A Systematic Technology Acquisition Process

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Common Mistakes in Selecting Technology and Vendors

When you make a technology purchase decision, you need to consider much more than gleaming new hardware or software. You also need to be certain that you are choosing a vendor that will provide you what you need over the course of what hopefully will be a long-term relationship. Selecting a technology and vendor is surprisingly similar to choosing a spouse (see Exhibit 1).

Exhibit 1: Choice of a Spouse or a Technology Vendor

1. There is a large element of chance. There are far too many potential choices to consider all of them. You will only consider a small percentage of the candidates.

2. There is more than one right one, more than one with which you could be happy

3. You can be overly influenced by superficial features

4. The quality of the decision you make is not necessarily improved by whether you spend a little time or a lot evaluating the candidates.

5. If you aren't focusing on the most important decision criteria, you make yourself vulnerable to making mistakes

6. There is a "honeymoon" period. For technology, and marriage, that often occurs before the wedding (or the technology/implementation)! No choice is perfect. Attaining and maintaining happiness will require effort.

7. Break-ups are messy, yet unfortunately, all too common! You typically will have invested a lot of time and money. Breaking the relationship is likely to cause recriminations, inconvenience, some temporary disorientation, and costs.

8. You may or may not be wiser the next time you choose.

That faulty choices are prevalent is probably not news to anyone. Selections of spouses or technology can be quite complex. What are the common mistakes you should consciously avoid to prevent a poor technology acquisition decision?

- *Evaluating vendors before you know your requirements.* This approach can result in relying on gut reactions or focusing on the wrong decision criteria, and at that point you are like a gambler relying on his good luck. Like the gambler, you may "go bust."

Although this may seem so basic that a warning is not necessary, it is easy to give too much consideration to the likeability of a salesperson or his or her speaking skills. Gorgeous PowerPoint® slides (or presenters) too often distract evaluators from the relative merit of a solution. You need a well-defined, prioritized set of requirements to make a good decision.

Another trap related to lack of criteria is becoming enamored with features vendors hype that add little value or possibly detract from the solution. For example, if your supervisors are evaluating their direct reports on accomplishment of development goals, do you really benefit from a "writing assistant," a feature that will allow supervisors to insert generic comments (developed by a software vendor) instead of their own? Granted, not every supervisor writes well, but aren't we defeating the purpose of feedback by giving supervisors an alternative to providing their own customized comments?

Knowledgeable vendors can be very helpful in educating you. They may even have technical sales staff that will help you decide what you really need. Furthermore, knowing that it takes a lot of time and effort to assemble a list of requirements and having a vendor provide you with a list could help you create yours. You will probably be given a list of requirements that jibes remarkably closely with their offering, but compiling suggested lists of requirements from several strong vendors (as well as from reputable industry analysts) can lessen the time and effort to assemble requirements and may help you identify important requirements that otherwise could have been overlooked.

- *Being misled by a written proposal.* Vendor proposals provide essential information, but you may err in how you evaluate proposals or by eliminating a vendor based solely on proposal responses. To maximize the value of vendor proposals, you will want to define what you are looking for by writing a Request for Proposal (RFP). The RFP usually contains your list of requirements as well as other important evaluation criteria (such as similar experience and references) to which prospective vendors must respond.

You are looking for vendors that can supply your requirements, hopefully "out-of-the-box" rather than needing to develop new functionality. That said, requirements can be a bit ambiguous, and it is not unknown for some vendors to indicate that they have everything! To reduce the tendency for vendors to overpromise, you can ask vendors to briefly describe how they meet each requirement.

Besides the "bells and whistles" that the vendor can offer, a proposal can give you other valuable insights such as how much that vendor might value your business, their attention to detail, and professionalism. You are right to be concerned when a proposal doesn't clearly address the issues in your RFP, when it is loaded with extraneous material and appendices, or when you see the name of another potential client in the proposal a vendor has submitted to you! Realistically, most vendors will use "boilerplate" (material they place in every proposal), but

they should clearly demonstrate that they care about your specific needs by addressing your specific concerns.

On the other hand, a "light" proposal does not always indicate bad technology. It is possible for a company to be better at developing and implementing a technology than it is at writing proposals. Furthermore, just because a vendor's proposal includes magnificent graphics or it weighs 10 kilos doesn't necessarily mean that you will be satisfied with that vendor. In fact, a lengthy proposal padded with endless appendices may be more of an indicator of high cost than of quality.

- *Lack of stakeholder input.* This error occurs when you exclude other business stakeholders such as end users, procurement, or IT from participating meaningfully in the evaluation. A variety of perspectives are required to make a good decision.

One of the secrets of the vendor selection process is utilizing the right combination of experts and end users. Evaluation of a dentist is an apt analogy. Even for something as seemingly straightforward as teeth cleaning, it takes an expert to accurately evaluate quality. Meanwhile, the patient has a valid and important evaluation of how the process was for them, but it would be inappropriate to judge a dentist solely on his or her pleasantness. Similarly, evaluating learning technology may require a combination of learning expertise, information technology, as well as end user experience. Giving too much weight to any of the three perspectives may lead you astray.

- *Vendor favoritism.* This manifests itself as a strong preference or even the selection of the winning vendor before the evaluation process has begun (sometimes referred to as a "wired" selection process). Most often, the favoritism is based on past relationships. Although the vendor might be competent, there are other vendors that deserve legitimate consideration.

Examples are legion of wired vendor selections. Strict rules of impartiality may help a bit (such as sharing questions and answers from one prospective vendor with all other vendors), but often these rules do more to create a perception of impartiality than to prevent vendor favoritism. An unfortunate by-product of vendor favoritism is that other viable vendors may sense that they don't have a legitimate opportunity to win the business and they may invest only a small amount in their proposal or may not participate at all in the process. This creates a self-fulfilling prophecy in that the favored vendor looks best.

Besides the necessity of maintaining an open competition, it is important that you assure prospective vendors the best you can that you will give real consideration to their offering and that the evaluation process is fair and impartial.

A Systematic Technology Acquisition Process

A systematic buying process is the antidote to common technology and vendor selection errors. The following approach is our modified version of the three-phase approach recommended by Schweyer, Newman, and DeVries (2009).

Phase 1: Organization Needs Assessment

Step 1: Select the Assessment Team

The first step is to develop a team to assist in the selection process. With an effective team in place, you improve your chances to:

- Identify an appropriate technology. Stated another way, insure objectivity.
- Effectively sell the technology to the rest of your organization and deal with resistance.
- Effectively implement the technology.

We understand you may be hesitant to involve others. After all, it means some loss of control as well as time to recruit and coordinate the team. The selection process almost certainly will take longer to complete. Further, it might not be typical for your organization to assemble task forces, and potential team members may feel like they are too busy to assist. While all these concerns are legitimate, our experience is that the benefits achieved by involving a team outweigh the costs.

To help determine who you want to involve on the assessment team, ask:

Q1: Who are Learning's <u>key</u> internal and external stakeholders (e.g. executive leadership, middle management, supervisors, employees, customers, regulatory agencies, etc.)?

Q2: Who could add valuable input to technology acquisition and implementation (e.g. Procurement, Legal, IT, HR, Learning Department, etc.)?

After you have formed a tentative team list, go out and recruit team members. Even if some decline to participate, you have strengthened your support by communicating with them about the technology acquisition and by allowing them to participate in the decision if they wish. The appropriate size of the team will vary based on the size of your organization and the number of stakeholders. We have seen good results from teams of 5-8. You will want to do your best to have all key stakeholders participating or represented either on the assessment team or participating during data collection (Steps 2 and 3).

Step 2: Define Organization Business Requirements

If you are not completely clear on what you are looking for, you are not likely to find it! Begin by clearly understanding *business requirements.* A business requirement defines an important business objective, such as having properly skilled sales representatives or expanding globally. Clear business requirements facilitate fact-based vendor and technology assessments.

Answering these questions will ensure that you understand the business requirements.

Q3. Why was this project initiated (e.g. performance improvement, cost reduction, time reduction, ease of use, etc.)?

Q4. In general, what do stakeholders believe are the most critical outcomes of Talent Management (TM) Staff (e.g. HR, Learning, and OD/OE)?

Q5. According to stakeholders, based on their view from the trenches, what are the priorities right now for TM in order to best support organization objectives? In short, what do they need?

Q6. What evidence, short and long term, will convince you that the new TMS is a success? Additionally, are there business metrics such as customer loyalty or reduced cycle time that stakeholders expect to improve as a result of the project? If available, it is desirable to collect existing baseline data and desired performance level for the business metrics stakeholders are looking to improve. It is important to know what is expected. You may have some work to do setting realistic expectations.

Q7. Based on the desired business metrics you just listed, what are the <u>behavioral indicators</u> that would convince stakeholders that the desired outcomes had improved? In other words, what should employees know or be able to do? What should employees be doing differently or better?

STEP 3: Define Organization Functional Requirements

Now that you have anchored your selection process in business requirements, you are better prepared to define functional requirements that will help you to reach the business requirements. Functional requirements can be high-level, such as having online individual development plans or a technology accessible worldwide, or they can be narrower such as allowing weighting of development goals or having the capability to create reusable learning objects.

Q8. Which of the following Talent and Performance Management processes are high priorities in order for us to meet our objectives (such as Career Development, Performance Reviews, etc.)*?*

Q9. What are the top 3-5 "make or break" priorities that we need from the system (a vendor that didn't have these would be eliminated).

*Q10. Please rate the importance of each of these Talent and Performance Management capabilities (*choose from a list of features. Provide a higher-level list to most stakeholders and a detailed list to those that are knowledgeable about Talent Management and technology).

Q11. How ready are we to implement a new TMS? What are the strengths that will ease the process? What are the barriers? How can we overcome these obstacles?

To develop a list of features from which to select, review the available research from professional organizations such as SHRM or ASTD or research analysts such as Bersin or Gartner. You could also consider visiting other organizations, joining and communicating with members of best practice communities, reviewing relevant blogs, attending relevant conferences, or visiting vendor websites. Some excellent advice is available from select industry analysts, but try to identify analysts committed more to objectivity than to promoting the products of vendors

that pay them a fee to become members. Finally, do not forget that you can often find vendors with knowledgeable sales and/or technical staff that can make valuable suggestions and help educate you.

It is customary to develop a matrix of requirements. There are many variations, and Exhibit 2 demonstrates just one possible format.

Exhibit 2: Sample Functional Requirements Matrix

R = Required; D = Desired   Y/N/A = Yes/No/Achievable at extra cost

Item	R/D	FEATURE DESCRIPTION	Have? Y/N/A	Brief Description of how system meets the requirement
		1. Learning Management		
1	R	Access individual employee training records		
2	R	Access customized training schedules and class calendars of training events available from Statewide Training programs		
3	R	Register for classes on-line		
4	R	Use an electronic workflow to forward registration through a predefined approval process		
5	R	Access and complete e-learning courses from any location		
6	D	Etc…		

This matrix distinguishes between essential and desirable features. You could add feature weighting or points if you wish. Since some vendors may be willing to develop a feature they don't have now, the matrix gives the vendor the option to state that. To reduce misunderstandings about what is being provided, and to help keep vendors objective, the last column requests a little bit of description and validation that the vendor does meet the requirement.

Step 4: Specify Vendor Evaluation Criteria

When acquiring technology, you have more to consider than whether a vendor offers the critical features you are seeking. In fact, when you evaluate a vendor, the feature set may count for only about half of your overall decision.

Certainly, you will consider price. That seems simple, but determining the total cost is not always straight forward. When calculating total costs you must consider initial and on-going fees. For example, there may be installation fees, training fees, consulting fees, and maintenance fees. Don't forget to consider the costs associated with work that must be done by your internal technical or support staff as well as potential hardware costs.

You need to consider the type of pricing model. Licensing is an older and rapidly disappearing paradigm for TMS systems. After you pay the initial licensing fee, you will likely elect to have access to technical support, product updates, and maintenance, and each comes at a cost. With licensing, you typically will have the option (and sometimes the requirement) to host the software on your own hardware. You will essentially own the software, and if you wish you can stop paying the vendor anything additional and still use the software.

Vendors are increasingly moving to SaaS, software as a service, and many no longer offer an option for licensing. With SaaS the vendors typically host the software on their hardware, so the burden on your IT department will be greatly reduced. The SaaS model generally entails one flat annual fee, but it is necessary to pay it each year in order to continue using the technology. In certain localities different taxes are associated with licensing and SaaS (which is treated as a service), and that can affect total costs.

Here are some of the common vendor evaluation factors (Exhibit 3):

Exhibit 3: *VENDOR EVALUATION FACTORS*	*Weight*
1. GENERAL FEATURES	
a. *Security, Performance & Stability,	
b. *Interface with our ERP, HRIS, and/or LMS and other systems	
2. FUNCTIONALITY: Degree to which they have what we need	
a. Our 4-6 make or break capabilities	
b. Other required and desirable capabilities	
3. PROCESS QUALITY embedded in the software (e.g. do you like the way it does performance reviews? Is it robust enough? Legally defensible?)	
4. *SYSTEM CONTENT. Included learning resources, competencies, etc. Also ease of inputting your pre-existing content	
5. *EASE OF USE for standard users. Intuitive Application. Overall usability.	
6. *CUSTOMIZABILITY/CONFIGURABILITY	
7. IMPLEMENTATION: Ease, time, and cost	
8. *ON-GOING EASE OF ADMINISTRATION	
9. *CUSTOMER SERVICE. Quality, accessibility, timeliness	
10. VENDOR: Experience: References: Stability: Learning/Talent Expertise	
11. SUPPORT PERSONNEL: Who assigned? Capabilities and Availability.	
12. TOTAL COST	
a. Vendor Subscription or License Fees	
b. Vendor Annual Maintenance & Support Fees	
c. Customization Fees and Upgrade Fees	
d. Initial Implementation: Time, data migration, training, etc.	
e. On-going Administration	
f. Other: Language packs, Content	

* Asterisked items are common areas of challenge for LMS systems

For example, one organization used the following evaluation factors (Exhibit 4).

Exhibit 4: Sample Vendor Evaluation Matrix	
Factor	**Weight**
1. Functionality/Degree to which Proposal assures fulfillment of the Description of Services -	45%
2. Respondent Profile: Comparable Experience: References	20%
3. Key Project Personnel: Capabilities and Availability	10%
4. Total Cost	25%
Total	100%

Whether the vendor will be *a good, long-term partner* is often given insufficient attention. You will want to try to determine if the vendor epitomizes values such as accountability, integrity, and truthfulness. Also, whether the vendor has vision and will continue to develop the product consistent with new and better approaches. Determining the support that you will receive <u>after</u> you buy is most critical! You will want to know what individual(s) will be assigned to your account, their qualifications, how long you can expect that they will stay with your account, and the time you can expect them to spend with you. If there is frequent churn of support personnel, it means that they may never get to know your account well. Ask to talk to 3-5 of their current customers so you can better find out what service they will provide. You should also carefully evaluate the Service Level Agreement (SLA) provided by the vendors.

Phase 2: Vendor Evaluation

Step 1: Request for Information (RFI)

Depending on the technology that you are considering, there may be a large list of potential vendors. If you don't have access to relevant research reports or another reasonable way to determine to whom you wish to send an RFP (Request for Proposal), an RFI is a good way to get a *general* idea of vendor capabilities and to arrive at a list of 10 or fewer vendors that are likely to be good matches with your needs.

RFI's typically request much less information than RFPs. Schweyer et al. recommend 5-10 short essay-style questions. These types of questions require a vendor to consider your specific requirements rather than robotically answering "yes" to each of your requirements.

When you evaluate RFIs (or RFPs), you are likely to achieve a more valid and reliable result if several persons evaluate them. One of the best ways to improve the evaluation is to create an evaluation form with a matrix of evaluation criteria such as that shown in Exhibits 3 and 4. Of course, it is critical that you have first carefully defined your needs (Exhibit 2) and that all vendors are showing their match with those needs.

Step 2: Request for Proposal (RFP)

The Request for Proposal is sent to vendors that you have identified through research or that competed successfully on the RFI. The number of vendors you wish to consider at this stage

may be correlated to the size and importance of the purchase, but a range of 3-10 is reasonable. You will be doing yourself and vendors a favor by not sending the RFP to any vendor that isn't likely to get the business, unless your organization (particularly public sector) is required to have an open process where any firm may compete.

Step 3: Vendor Demonstration

Vendor demonstrations are a great way to involve all of your evaluation team members and all important stakeholders. However, you will need to design the demos in a manner that your stakeholders, with varying degrees of sophistication, can make valid vendor assessments. The way you design and manage vendor demonstrations has a tremendous impact on their value.

The *key* to a useful vendor demonstration is the preparation of a vendor script. The vendor script lists the 5 – 15 activities that you want the vendor to cover, in a consistent order for all demonstrations. For example, you might want the vendor to demonstrate how an employee can register for a class. Without a script, it is much easier for a vendor to impress you with style rather than their substance. Further, a script allows you to make fair "apples to apples" comparisons between vendors.

Be prepared to work closely with vendors before demonstrations. Emphasize the importance of the vendor following the script. Provide additional information that the vendor may want or need to make the demonstration more relevant and meaningful to your organization, such as competency models, job descriptions, etc.

Step 4: Evaluate the Vendors

After each demo, the preferred process is to have your assessment team individually complete an evaluation matrix, and then convene as a team to discuss ratings. Come up with a consensus rating, particularly where ratings vary (e.g. when rater 1 gives a "5" - *Excellent* for user friendliness, and rater 2 gives a "3" - *Adequate*).

Rank order the vendors based on their total points. Do their scores gibe with your gut feelings about which vendor will be the best fit? Is there consensus among your assessment team on which vendor to select? If not, you may need to review the weights that you originally assigned to each factor, or you may need to add knock-out (necessary but not sufficient) or extra credit factors. Nobody leaves the meeting until you have a decision!

Even though one vendor will generally stand ahead of the rest, it is possible to still have a couple of contenders. Either way, it is ideal (although admittedly not always practical) if you can arrange for a trial or "proof of concept period" of 30 – 90 days. During this period, you want as many different constituencies as possible to try out the technology and to test out the vendor's service to see if it is what you need and to identify any frustrations. Presuming that proof of concept period validates your original decision, you are ready to move to the final phase.

Phase 3: Final Selection

Step 1: Present Findings

Your assessment team will want to present your findings to your sponsors, stakeholders, and steering committee (if one exists). All the hard work you have already done will make your presentation relatively simple to prepare. If you present your approach and findings from Phases 1 and 2, your conclusions will be compelling and credit will accrue to you for your thoughtful selection approach.

Step 2: Contract Negotiations

Contract negotiations may or may not involve legal and purchasing departments. Describing this step is beyond our scope, but we do want to remind you that your goal should be to establish a strong, long-term mutual relationship, not animosity, at this stage. Truly, the only good, long-lasting agreement is one that is good for all involved. It probably *won't* work to tell prospective vendors that they should give their product away so that they can use you as a powerful reference (they probably have heard that same offer dozens of times). It is also common for buyers to request unreasonable levels of support, excessively drawn out payment periods, or other burdensome contractual requirements. These types of practices will create ill will and chances are the vendor will be busy trying to figure out how to get the lost money back rather than focusing on how to ensure that you continue to be delighted!

We recommend that your focus be on establishing a mutually beneficial partnership. Help the vendor to see additional growth possibilities in your organization. State your willingness to serve as a reference when they need it. Successful case studies can be good publicity both for them and you. Don't "lose" their invoices and delay payments. In short, the effort you make to build a strong partnership will pay you large dividends.

Step 3: Continue the Evaluation Process

In this step, you complete the loop with Phase 1, when you initially evaluated business and functional needs. Use the metrics that were created in Phase 1 (or create them now if you did not then) and try to get some baseline estimates of where you stand. Periodically survey your stakeholders informally and formally.

Remember that continual improvement, not purchase justification or punishment of guilty parties, is the best use of your metrics. From the start, set the expectation that "Rome is not built in a Day" and that it will take time to achieve your desired goals. Continual progress tends to be more impressive than outstanding results beginning Day One. We find that reporting on your metrics about every 90 days is ideal to keep all constituencies informed, engaged, and onboard.