

Managing Complexity in Cross-Country Operations

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Managing a Human Resource Information System (HRIS) on a global scale – as opposed to a domestic, single-country scope – brings a unique set of challenges that are both magnified and broadened when considered across countries. The multitude of environmental factors that vary across countries – from compensation schemes and time recording, to social benefits and taxation frameworks, to legislative and regulatory compliance – create an unusually complex environment that is not for the faint of heart.

With such complexity, the critical question becomes, how does an HRIS organization effectively deal with cross-country issues? This article discusses the importance of not only understanding the content but also the context in which the HRIS functions. A global HRIS (content) does not operate in isolation; it functions in a particular environment (context), such as differing legislative and regulatory requirements, varying tax regimes, multiple languages, and diverse cultural practices, to name just a few of the contextual factors that vary across countries and impact the HRIS. This article provides a framework for understanding and managing the complexity of the differing country contexts in which a global HRIS operates.

The Importance of Context

To evaluate the impact of contextual factors on the HRIS, the first step is to categorize the various factors into four domains – organizational, material, socio-political, and economic – as seen in Figure 1.

- **Organizational Factors** – Varying enterprise aspects, such as organizational model (centralized or decentralized), governance model (local, regional, global), industry sector, organization size;
- **Material Factors** – Different physical environments, such as geography, infrastructure (analog and digital access, transportation systems), climate, time zone;
- **Socio-Political Factors** – Fluctuating business dynamics, such as culture, language, business practice and customs, legislation, regulation; and,
- **Economic Factors** – Divergent economic conditions, such as levels and types of social benefits, taxation frameworks, financial sophistication, economic stability.

A few examples can help to illustrate the impact of these contextual factors on the HRIS.

Consider the number of official languages spoken across the organization and the importance of having a global language strategy to effectively support the global business. Identifying one (maybe two) standard language(s) for the corporation, such as English or French, improves communications across borders and reduces the number of translations required for official corporate communications. Tsedal Neeley and Robert Steven Kaplan, in their September 2014 *Harvard Business Review* article, “What’s Your Language Strategy?” hold that “unrestricted multilingualism creates inef-



Figure 1. Country Contextual Factors.

iciency in even the most dedicated and talented workforces.” This implies that the higher the levels of English spoken in a country (assuming English is the standard language for global business), the less complexity that country will have in their HRIS processes.

Another common contextual factor often cited with regard to global HRIS is the complex country-based legislative environment. There is general agreement that the greater the level of legislative and regulatory compliance requirements in a country, the more complex the HR and payroll processes.

Finally, other factors may be critically important in one country, but not at all significant in another, such as climate. In highly developed countries, weather conditions, such as the occasional snowstorm, rarely impact HR/Payroll processing. But, in countries where the payroll is dropped via helicopter into a rice field, the impact of typhoons on pay distribution can be quite severe.

As these examples show, it is critically important to evaluate and understand multi-country metrics within a variety of contexts. The use of a Country Contextual Complexity Index (CCCI)¹ provides an effective and objective filter for interpreting results, setting targets, and benchmarking standard operational metrics across countries.

Country Contextual Complexity Index

Fundamental to understanding cross-country complexity for HRIS is the incorporation of a factor to normalize the complexity of different business contexts across countries. The CCCI² shown in Figure 2 evaluates 16 contextual factors and assigns each one a score, from lowest (score of 1) to highest complexity (score of 5). Data are from a variety of independent, publicly available research datasets, such as The World Bank’s Financial Inclusion Data, World Economic Forum’s Global Competitiveness Index, International Monetary Fund World Economic Outlook Database, Hofstede’s Cultural Dimensions, EF Education First’s English Proficiency Index, and many others.³ The scores are weighted and averaged to produce the relevant CCCI for each country.

The purpose of the CCCI is to objectively evaluate the relative differences in complexity across countries based on specific contextual factors that are outside the control of the HRIS

Domain	Weight	Complexity Factors	Weight	GBR	USA	DEU	FRA	CHN	IND	BRA
Organization	15%	Industry Sector	15%	2.7	1.5	3.6	4.4	3.6	3.0	4.3
Organization	20%	Workforce Composition	20%	2.7	1.5	3.6	4.4	3.6	3.0	4.3
Organization	35%	Labor Flexibility	35%	1.4	1.5	3.6	3.7	3.1	2.9	4.3
Organization	30%	Talent Retention/Attraction	30%	1.3	1.5	2.2	4.2	3.4	4.0	4.2
Material	25%	Technological Readiness	45%	1.6	1.7	1.6	1.7	4.5	3.0	3.0
Material	40%	Infrastructure	40%	1.7	2.0	1.8	1.7	3.7	3.0	4.6
Material	10%	Timezone Differences	10%	1.8	3.5	1.8	1.8	3.5	3.5	3.5
Material	5%	Climate Conditions	5%	1.9	2.2	1.9	1.9	2.4	3.0	2.3
Socio-Political	35%	Language Proficiency	15%	2.9	3.3	3.0	3.7	4.3	3.9	4.3
Socio-Political	15%	Culture Distance	15%	2.9	3.3	2.9	4.1	3.0	3.0	4.2
Socio-Political	30%	Higher Education	30%	2.0	3.3	1.9	2.5	4.3	3.0	3.3
Socio-Political	40%	Legislative Burden	40%	2.5	3.3	3.0	4.2	2.2	3.0	3.0
Economic	25%	Government Efficiency	20%	1.8	3.0	2.1	3.6	2.9	3.5	3.0
Economic	20%	Financial Stability	20%	2.2	1.6	2.9	2.8	2.6	3.8	3.9
Economic	30%	Personal Banking	30%	1.5	1.9	1.5	1.5	3.2	4.7	3.6
Economic	30%	Taxation Process	30%	1.5	1.9	2.4	3.1	3.7	4.7	3.9
Country Contextual Complexity Index (CCCI)				1.8	2.0	2.4	3.0	3.7	4.7	4.1

Figure 2. Country Contextual Complexity Index (CCCI).

BSC Domain	MPBS Payroll Metric	USA	Brazil	UK	France	Germany	China	India
Customer	Payroll Processing Error Rate	0.87%	2.51%	1.01%	2.22%	1.50%	0.68%	6.06%
	Payroll Accuracy Rate	99.13%	97.49%	98.99%	97.78%	98.50%	99.32%	93.94%
	CCCI	2.4	4.1	2.2	2.9	2.4	3.3	4.1
	Actual Rate Adjusted	98.92%	95.95%	99.28%	98.04%	98.92%	97.34%	95.95%
	Difference from Actual	0.21%	1.54%	(0.29%)	(0.26%)	(0.42%)	1.98%	(2.01%)
	Best Possible CCCI (60% Target)	1.8	2.8	1.7	2.1	1.8	2.4	2.8
CCCI Target Rate		99.62%	97.42%	99.44%	98.90%	99.18%	98.83%	97.38%
Difference from Actual		(0.49%)	0.07%	(0.45%)	(1.12%)	(0.68%)	0.49%	(3.44%)
BSC Domain	MPBS Payroll Metric	USA	Brazil	UK	France	Germany	China	India
Business Process	Manual/Off-cycle Payment Rate	0.40%	0.56%	0.29%	1.31%	1.02%	1.05%	3.60%
	CCCI	2.4	4.1	2.2	2.9	2.4	3.3	4.1
	Actual Rate Adjusted	0.56%	1.82%	0.49%	0.80%	0.56%	1.05%	1.82%
	Difference from Actual	0.16%	1.26%	0.20%	-0.51%	-0.46%	0.00%	-1.78%
	Best Possible CCCI (60% Target)	1.8	2.8	1.7	2.1	1.8	2.4	2.8
	CCCI Target Rate	0.38%	0.62%	0.27%	0.55%	0.50%	0.69%	0.77%
Difference from Actual		(0.02%)	0.06%	(0.02%)	(0.76%)	(0.52%)	(0.36%)	(2.83%)

Figure 3. Sample Contextual Balance Scorecard

organization. The CCCI is used to normalize the operational metrics in each country so that a realistic, like-for-like comparison can be made and so that reasonable, attainable, context-sensitive targets can be set for each metric in each country. Across the seven countries shown in Figure 2, Brazil and India have the most complex environment for HR/Payroll due to factors such as their broad cultural and linguistic environment (India has 18 official languages), less well-developed infrastructure and educational systems, and multifaceted taxation and legislative frameworks. Conversely, the U.S., UK, and Germany show the least complex environments, followed by France and then China.

Global Benchmark Metrics

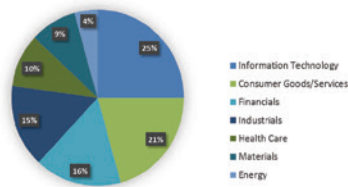
Figure 3 illustrates the application of the CCCI to two metrics from the 2014 Mercer Payroll Benchmarking Survey (MPBS), Payroll Accuracy Rate and Manual/Off-cycle Payment Rate. It is generally expected that as complexity goes down, accuracy rates should go up and exception payment rates should go down. Hence, less complex countries should have higher

Endnotes

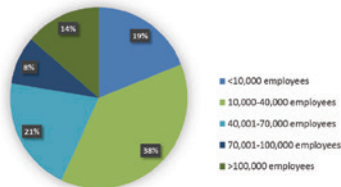
- The author wishes to credit and thank James Garrett for the collaboration on tying together the business and numerical approaches to country complexity and for the independent statistical validation of the CCCI model.
- The CCCI is defined in connection with a simple analysis of variance. The index represents the effect on metrics as they vary from country to country. The CCCI components are selected and weighted to minimize the interactions in a two-way fixed-effects model.
- This is a preliminary list of external sources used to develop CCCI. Further analysis is continuing to determine the best-fit sources to support the CCCI model for the HRIS environment.

Mercer Payroll Benchmarking Survey Demographics

Participants by Industry



Participants by Employee Size



accuracy rates and lower manual payment rates than more complex countries; indeed, the data from MPBS confirm this fact.

Taking the U.S. and India as examples, the MPBS data from 2014 show that the U.S. has a Payroll Accuracy Rate of 99.13%, while India has an Accuracy Rate of 93.94%. Adjusting these rates based on their CCCIs, the Actual Adjusted Payroll Accuracy Rate for the U.S. is 98.92%; for India, it is 95.95%. On average, U.S. organizations are performing 0.21% above what is expected given the complexity of their environment, and Indian organizations are 2.01% below.

However, using the raw CCCI creates an inappropriately low target for the U.S. given their relatively low level of complexity, and a potentially high target for India given their relatively high level of complexity. Therefore, to normalize this difference and set realistic, attainable targets for each country based on their complexities, a best possible CCCI is created by reducing the raw CCCI to 40% of the lowest possible complexity for each country (40% being a reasonable, albeit arbitrary, number to set an attainable goal).

Specifically, the CCCI Target Rate for each metric is the difference between the current value of the metric based on the country's complexity index and the ideally best possible value for that metric based on the lowest possible complexity for the country. This calculation takes the U.S. from an Actual Adjusted Payroll Accuracy Rate of 98.92% to Target Adjusted Accuracy Rate of 99.62%, in effect putting the U.S. 0.49% below target. Likewise, India's Actual Adjusted Accuracy Rate of 93.94% becomes a Target Adjusted Accuracy Rate of 97.37%, putting India 3.44% below target. Looking at the CCCI target rates for all seven countries, only China is performing

above target on payroll accuracy, while Brazil is performing close to target. The U.S., UK, France, Germany, and India are performing below average.

The second example, Exception Payments, shows a similar trend with some minor differences: the U.S., Brazil, and the UK are performing close to target, while the other countries are below target. Only Brazil is performing at target on both metrics, while India is performing below target on both. Extending this concept to create a full contextually-based balanced scorecard gives a fuller and more accurate picture on the performance of each country.

Optimizing Performance

To effectively manage the performance of a global HRIS via metrics, it is important to set reasonable, attainable targets based on each country's relative complexity. Contextually-based metrics provide a method to compare apples-to-apples across countries, eliminating the all-too-common objection, "It's different in our country." Setting individual country-based targets for each metric avoids the perception that metrics are being established based on "corporate headquarters' view of the world." Setting realistically achievable metrics is fundamental in building a performance management system that motivates individuals to strive for continuous improvement.

About the Author



Karen V. Beaman is the managing director for Teilasa Global and the founder and lead researcher for Mercer's Payroll Benchmarking Survey (MPBS), a unique groundbreaking research effort focused on uncovering leading practices in payroll. She has

30 years of diversified human capital management (HCM) experience, covering global strategic planning, application development, data modeling, business process optimization, shared services delivery strategies, business case development, and global systems deployment. She was previously the founder and chief executive of Jeitosa Group International, a worldwide strategic business consultancy providing solutions for global effectiveness, which was acquired by Mercer in 2014. She led the team that developed the global strategy and built the requirements for the foundational core of Workday's new HCM system. Previously, she was responsible for ADP's global professional services across the Americas, Europe and Asia Pacific. Beaman was the co-founder and editor-in-chief of the IHRIM Journal, is currently the academic editor of Workforce Solutions Review, and is the editor of four IHRIM Press books. She is a certified Human Resource Information Professional (HRIP) and, in 2002, she received the Summit Award, IHRIM's highest award honoring her lifetime achievements in the field of HR. She is fluent in English, German, and French and conversational in Spanish and Portuguese. She can be reached at karen.beaman@teilasa.com.

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