The Challenges of Implementing “Vanilla” Versions of Enterprise Systems

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Executive Summary

A common prescription for reducing the costs and risks of implementing enterprise systems is to adopt a “vanilla” approach, where the organization implements the package without modification. In reality, few implementations are completely “vanilla.” Generally, organizations modify the package to better align it with their organization because they are unwilling or unable to adapt to or live with the processes required by the package. Unfortunately, misalignments between package and organization are often identified fairly late in implementation, and then not appropriately managed.

This article therefore addresses two questions: 1) How can organizations identify package-organization misalignments early? and 2) When should organizations align by modifying the package and when by changing their organization?

Misalignments arise from the developer’s context differing from the organization’s context. The developer’s context is reflected in the structures embedded in the package. The organization’s context is reflected in its structures. We present a framework that distinguishes between misalignments arising from imposed structures versus those arising from voluntary structures. We refined the framework by analyzing several hundred instances of misalignments in ES implementations at three Asian hospitals. We conclude that organizations should identify major misalignments early and plan for appropriate alignment responses.

THE CHALLENGE OF “VANILLA” IMPLEMENTATION

The 1990s saw the widespread adoption of enterprise resource planning (ERP) systems in many countries. Implementation of enterprise-wide systems (ES) continues apace as organizations adopt CRM and SCM packaged software, or replace their aging ERP systems with third-generation ERP packages. These implementations are often motivated by promises of integrated information and processes across the enterprise and “best practices.” However, many implementing organizations have not experienced the expected benefits, and there have been expensive ES implementation failures. One prescription for minimizing the risks of ES implementation is to implement a “vanilla” package – where the organization adopts the package without modifying it.

But “vanilla” implementation raises significant challenges in practice. It assumes that the implementing organization can adapt itself to the package. Our reading of several well-known ES failures provides a less sanguine view. The AeroGroup found that the SAP R/3 Apparel Footwear solution could not meet the unique complexities of its footwear business, while FoxMeyer attributed its bankruptcy to problems with its ES, in particular the inability of the package to meet the requirements of its wholesale distribution business. These two cases suggest that mismatches

1 Jeanne Ross was the accepting Senior Editor for this article.
between a package and an organization can be significant, and adapting to a package may not be feasible.

Moreover, in reality, most ES implementations are not completely “vanilla.” Some degree of package customization is done to respond to user demands. In most organizations, each decision on a misalignment depends on the interplay among the strength of the management directive for a “vanilla” implementation, the balance of power of the users requesting the customization, the consultants and the project manager tasked with holding the line, and the available project resources and timeline. When a sound basis for making these decisions is absent, people make highly suboptimal choices. Powerful users may get scarce resources committed to customization that provides little value to the organization. Conversely, time and budget pressures may result in decisions not to customize, undermining organizational performance.

Organizations need to carefully consider such issues to assess their ES implementation risks. This paper deals with these challenges by providing a framework to help organizations: 1) identify package-organization misalignments early, and 2) assess whether alignment should be via package modification or by organizational adaptation.

FOUR TYPES OF ORGANIZATIONAL STRUCTURE

Package-organization misalignments occur because they have different organizational structures. Four are important to this discussion: package-embedded structures, the implementing organization’s structures, imposed structures, and voluntary structures.

Package-embedded Structures

ES packages are not custom-built for each implementing organization. So, to design and code the package, the developers (vendors) must make assumptions about the requirements of businesses in general. Technology developers (not merely package developers) inscribe their vision or view of the world in the technology they create. ES packages therefore reflect the market-based perspective of the consultants and software vendors who seek economies of scale for their products and services. Given the enterprise-wide scope of ES packages, vendors must make many assumptions about organizational requirements in such areas as organizational policies, structures, standard operating procedures, user knowledge, and interfaces. These assumptions manifest themselves in the processes and features in the ES package; we refer to these processes and features as package-embedded structures. Often, they reflect the context of the organizations the vendors interact with most closely. These reference organizations are usually in the vendors’ home market and a handful of other markets where the vendors have or wish to build a major presence. These markets are usually national or by industry.

ES vendors claim that their package-embedded structures reflect best practice. However, many customers have found that these configuration options do not meet all their specific needs, and many question whether the “best practices” truly do apply to all organizations.

Developers’ context — that is, their reference organizations — may differ from potential implementers’ contexts, particularly those located in different countries or industries. Even within the same country and industry, contextual differences can exist.

Structures of Implementing Organizations

Organizations that implement ES differ in their goals and practices due to differences in their history and competitive positioning. The organizational structures, practices and norms (organization structures for short) that arise from differences in country, industry and history are persistent and difficult to change. They result from an organization’s cumulative interactions with its environment and provide meaning and access to necessary resources in their environment.

Implementing organizations often are unaware of many differences in assumptions and structures between themselves and the package they plan to adopt because they are separate from the developers in time and space. Also, in “vanilla” implementations, companies devote few resources to identifying contextual differences.

The result is naive adoption of ES packages. Fundamental misalignments are not discovered until late in implementation, and are not anticipated or budgeted


for. So the organization scrambles to recover from the setbacks. At best, the organization experiences implementation delays, inelegant solutions, and disgruntled users. At worst, its organizational performance may be significantly affected by lost sales, excessive inventories, and damaged reputation.

Implementing organizations need to identify, as early as possible, misfits between the package and their organization. They should create a basis for ascertaining when to align through organizational adaptation and when to align through package customization. To begin, organizations should understand their specific context, their organizational structure, and their ability to change these contextual factors and organizational structures.

**Imposed Structures**

While all organizational structures are adopted over time to respond to the external environment, the degree of organizational volition can vary. Some organizational structures are imposed by authoritative sources; others are adopted voluntarily. These imposed and voluntary structures are embedded in packages and in user organizations alike, as shown in Figure 1. The distinction between imposed and voluntary is important because it indicates an organization’s ability to adapt itself to a package for a given misfit.

Imposed organization structures arise from two sources of authority. One is the coercive authority of nations and states, exercised through laws and regulations that organizations must follow to remain in business. The second source is the more normative authority of professions, exercised through professional and industry accreditation and recognition of standard industry practice.

Country-level differences between organization and package can occur when the two have different country contexts. Management needs to identify these differences. They can come from a myriad of sources. Of prime concern are differences in national economic institutions, especially package provisions pertaining to accounting, banking, consumers, labor and employment, and trade between organizations. How does the package’s country context differ from the implementing organization’s country context? For example, ES packages developed for countries that have a smaller governmental role in economic activity will have fewer features for government funding, reporting and regulation.

Similarly, implementing organizations also need to consider industry-level differences. Interaction norms within an industry – among customers, suppliers, and regulators – emerge over time and define expectations of acceptable industry practices. Professional or industry certification and membership requirements often
strengthen these norms. And they differ from industry to industry.

One example involved a public-sector military organization, which aimed to implement an e-procurement package widely used in the private sector. But it encountered significant package-organization misalignments, a recent study found. The financial management models embedded in the package did not fit the organization’s complex budgeting and expense monitoring practices, so the organization had to customize the package in that area. The package also did not address the military’s security sensitivity (e.g., physical intranet/Internet network segmentation, security classification of catalog items), so it needed to make changes in this area as well.

Voluntary Structures

Organizations also develop structures to support strategic, managerial, and operational choices. Organizations make strategic choices over time as they seek favorable positions within their industry, targeting selected market segments, crafting distinctive value propositions, and implementing routines and structures for interacting with suppliers and customers. Many voluntary organization structures arise from organizational experience and perceptions of how to efficiently acquire and use strategic resources. These structures, while voluntarily acquired, can be an important source of competitive advantage. Much of the recent work on dynamic capabilities (as embedded in organizational routines or structures) has noted that an organization’s ability to combine and leverage resources is critical in today’s competitive environment.

Other voluntarily adopted structures reflect operational concerns and managerial preferences. For example, organizations evolve ways to deal with recurring problems, and over time, these solutions become part of organizational routines. Management teams also face a multiplicity of demands and evolve responses to balance the demands of various internal and external constituencies. Managers also shape organizational structures through their requirements for information and levels of risk preferences. For example, executives with a low tolerance for risk will evolve structures for high internal control in the form of detailed analysis, frequent reporting, multiple approvals, and other norms and routines.

Voluntary structure misfits, particularly those closely tied to strategic positioning and strategic resources, can significantly degrade organizational performance if not surfaced and handled appropriately.

For example, in the candy industry, customer demand is cyclical, with Halloween being a period of high demand. Hershey, the candy company, had evolved its own organization-specific routines to manage its high storage requirements for the run-up to Halloween. It hired temporary storage facilities and temporarily converted rooms in its manufacturing premises to storage. But these temporary locations were not recorded as storage points in the data model of the ERP system. Hershey lost track of its inventory so badly that it could not fulfill many orders. This misfit cost Hershey $150 million in lost sales one Halloween.

MODIFY THE PACKAGE OR ADAPT THE ORGANIZATION?

Once misfits are identified, package-organization alignment can be achieved by either modifying the package or adapting the organization to the package’s structure. “Vanilla” implementation promotes organizational adaptation, either by conscious redesign and substantial change management, or by piecemeal, evolutionary workarounds, such as individuals and groups adapting. Their adapted practices lead to new organizational structures. Package modification can range from customizing the package code to interfacing with custom-developed modules or modules from other vendors.

The decision on whether to choose package modification or organizational adaptation usually results from interactions and negotiations among users, consultants, project managers, and sometimes, senior management. Users tend to push for package modification to minimize the amount of change they will have to make. Consultants and project managers tend to advocate organizational adaptation, to simplify package implementation and avoid the tangible costs (time, resources and risks) of package modification.

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Prior research has suggested that this process of negotiation is usually “messy” because it lacks a consistent basis for decision-making, and because it depends on the balance of power and knowledge among the parties, as well as the amount of available resources.

The misfits that arise from imposed or voluntary structures provide a framework for making these decisions, with the goal of resolving the misfits (see Figure 2). Imposed structure misfits usually require package modification because user organizations usually cannot change the country laws and regulations or industry norms underlying the imposed structures. In negotiating how to align the organization and the package on each imposed structure misfit, users point to the external authority requirements. Consultants and project managers tend to acquiesce, because it is difficult to argue against the dire consequences of non-compliance with regulations or established industry norms.

Users have more difficulty arguing for package modification in cases of voluntary structure misfits. Without the authority of governmental regulation or industry norms, arguments by consultants and management about the risks and costs of package modification are unlikely to prevail. Hence, many voluntary structure misfits tend to be resolved through organizational adaptation. While we agree that organizations should refrain from modifying packages wherever possible, and that voluntary structure misfits should be resolved by organizational adaptation, we note one important caveat: When an organization’s voluntary structure is closely tied to how the organization executes its strategy, management must carefully consider the impact of organizational adaptation. It might undermine competitive position.

Three Case Studies of Misfits and Alignment

While many of the examples that we have cited from the published sources deal with cross-industry and cross-organizational context differences, few deal with cross-country differences. Yet country differences are important because they are often the least malleable. They are also particularly salient because companies are moving their operations into the growing markets of China and Eastern Europe, looking to implement ES packages in these overseas operations to control and coordinate them. We illustrate imposed and voluntary structure misfits and their resolution through the case studies of three Singaporean hospitals implementing ERP. The lessons are applicable to the broad range of large software packages.
All three have implemented an ERP package developed for the U.S. and Western Europe. The cases therefore provide interesting instances of country-level imposed structure misfits. Several modules of the ERP package were also not developed specifically for the healthcare industry, and hence industry-level imposed structure misfits are also present. Finally, each hospital has over a hundred years of history and has targeted different segments of the market.

- Hospital A is a tertiary care hospital, with a broad range of medical specialties. It is especially known for its cardiac center and for its reputation as an established teaching hospital.
- Hospital B, also a multi-specialty hospital, is known for its expertise in communicable diseases. It began as a privately funded charitable hospital for the needy, and has long been a hospital for the masses.
- Hospital C has been a women’s and children’s hospital for over one hundred years.

These variations in organizational structure allowed us to also analyze voluntary structure misfits.

All three hospitals were privatized in the 1980s and had separate boards of directors as well as professional management teams. In the late 1990s, all three decided to implement an ERP package because their existing core systems were not Y2K compliant. All three implementations were enterprise-wide, and included both back-end modules, such as finance and materials management, and front-end operations modules dealing with patient and ward management. Although the hospitals were independently managed, they adopted the same ERP package, mainly because of the vendor’s market dominance and because the hospitals wanted to negotiate lower customization costs for the misfits that were common across all three of them.

Implementation took place in 1998 and 1999. We interviewed about 70 project participants across the three hospitals, including users, IT personnel, project managers, and consultants. We also reviewed minutes of project meetings and other project documentation, such as contracts and requests for change. We identified several hundred instances of package-organization misfits for the three hospitals (A-190, B-121, and C-136) and traced each misfit to its eventual resolution.

### Imposed Structure Misfits and Alignment

About one-third of the misfits were from imposed structures, in all three hospitals. In almost all these instances, the hospitals opted for modifying the package to achieve organization-package alignment (A: 89%, B: 93%, C: 92%). In addition, these imposed structure misfits arose from just a handful of fundamental country and industry contexts that differed...
significantly from the package’s assumptions (see Figure 3). Two fundamental country differences of major importance were the Singaporean government’s policy of co-payment and its national identification number for every citizen.

Co-payment based on ability to pay is widely implemented in all public services in Singapore, including healthcare, education, and housing. In healthcare, the government’s subsidy for each patient varies according to the bed-class selected. Patients are in “A”, “B1”, “B2”, or “C” wards, which have different levels of room amenities and increasing levels of government subsidies. “A” and “B” bed-class patients pay substantial portions of their bill, either through cash, credit card, check, or deductions from their Medisave accounts. Many imposed structure misfits arose from this co-payment policy because the ERP package was developed for the United States (where there is much higher reliance on insurance) and Europe (where healthcare is more highly subsidized). The concept of multiple bed-class is also not widely practiced in these markets.

Singapore’s co-payment policy resulted in misfits in subsidy claims from the government, billing of patients, and collection of payment from patients. The package did not have the ability to compute the different patient bills and government subsidy claims based on the bed-class formulas. These computations were sometimes quite complex because patients would upgrade or downgrade their bed-class during their hospital stay. They would upgrade because they were temporarily admitted to a lower bed-class when no higher bed-class rooms were available. They would downgrade if their stay was extended and they needed to reduce their medical bills. The package was not able to track such bed-class changes nor reflect these in the bill and subsidy claims. The package also could not handle common forms of payment in Singapore: over-the-counter cash, credit card payments, and Medisave account deductions.

The main sources of industry-level imposed structure misfits came from healthcare regulatory requirements and industry norms for interacting with patients and suppliers. The package did not have the functionality to meet such regulatory requirements as reporting key statistics (such as HIV indicators, accident and emergency readmission statistics) and tracking publicly funded medical equipment. The healthcare industry in Singapore had also evolved a practice of accepting installment payments to help individuals meet their co-payment obligations. The hospitals had developed routines for monitoring overdue payments and had established the practice of handing the more difficult cases to debt collection agencies. The package, developed for markets where payments by individuals were not significant, did not have the functionality to track installment payments or manage collection agency work.

To deal with these imposed structure misfits, the users, consultants, and project managers justified their positions based on “matter of fact.” The users assumed the imposed structures would continue, referring to the underlying country and industry regulations and practices. The consultants and project managers appeared to accept the imposed nature of the misfits. Users also noted the widespread negative effects of these misfits. For example, one user manager noted that if the package was not modified to accurately capture, track, and report installment payments, the hospitals would face a chain of additional work, errors, and poor customer service. The several thousand cases of installment payment plans and bad debt cases were calculated to have an annual value of 70 times the amount required to modify the package. These modifications included creating new entities (e.g., Medisave schemes, bed-class) and new processes (e.g., counter collection, subsidy rules validation, Medisave claims, installment payment, bad debt monitoring) in the package.

Only a handful of imposed structure misfits were not customized, mainly because the volume of these transactions was low. Their information could be captured separately. For example, the Medisave claim submission in the patient discharge form required reporting the principal doctors. This misfit was not customized because in only a few instances did the principal doctors differ from the doctors who last attended the patient.

**Voluntary Structure Misfits and Alignment**

Two-thirds of the misfits in the hospitals arose from voluntary structures. In the majority of cases, the hospitals achieved alignment through organizational adaptation. Few of these misfits resulted in package modification (A: 23%, B: 35%, C: 25%).

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13 These are a form of enforced savings through mandated, accumulated, monthly employer and employee contributions to the Central Provident Fund.
Most of the voluntary structure misfits reflected management and user preferences for information, internal control, and ease of use, which had evolved into established routines over time (See Figure 4). For example, the three hospitals had different management information requirements in such areas as length of stay re-admissions, day surgery statistics, patient refunds, and so on. Similarly, the hospitals also had different internal control routines for monitoring overdue accounts, payments reconciliation, checking on accuracy of treatment and department codes, etc. The hospitals had also built features into their old systems to expedite data entry and processing, such as a feature for searching for doctor-related information using only the doctor’s initials.

The users, consultants, and project managers agreed to follow most of the consultants’ recommendations to work around the voluntary misfits. The users could not point to external sources of authority to justify continuing these voluntary structures. In addition, while users may have felt the package was less efficient for data entry and report generation, the ad hoc nature and un-unified view of the voluntary structures made these users susceptible to arguments against customization, to meet project budget and schedule.

The consultants were able to get the users to use workarounds by teaching them how to use the query function to create simple reports, or to download the data into Excel for further analysis.

In a minority of instances (25% - 35%), the voluntary structure misfits were eventually customized, but these package-modification decisions were inconsistent across the hospitals. For example, in the hospital where package implementation was driven by the finance department, a higher proportion of internal financial reporting misfits led to package modification. One project team member noted that the finance manager had the “loudest voice” and “won” the misfit negotiations. When we revisited the site some time later, a new finance manager had taken over. She had discontinued the use of the customized reports. She preferred the standard ERP reports. This incident illustrates the idiosyncratic nature of many voluntary structures, and reinforces the argument to adopt the “vanilla” package in these instances.

However, there were a handful of voluntary structure misfits with strong justification for package modification. These were instances where the voluntary structure was closely tied to the organization’s strategy. In
these cases, the users were able to make strong “matter-of-fact” arguments for changing the package. They could identify significant negative performance effects if it was not modified.

For example, the package lacked functionality in areas of billing for delivery and nursery fees, maternity package pricing, and additional baby information. Two hospitals worked around these package shortfalls. However, Hospital C, which strategically targets the mother and child market, decided to modify the package to align with its voluntary structures in this area. The users argued for their need to maintain their service quality in this niche. Not being able to establish a mother-and-baby relationship would inconvenience maternity cases where babies were put on extended stay due to special circumstances. The parents, already under stress, would have to go through a second round of admissions for the baby. The users justified these modifications because of the large volume of maternity and baby cases, and the heavy additional workload any work-arounds would cause.

Similarly, while all three hospitals wanted additional bed-planning functionality, this inadequacy in the package was most critical for Hospital A. As a tertiary care hospital with the broadest range of specialties, it faced significant challenges in managing beds as a shared resource across multiple specialties. It had evolved many routines over time to address this problem. One was “double-decking,” where two patients were assigned the same bed because one patient would be moving to another ward and would return in a few days. This practice maximized bed utilization but required detailed, up-to-date and fine-grained information by bed-class and from multiple sources, including forecasts of patient stays, advance bookings, patient discharge, movement between wards. Hospital A therefore modified the package to provide the required bed-planning functionality. On the other hand, Hospital C adapted its internal practices by having ward clerks be more vigilant by manually monitoring admissions, discharges, and movements.

### THREE CRITICAL STEPS FOR PACKAGE-ORGANIZATION ALIGNMENT

These case studies show that package-organization misalignment is to be expected in any enterprise system implementation because packaged software is designed around specific assumptions about country, industry and organizational structures, practices, and policies. Where the implementing organization’s context is very different from package developers’ assumptions, the misalignment can be extensive. Organizations should therefore proactively assess the extent of misalignment in all the ES packages they plan to implement. Specifically, they should:

1. Identify misalignments and appropriate solutions early.
2. Know the questions to ask to surface misalignments.
3. Take steps to increase the quality of misalignment identification and assessment.

We discuss each imperative below.

**Step 1: Identify Misalignments and Appropriate Solutions Early**

The need to identify imposed structure misfits early is critical. Implementing organizations should not assume a package is flexible enough to meet its requirements or that the organization can adapt to the package. Neither may be true. Our study suggests that differences in country and industry contexts exist in most implementations and that package customization is almost always required for these imposed structure misfits. If such misfits are not identified early, a chain of negative consequences will ensue.

For example, late discovery of the need to customize a package will delay implementation. Given the drain on project funding, corners will have to be cut elsewhere in the project. Most often, training will be cut back, and testing will be less extensive. Both will increase project risk. The alternative is to defer the package modification until after rollout. However, the consequences are dissatisfied users who will have to work around the system, increasing the risk of operational errors. Moreover, unplanned development efforts may also require extensive contract renegotiation – yet a further drain on the capacity of the beleaguered project management team.

When imposed structure misfits are identified early during the package assessment phase, an organization has two more options. First, if the extent of misalignment is large, the organization can decide not to adopt the package and look for a better-fit solution. Second, if the misalignment appears manageable, the organization can go ahead with the package and plan adequate funding and time to modify and test it.
To effectively manage ES implementation, the organization needs to distinguish between voluntary structure misfits that the organization will resolve through organizational adaptation and those that will require package customization. Organizational adaptation requires a strong management mandate to hold the line against unnecessary customization, as well as active change management right from the start of the project. Such rigor builds the mindset among users to accept the package-embedded structures wherever possible. No implementation can be completely “vanilla,” but package modification should be limited to what is absolutely necessary to minimize project risks and costs. However, the organization must identify any voluntary structure misfits that stem from critical aspects of competitive positioning and differentiation because package modification may be required. Senior management needs to be involved in correctly assessing the strategic impact of misfits.

**Step 2: Know the Questions to Ask to Surface Misalignments**

Organizations implementing enterprise systems need to know the questions to ask when assessing these packages.

**To Surface Embedded-Package Structures.** First and foremost, seek to understand the contexts underlying the package’s development, such as an enterprise system developed for US/European private sector Fortune 500 manufacturers. Figure 5 lists some of the questions to ask.

**To Surface Imposed Structure Misfits.** With this preliminary understanding, organizations can then surface or infer areas of differences in country and industry contexts between themselves and the package. Figure 6 lists the questions organizations can ask to identify imposed structure misfits. Project teams should not hesitate to challenge features in enterprise systems that are perceived as standard practices, by
asking, “How common is ‘common?’”\textsuperscript{14} Most imposed structure misfits will require package modification.

**To Surface Strategy-Related Voluntary Structure Misfits.** In addition, organizations should search out voluntary structure misfits that arise from its strategic positioning and differentiation. What are the current sources of competitive advantage? What is unique about the organization? Are these unique attributes sources of competitive advantage or non-strategic variations? How will the enterprise system package affect these capabilities? Questions to stimulate a discussion with senior management and uncover strategy-related misfits are shown in Figure 7. Senior management needs to decide whether the strategy-related misfits will require package modification. Compaq, for example, decided to build its own functionality in competitively important business domains, even though developing these custom applications and interfaces would be difficult.\textsuperscript{15}

**Figure 7: Questions for Surfacing Strategy-Related Voluntary Structure Misfits**

Given the unique strategic focus and competitive positioning of your organization, in what ways are its routines, policies, systems, and practices likely to differ from the enterprise system package? Consider the areas of:

- Products and services developed for specific strategic positioning (e.g., niche market segment, cost efficiency focus, or customer intimacy)
- Internal routines used to create/deliver products and services (e.g., tightly coordinated supply chain, superior customer service)
- The need for complex and/or flexible pricing (e.g., package pricing)
- Internal routines used to manage strategic resources (e.g., innovative HR schemes, double-decking of hospital beds)

**Step 3: Take Steps to Increase the Quality of Misalignment Identification and Assessment**

While the above questions help get the process of identifying misfits started, the project team needs accurate answers to these questions. The main challenge in getting good answers is that much of the contextual knowledge is “taken for granted” and therefore difficult to surface. Preferably, the organization needs people who have both in-depth knowledge of the organizational context (country, industry and organization), as well as of the embedded package structures. Unfortunately, such knowledge usually resides in two disparate groups – users and vendors. Organizations therefore need to bring both sources of knowledge to bear on identifying misfits.

**Appoint Consultants with Relevant Experience.** A key success factor for enterprise systems projects is third-party consultants to fill gaps in expertise.\textsuperscript{16} Organizations need to go beyond merely appointing reputable consulting firms to ensuring that key members of the consulting team have experience implementing the package within the organization’s country and industry.

**Consult Other Organizations.** Package vendors can facilitate tapping others’ experience by recommending sites within the industry or country. We have observed such knowledge sharing helping – organizations that are implementing – avoid specific modules that are


\textsuperscript{15} Ibid. Davenport 2000, p.109.

highly misaligned with the country’s context (e.g., the HR module in one case), defer some functional requirements and wait for more stable versions (e.g., mobile communication functionality in another case), as well as plan higher resource levels for certain aspects of the project (e.g., verification and input of authorization parameters).

Avoid Being the First Implementer. The availability of experienced consultants as well other organizations to consult is clearly low if the implementing organization is among the first to adopt the package. In addition, later adopters also benefit from having many country and industry misfits already identified by earlier adopters and incorporated into the package by the vendor. But if you must be an early adopter, build adequate resources for learning into the project budget and schedule.

Be Involved in the Vendor’s Industry Group. This recommendation is particularly important to early adopters because few consultants and other organizations have relevant industry experience. In fact, implementing organizations should send several of their employees to the vendor’s offices, some reference organizations, and the vendor’s industry group meetings, to interact with the package’s development team, the earliest adopters, and other adopters in one’s industry.

Provide Early Training to the Project Team. Equipping the project team with knowledge of the package will greatly increase its ability to identify misfits. Early training is most effective when the project team members already have high technical knowledge. IT personnel and IT-savvy users are good candidates for early training because the training needs to focus less on the procedural “how-tos” of the package and more on the structures, policies and practices that underlie it.

CONCLUSION

As the enterprise system package phenomena continue to grow, organizations need to pay more managerial attention to systematically assessing package-organization misalignment up front. Identify unique country, industry, and organizational contexts when adopting any large-scale package. By using the proposed imposed-voluntary framework to identify structure misfits, organizations can better surface and identify critical misalignment early. Then they can more deeply examine their assumptions about the “permanent” characteristics of their organization. Such early clarification should help guide organizational decisions in choosing to adopt an enterprise package and in determining the appropriate solutions to misalignment.

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