.2% in 2001, and the time spent in the role of "strategic business partner" was 21.9% in 1995 versus 23.2% in 2001.

The table below lists the highest-frequency HR measures, according to a Conference Board study (Gates, 2002).

Table 1
Highest-Frequency HR Measures

Turnover (96%)	Voluntary Resignation (84%)
Average Compensation (82%)	Average Workforce Age (77%)
Diversity (76%)	Compensation/Total Cost (76%)
Average Seniority (75%)	Work accident frequency (74%)
Percent with variable compensation (71%)	Percent with stock options (71%)

Source: Gates, Stephen (2002). "Value at Work: The Risks and Opportunities of Human Capital Measurement and Reporting". Conference Board Report # r-1316-02-rr. New York: Conference Board.

While these measures are certainly relevant and potentially valuable, they hardly seem to reflect the depth and sophistication of today's global human resource data warehouses. Perhaps even more important, the measures listed in Table 1 largely reflect descriptive information about the workforce, rather than information relevant to the role of talent in achieving business success. For example, how should "average seniority" be interpreted? In some organizations or jobs, higher seniority may well indicate greater learning, experience and value to the organization. In others, higher seniority may indicate a failure to move talent to higher-level roles, or to bring in newer workers who have needed external perspectives or knowledge. Similarly, low turnover may indicate that the organization is retaining talent that is key to its success, but they may also indicate a failure to act decisively to remove low performers.

In short, for all the promise and investment in HRIS, their potential remains largely untapped. Today's HRIS usually automate and accelerate the traditional HR activities and functional services. This is not unimportant,

but it is certainly not tapping the full potential of information systems to support decisions about talent that directly enhance the strategic success of the organization. The dilemma is that strategic decision support cannot be achieved by incremental improvements in traditional HRIS applications to HR activities and functions. It requires a fundamental shift in our perspective about human resources and in our approach to the design and use of HR information.

We can learn a great deal about how to accomplish this paradigm shift, but we must look beyond the HR function to the information systems in functions such as Finance, Marketing, and Supply-Chain management. In this chapter, we will describe some of these lessons, and suggest how HR professionals can embark on a path that will tap the strategic decision power of their HRIS. To gain a perspective on the development of HRIS systems, it is helpful to contrast their development with financial systems. Each revolution in computer technology (mainframes, minicomputers, networks, large scale data base servers, PCs, graphical user interfaces, internet, etc) arrived at the same time, affecting both the HRIS and financial information systems. The difference is that Finance and HR were at very different stages in their maturity, when technology arrived.

Automated Financial Information Systems Quickly Became Effective Decision Support Systems

When large-scale automation became feasible for bookkeeping, accounting and finance functions, there was already a very clear distinction between the transactions (bookkeeping), professional practices (accounting) and the decision science (Finance). The initial benefits came from automating the operations, with efficiency gains achieved in the transaction (bookkeeping) activities, where labor had historically accomplished the routine bookkeeping tasks of processing purchase orders, receipts, accounts payable, inventory, invoicing and accounts receivable. Long before computers arrived, there were well-understood distinctions and contributions from bookkeeping, accounting and Finance, and a clear link from the data to strategic organizational decisions. Bookkeeping practices were well established, and the results of these activities were logically linked to accounting (capital market reporting, management accounting, auditing) and to the decision models of finance (return on investment, portfolio analysis, capital budgeting). When the bookkeeping was automated, the efficiency immediately improved. More important, however, was that as this information became available faster and at with deeper detail, it flowed almost immediately into more timely and accurate finance decisions. This is because the logic of the financial decision models that used the transaction information was already well-understood and firmly established within the organization. Similarly, the accounting system had established processes and practices for consolidating information from bookkeeping since the early 1900s, so the frameworks necessary to have broad and diverse business units using common transaction and reporting standards existed long before the first computers showed up on the scene.

Why HR Information Systems Have Yet to Become Effective Decision Support Systems

Computerized financial information systems rather quickly became a decision tool, but HRIS has still largely failed to achieve the same deep and logical connection to decisions that drive strategic business success. The history of automation in the Finance discipline provides some important contrasts with the history of HRIS in the HR function. For example, the HR transactions that usually benefited from automation first were in payroll and benefit processing. Unlike automation financial systems, payroll and benefits transactions had relatively little connection with the HR professional practices of staffing, development, performance management, compensation, labor relations, etc. In fact, the information required for effective payroll and benefits transaction processing was more closely linked to accounting, such expense codes, overtime authorization, tax tables, etc. Before automation, payroll and benefits reporting frameworks were largely used for accounting control and compliance, so automated HR systems emphasized such things as pay grades, exempt/non-exempt, union/non-union, etc. Automating payroll and benefits increased transaction efficiency, but the *information* arguably created far more value for the management accounting systems, through more accurate labor cost data, than for improving HR processes or enhancing strategic talent decisions.

This is not to diminish the significant efforts to enhance decisions using the results of payroll and benefits automation. However, the lack of a deep, logical and clear connection between transactions, professional practices and strategic decisions is a key reason that improved data collection through HR automation have often yielded disappointing results.

Turnover reporting provides another good example. The payroll system tracks the transactions when employees leave the organization, so automating payroll provided an opportunity to automate, collect and process turnover events. Existing payroll system separated "voluntary" from "involuntary" turnover, because these

classifications were already important for external reporting regarding unemployment compensation, so their meaning was relatively clear. Typically, however, the new automated system added turnover classifications, in a "turnover cause table." In the late 1990's business leaders felt the pain of increased talent mobility and shortages in key roles, and looked to HR professional to help. HR professionals turned to their HRIS, and often found 10, 20 or more system codes for "reasons" why people leave (retirement, take another position, family issues, relocation, etc.). The modern computerized reporting system allowed analysts to calculate the number of separations in each category, even sliced by any number of demographic or business unit variables. Yet, this yields little insight into whether this was significant for business success. Several CFO's we worked with have noted that "we have 10-20 turnover codes in the system, yet no one can tell me whether turnover is hurting or helping my business units."

What is the key difference, then, between the rapid advancement of automated financial systems as strategic decision tools, and the less-than-rapid advancement of HRIS?

The Importance a Decision Science for Talent … Talentship

We have noted (e.g., Boudreau & Ramstad, 2002), that in the financial and customer/product markets, there is a clear distinction between the *professional practices* required to operate in the market and the *decision science* which supports analysis and deployment of the resources from that market. For example, there is a clear distinction between accounting (the professional practice) and finance (the decision science). Accounting for revenues, costs, taxes and interest is important but very different from financial tools to decide about appropriate debt structure, internal rate-of-return thresholds, etc. There is an equally clear distinction between the *professional practice* of sales and the *decision science* of marketing. Excellent sales practices are critical, but very different from the decisions about customer segmentation, market position, product portfolio, etc. The examples above show that the clarity of this distinction, and the shared frameworks that integrate professional practices and decision sciences were key to the rapid evolution of automated financial systems into strategic decision tools.

We have coined the term *Talentship* for the decision science applied to the human element of organizations, and defined the goal of Talentship as *"To increase the success of the organization by improving decisions that impact or depend on talent resources"* (Boudreau & Ramstad, 2002). Talentship reframes HR beyond excellent service delivery to excellent talent decisions, just as Finance reframes capital management beyond excellent accounting practices to excellent decisions about money. This fundamental shift in perspective has significant implications for the role of the HR function in organizations (Boudreau & Ramstad, 2002), for HR measurement (Boudreau & Ramstad, 2003); for how HR defines its processes and accounts for their contribution (Boudreau & Ramstad, 2001); and for the design and assessment of global talent and leadership systems (Boudreau, Ramstad & Dowling, 2003). For more information about Talentship and the HC BRidge® framework, please visit: http://www.hcbridge.com
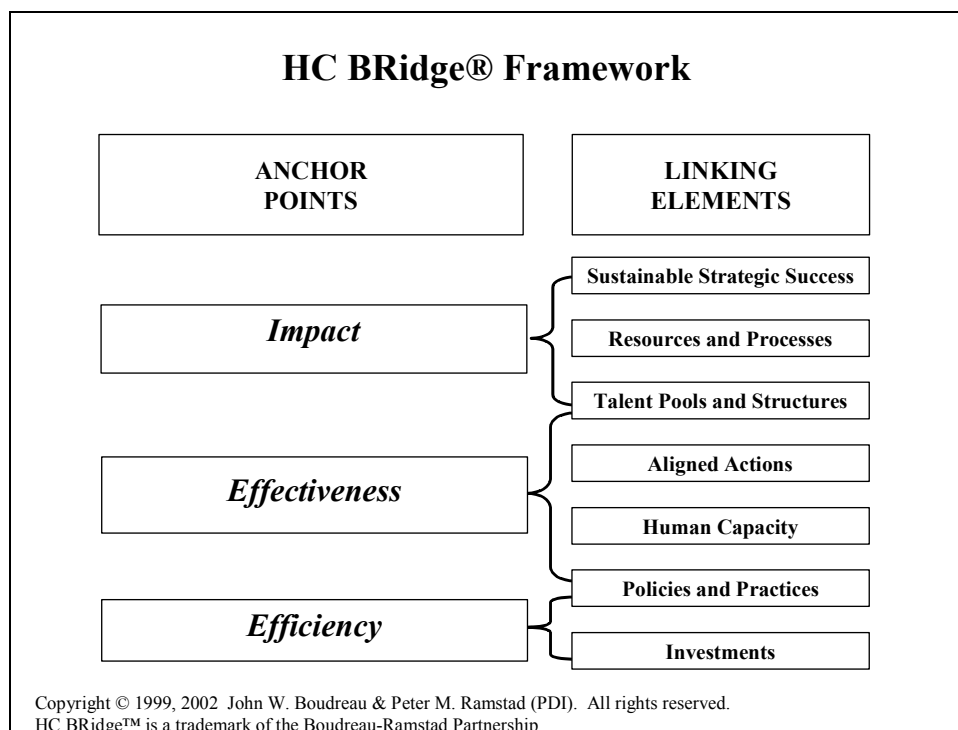
The shift toward a decision science for talent has equally important implications for the evolution of HRIS. Automated financial systems advanced quickly in part because of the logic linking bookkeeping with accounting (capital market reporting, management accounting, auditing) and accounting with financial decision models (return on investment, portfolio analysis, capital budgeting). For HRIS to advance as a decision tool, we will need a similar framework for talent resources. Next, we consider such a framework, called HC BRidge®, and its implications for HRIS evolution.

HC BRidge®: Connecting Talent to Sustainable Strategic Success

The HC BRidge®framework, in the diagram below, describes the elements linking talent and sustainable strategic success. The framework is not a rigid set of rules, but can be adapted to different business or competitive situations. It is based on the three generic elements: "Impact" "Effectiveness" and "Efficiency," that are common to successful existing decision frameworks like Finance and Marketing. In the HC BRidge® framework, each of these fundamental questions is broken down further into a set of linking elements that can be used to articulate it more explicitly. HC BRidge® is an outline, like EVA or ROIC, in which each linking element also represents deeper logic and analysis. For example, the linking element of "Resources and Processes" represents more detailed analysis of the value chain and unique organizational capabilities that support sustainable strategic success.

We find the HC BRidge® model useful as a planning tool, working from sustainable strategic success at the top, to derive implications for HR practices and investments at the bottom. We also find HC BRidge® useful in guiding execution, starting with HR investments and practices at the bottom and exploring how well and how clearly they link upward to sustainable strategic success. We also find the framework useful when talent questions "start in the middle," as when HR professionals are confronted with a client request such as "we need to get our

manufacturing employees to be more innovative." The model can guide a dialogue that begins with "human capacity" (in this case innovativeness) identify its links to key actions, talent and business processes (moving upward). If it is indeed determined to be a high-impact capacity, the model can help to guide a discussion of the appropriate HR practices that will most enhance it (moving downward from the "human capacity" element).

HC BRidge® Framework

ANCHOR POINTS	LINKING ELEMENTS

Impact
- Sustainable Strategic Success
- Resources and Processes
- Talent Pools and Structures

Effectiveness
- Aligned Actions
- Human Capacity
- Policies and Practices

Efficiency
- Investments

A good point of view encourages and enables everyone in the organization to ask great questions about talent. Questions that identify the most important talent issues, the most promising talent investments, and the best use of scarce talent resources. So, a powerful way to evolve toward Talentship is for HR leaders simply to begin asking questions using this "point of view" as part of everyday work with their constituents.

The HC BRidge® framework is built on the three major "anchor points," and their associated fundamental questions.[1] We will illustrate the framework using an example of Federal Express in the Asia-Pacific region, because it is a familiar organization that offers some interesting insights into the model.

"Impact" asks, "For which talent pools do quality differences have the biggest impact on our competitive success?" This question, and the tools that support it, often unearths surprising talent potential. For example, with Federal Express Asia Pacific, some of the largest opportunities to improve on-time performance and customer satisfaction might lie with a relatively "undervalued" talent pool – couriers and dispatchers. In our investigation of the talent issues at Federal Express, we found that it was not unusual for couriers to encounter a customer who said, "Can you wait 15 minutes, because I will have 20 more packages for you." The quality of responses, multiplied across hundreds of incidents every day, contributed significantly to the effectiveness or ineffectiveness of the entire system. Waiting at the wrong time could cause a truckload of packages to miss the timing window at the airport hub, and be delivered late. Not waiting, when time is available, caused needless customer dissatisfaction. We find that most HR and business leaders searching for the key talent at Federal Express will identify pilots, logistics designers and top leaders, which are undeniably important. Yet, in terms of strategic success *improvement*, changes in the quality of the courier-dispatcher talent pool was even more pivotal. Organizations that systematically consider the "Impact" anchor point often discover their own examples of previously overlooked key talent.

"Effectiveness" asks "Do our HR practices make a significant *difference* in the strategically-important talent pools?" This gets at the effect of HR programs on *capability* (can employees contribute?), *opportunity* (do

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[1] A more detailed application of the HC BRidge® framework to the strategic challenges of the internet can be found in Boudreau, Dunford & Ramstad (2001).

employees get the chance to contribute?), and *motivation* (do employees want to contribute?), which are the elements of "Human Capacity" in the HC BRidge® model. At Federal Express Asia-Pacific, the "aligned action" would be the response to the customer request. Understanding the importance of this action would reveal new opportunities to direct HR programs to create more aligned actions through capability, opportunity and motivation. For example, couriers in Asia have very different social status compared to their customers, than in the U.S. In Asia, it is much more typical for couriers to defer to the customer. Thus, saying "No" to a customer request to wait would be very unusual. Yet, given the strategic impact of this action, it may well make sense to invest in ways to change the motivation and capability to say "No." In fact, it may also make sense to change "opportunity," perhaps by providing increased alternatives to the couriers, such as additional shipping trucks that are available to handle overflow. Couriers could then say "No, I can't take your additional packages now, but I can send someone who can." Thus, the talent issue reveals implications for logistics design.

"Efficiency" asks, "What is the level and quality of HR practices we produce with the resources that we spend?" In the courier-dispatcher example, HR might have benchmarked its efficiency by measuring couriers and dispatchers in terms of cost-per-hire, pay-per-employee, or time-to-train. Usually, such benchmarking suggests where costs/time can be reduced, and/or where volume of HR activity can be increased, without spending more. Yet, the more complete analysis of Federal Express suggests that it might make sense to spend *more* resources than their competitors, to get the right couriers and dispatchers, precisely because of their strategic importance. Competitors battling to reduce HR expenses may actually be a symptom that they have overlooked the strategic opportunity. The existing "point of view" about HR typically reflects mostly efficiency, because the existing organizational decision systems (accounting, budgeting, operations) can only "see" the cost and time spent on HR programs and employees. These existing systems are not wrong, but they are myopic to the connection between HR investments and organizational outcomes.

The key is not to rigidly adopt HC BRidge®, or any model, but rather to develop the point of view about talent that best supports a collaborative decision process, that clearly connects talent with organizational strategic success, and that enables a reliable, consistent and productive approach to talent analysis, decisions and evaluation. The best organizations integrate the HC BRidge® framework into their other management systems (strategy, capital budgeting, operational budgeting, financial reporting, product line analysis, etc.), so that the talent decisions are directly linked to the critical decision making processes and frameworks used within the organization. Whatever the final form of the decision model, it appears useful that it reflect the three anchor points of "Impact," "Effectiveness," and "Efficiency."

The Next Evolution of HRIS

The evolution and decision influence of financial reporting systems has been fundamentally assisted by the clear and logical frameworks that connect data from bookkeeping and accounting to the decision science of Finance, and this suggests that similarly clear connections will be necessary for HRIS to evolve to be a useful decision tool, and not simply a process for automating HR data. The HC BRidge® framework offers a model for logically connecting HR policies, practices and investments, and the fundamental processes, resources and competitive challenges facing organizations. So, we can use the HC BRidge® framework to suggest a path toward the next evolution of HRIS, as true decision support systems for talent.

Decisions, Not Data

It may seem counterintuitive to suggest that information systems emphasize something other than data and information. Yet, history in all fields of business and science show that information systems achieve their potential only when they improve decisions. HC BRidge®, like EVA and ROI in Finance, provides an example of a decision-based framework. It describes the logical connections between the elements that define both the investments and the returns to the talents of the organization. Today's HRIS are typically designed and organized to reflect the data and reports typically required or requested of human resource managers. Such data and reports were developed at a time when the HR profession was defined by its programs and practices. Organizing HRIS to reflect decisions has significant implications for both the design and accountability of such systems. Today, HRIS are largely evaluated based on their efficiency, the amount and breadth of data they can access, their accessibility and their usage levels. In fact, none of these directly measures the most important outcome of an HRIS, improved decisions about organizational talent that enhance strategic success. Future HRIS evaluations should track not only usage levels, but the perceived and actual quality of the decisions they support. Moreover, the concept of "pivotal talent" suggests that not all talent decisions are equal. Truly strategic systems will not only improve talent

decisions, but they will help to identify where and why talent contributes to strategic success, and target their effectiveness to those talent areas.

Necessary and Sufficient Conditions, Not Just HR Techniques

Today's HRIS, like the HR profession they support, focus largely on tracking HR techniques, such as tests, recruitment sources, training programs, performance assessment processes, and incentive systems. Many HRIS are devoted primarily to automating these processes. They provide compelling statistics showing the costs, activity levels, and the numbers of individuals affected by each technique. Techniques are evaluated with data, including the correlation between test scores and job performance, or the number of candidates generated by different recruitment sources. Some advanced HRIS go even further, providing process maps that describe and track activity levels across related techniques. One example is tracking the number of individuals who flow through the different stages of a staffing system, from recruitment, to selection, to offers, to hires, to retention.

Yet, information systems that support finance, marketing and other disciplines go further. The financial system not only tracks each element of cash flow, it provides a framework that defines the requirements for high returns on cash investments, and diagnostic conditions that can pinpoint where those requirement are not being met. Future HRIS should learn from this perspective, to incorporate what we have called "Necessary and Sufficient Conditions" for process success (Boudreau & Ramstad, 2001). The HC BRidge® framework provides one high-level set of such necessary and sufficient conditions, by defining the three anchor points of Impact, Effectiveness and Efficiency. Within the "Effectiveness" element of HR Policies and Practices, there are important opportunities to take the concept even further.

For example, we have suggested that the staffing process can be conceived through the lens of a supply chain. This perspective suggests the importance of tracking not only the cost, volume and quality of each separate technique that is a part of the staffing process, but the conditions that the staffing process must meet (Boudreau & Ramstad, 2001). These conditions include generating a sufficient quality and quantity of applicants, identifying the most appropriate candidates, constructing attractive and competitive employment offers, ensuring that offers are accepted by the best candidates, orientation of the new hires to ensure that they are retained, and then long-term employment relationships that encourage the best to stay and those who don't fit to leave. These conditions are well known in both the professional and scholarly world of HR, but it is surprising how difficult it is to collect and analyze data to reflect them. Typical HRIS are simply too rigidly defined to generate standard reports on each staffing technique, with little integration across them. Even when users attempt to analyze the entire system, they often find that key data (such as the qualifications of applicants) is only associated with one element of the process, and cannot be retrieved or linked with other elements. As a simple test, imagine trying to examine the qualifications of a sample of your own employees, taking when they were job applicants, and compare a group who stayed for at least 3 years, to those who left in the first 3 years. Typically, the applicant qualifications are available only at the time of application, to generate standard recruiting reports, but are not easily connected to subsequent stages of the staffing system.

Such "necessary and sufficient conditions" exist not only in staffing systems, but in other key areas of HR management, such as motivation, engagement, learning, labor relations, etc. For future HRIS to achieve true decision support, such frameworks should be used not only to explore the existing data, but to design the data elements that define the system in the first place. In that way, like financial information systems, the logic of the decision model enhances the information system, and the data from the information system improves the logic.

Synergy, Not Silos

Recent research suggests that HR programs work as "bundles," with the effects of one program affecting another, either in concert or in conflict. The HC BRidge® framework reflects this in the Effectiveness anchor point, and in particular in the connection between HR programs and human capacity. In our work with organizations, the COM concept (Capability, Opportunity, Motivation) provides a useful organizing framework for measuring and diagnosing the underlying cause of variations in employee performance and aligned actions. Decades of literature suggest that an appropriate balance of the COM elements is key, and that if any one of them nears zero, then performance is impossible. These two ideas – HR programs as interrelated bundles that contribute to a necessary balance of COM elements – have significant implications for HRIS as well.

Future HRIS must do better at reflecting the interactions between HR functional systems. For example, organizations that employ team-based organizational structures perform better when reward systems reflect team outcomes. While it seems obvious that the systems should compliment each other, it is not unusual for organizations to implement team-based performance structures, but to maintain performance management systems that focus on individual achievements, or worse, that actually create zero-sum outcomes (such as forced-distribution performance ratings). Viewing HR investments, programs and practices as a *portfolio* is more appropriate than viewing them as separate services, and future HRIS may do well to draw on portfolio theory and financial systems for their inspiration.

A significant connecting point between HR activities and their ultimate outcomes, is how they affect the level and balance among three fundamental components of human capacity: Capability, Opportunity and Motivation (COM). Today's HRIS often focus on one or another of these outcomes, and most frequently contain data on capability-related elements such as skills, knowledge, competencies, etc. Employee motivation and engagement are increasingly available through attitude surveys, but they are surprisingly rarely linked to the capability elements. Opportunity is least-often reflected in today's HRIS, though the raw data reflecting organizational structures and reporting relationships is usually available. There is a very deep history of research on organizational structures, both informal and formal, and their effects on knowledge (Boudreau, 2003) that can be used by future HRIS. However, the most critical change for the future is that HRIS must develop systems and structures that reflect not only the level of each of the COM components, but their balance as well.

Self-Service Based on Capability, Not Just Cost

Future HRIS will increasingly create value through their ability to efficiently deliver HR activities through self-service platforms such as web portals and voice-response systems. Today, the promise of such delivery is largely expressed in cost savings that accrue from the reduced need for administrative time and effort within the HR organization. Certainly, such self-service delivery has enabled many HR organizations to reduce their functional budgets and headcount, and to successfully shift responsibility for data entry and even report generation to employees and managers. Certainly, such systems can achieve significant benefits for HR leaders, employees and business clients, through greater data accuracy, timeliness and speed. However, when self-service is driven largely by cost savings, it can be seen as a "shell game" in which HR cleverly shifts their functional budget items by increasing the workload of busy line managers and employees. We are rapidly reaching the point at which much of the "low-hanging fruit" has been taken, by shifting appropriate tasks from the HR function to employees and managers. Pressing for further cost savings is likely to increase the chances of being seen as merely cost-shifting.

However, future HRIS can avoid this problem by redefining the basis on which self-service applications are built. Rather than only cost-reductions and efficiency, future self-service applications can be based on the capability and expertise of the clients they are designed to serve. We can see early examples today, in the combination of on-line training and artificial intelligence built into many benefits enrollment systems, that help employees understand the implications of the benefits choices they are making. Yet, it seems fair to say that the link between user capability and HRIS applications today is largely focused on preparing users to work with the application. There is much greater potential in this connection in the future.

Financial systems educate by their very nature. Users learn relationships between financial ratios and money flows by using the system itself. Users are expected to become more sophisticated in concepts such as ROI, NPV and EVA, so that the systems can be designed to allow them to do more sophisticated analysis and vary their assumptions. Finance professionals often educate users, not so much on how to use the applications, but on the principles that underlie the financial decision concepts on which the applications are based. In the same way, we envision that future HR professionals, particularly those with strong functional expertise, will so much more than service design and delivery, becoming expert educators on the principles, "Necessary and Sufficient Conditions," and frameworks that help business leaders and employees understand the connections between talent and business outcomes. The role of "decision scientist for talent" will not be limited to HR professionals, so redefining self-service to include user education will be essential.

Talent "Decision Scientists" not Merely HR Partners and Clients

Virtually every proposal or evaluation of HRIS investments includes the idea that such systems will not only increase transactional efficiency and speed, but that they will also "free the HR organization from its administrative burden, to allow it to spend more time on its important strategic role." Yet, the capability of HRIS to truly support HR professionals in this role still significantly lags the rhetoric. More evolved decision systems like Finance have much to teach us about the evolution of HRIS on this domain. A good decision science has its greatest value in framing and structuring the *questions*, not in simply providing answers to existing questions. Our work with the HC BRidge® framework in many companies demonstrates this. The most tangible value of the framework is that it provides an organized way for HR professionals, business leaders, employees and others to sensibly and logically understand information about talent, just as financial systems help leaders sensibly and logically understand the vast array of information about money and financial capital.

Conclusion

Information systems are ultimately for decision support, and decision support requires deep and logical decision models. Building better decision models for talent will require that HR professionals move beyond defining their roles in terms of their activities, services and clients. They must shift the paradigm to build on a logical decision science for talent, and shift from thinking only of client service to a partnership to help those within and outside the HR function make their greatest contribution to that decision science. The table below captures some of the key distinctions. The HR profession must drive this evolution, or others will do it for them.

Traditional HRIS	**Future HRIS**
"The system gathers and delivers data, reports and information about human resource programs and their effects to HR leaders and their clients, in a timely and useful manner."	"Decisions about our pivotal organizational talents are much better when decision-makers have and use the HRIS."
Key Service Level Measures:	Necessary and Sufficient Conditions:
– Amount of data in the warehouse – Number of reports generated or available – Usage rates of clients – Client satisfaction	– Necessary data are in the system – Clients use the system – Users understand which decisions matter most – Users apply a valid decision science logic

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For more information on Talentship, and the tools and processes of the HC BRidge® framework, please visit:

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About the Authors

John W. Boudreau*, Ph.D., Professor of human resource studies, and the Center for Advanced Human Resource Studies (CAHRS) at Cornell University, is recognized worldwide for breakthrough research on the bridge between superior talent and sustainable competitive advantage. His research has received the Academy of Management's Organizational Behavior New Concept and Human Resource Scholarly Contribution awards. Dr. Boudreau consults and conducts executive development with companies worldwide that seek to maximize their employees' effectiveness by quantifying the strategic bottom-line impact of superior people and human capital strategies, including Citigroup, Corning, GE, The Hartford, Shell International, Sun Microsystems, the United Nations, and Williams-Sonoma. Professor Boudreau is a Fellow of the National Academy of Human Resources.*

Dr. Boudreau has published more than 45 books and articles, including the best-selling Human Resource Management in multiple languages worldwide. In addition to HR metrics, Dr. Boudreau's large-scale research studies and highly focused qualitative research have addressed decision-based HR, executive mobility, HR information systems and organizational staffing and development. His research findings have been published in <u>Management Science</u>, <u>Journal of Applied Psychology</u>, <u>Organizational Behavior and Human Decision Processes</u>, <u>Personnel Psychology</u>, <u>Asia-Pacific Human Resource Management</u>, <u>Human Resource Management</u>, <u>Journal of Vocational Behavior</u>, <u>Human Relations</u>, <u>Industrial Relations</u>, <u>Journal of Human Resources Costing and Accounting</u>, and <u>Personnel Administrator</u>.

Peter M. Ramstad *is Executive Vice President for Strategy and Finance at Personnel Decisions International (PDI). Over the last twelve years, Mr. Ramstad has held various leadership positions within PDI, including chief financial officer, contributing to PDI's strategic initiatives in business strategy, organizational effectiveness, and talent development. Prior to joining PDI, he was a partner with a public accounting firm focusing on financial, operational, and systems consulting in high tech and service environments.*

Mr. Ramstad's research and consulting focuses on an organization's ability to manage human resources as assets, rather than merely expenses. This extends traditional HR system analysis, by focusing on how organizational capabilities create value and the connection to competitive success. Mr. Ramstad has worked extensively with both HR and line leaders at all levels of several U.S. and multinational organizations.

Mr. Ramstad is a Certified Public Accountant, Certified Management Accountant, and a member of the AICPA, and holdsdegrees in Math and Accounting with minors in Economics and Computer Science. He speaks frequently at professional conferences in human resource management, finance and accounting, and designs and conducts both public and firm-specific executive education, including regular professional development workshops for the Society for Industrial and Organizational Psychology (SIOP) and the University of Minnesota business school.