A Tour into the Factors Affecting the Choice of Vendors in the Middle East

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ABSTRACT

Since choosing IT vendors is an integral component of the firm's IT deployment strategy, the final choice of an IT vendor should be the result of careful and in-depth analysis of the various variables involved in the deployment.

For the purposes of this study, the factors affecting the choice of IT vendors were classified into two categories: overall vendor factors and specific vendor factors. The overall factors include the reliability of the vendor, the speed by which the vendor implements the chosen IT solutions and the level of technology the vendor is providing. The vendor specific factors were further divided into two sets: structured criteria for selecting vendors and convenience criteria. The structured criteria included speed of the application, costs, localisation and support services. The convenience criteria included vendor reputation, promotions, recommendations and easiness of the solution provided.

The findings of this study reveal that more emphasis is being placed on structured vendor criteria (i.e. measurable) than on unstructured ones (i.e. convenience). This finding suggests that IT implementation initiatives are being carried out more professionally with the aim of ensuring higher overall IT deployment fit.

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LIMITATIONS

Respondents were asked to rate the overall vendor factors on a three-point scale (Alserhan and Brannick, 2002). Respondents rated factors regarding the decision of choosing IT vendors as Important, Not Important or Not Sure. For the specific factors though, only two alternatives were given to respondents: either Important or Not Important. Tables 4.1 and 4.2 show these factors as presented to the respondents in the questionnaire.

Table 4.1: Vendor Specific Factors

Please mark with [x] the answer that best indicates the importance of each of the following vendor selection criteria.		
Criterion	**Important**	**Not Important**
Speed of application	[ ]	[ ]
Technical support services	[ ]	[ ]
Cost	[ ]	[ ]
Localised packages	[ ]	[ ]
Vendor reputation	[ ]	[ ]
Easiness of application provided	[ ]	[ ]
Special promotions	[ ]	[ ]
Special recommendation	[ ]	[ ]

Table 4.2: Vendor Overall Factors

Please mark with [x] the answer that best describes the importance of each of the following factors to selecting IT vendors.			
Factor	**Important**	**Not Sure**	**Not Important**
Supplier reliability	[ ]	[ ]	[ ]
Level of technology provided	[ ]	[ ]	[ ]
Speed of implementation	[ ]	[ ]	[ ]

The results for the specific factors, in terms of abstract percentages, were significantly higher than those for the overall factors. This is primarily due to the fact that in the overall factors respondents had more options to choose from. A respondent who was not sure about an answer tended to choose the neutral option (*Not Sure*)

instead of being forced to choose *Important* or *Not Important.* Spreading responses over a wider range of options had a moderating effect on the overall results.

In the specific factors respondents had only two alternatives to choose from: *Important* and *Not Important.* A respondent who was not sure about a response might have felt obliged to choose *Important* since it was the safer option, thereby increasing the value of the perceived importance of the specific variables.

Therefore, the researcher anticipates that limiting the number of options open to respondents to choose from in relation to the specific vendor factors has led to increasing the perceived importance of these factors in terms of abstract percentages.

FACTORS AFFECTING THE CHOICE OF IT VENDORS
For the purposes of this study, the factors affecting the choice of IT vendors were classified into two categories: overall vendor factors and specific vendor factors.

The overall factors include the reliability of the vendor, the speed by which the vendor implements the chosen IT solutions, i.e. speed of installation of both hardware and software, and the level of technology the vendor is providing, i.e. is the provided solution standard, customised, new, widely used or close to the end of its life-cycle (Ben, 2005).

The specific factors were further divided into two sets: structured criteria for selecting vendors and convenience criteria. The structured criteria included speed of application, costs, localisation and support services. The convenience criteria included vendor reputation, promotions, recommendations and versatility of the solution provided.

To be able to understand the importance of these factors to the IT acquisition decision, a survey was carried out in the manufacturing and export sector in Jordan. A total of 500 structured and pre-tested (Alserhan and Brannick, 2002) questionnaires were sent to the CIO (chief information officer) or those who carry out the information function in the firm. The final usable response rate was 54 per cent.

Overall Factors
Respondents were asked to rate the overall vendor factors on a three-point scale (Alserhan and Brannick, 2002). Respondents rated factors

regarding the decision of choosing IT vendors as *Important, Not Important* or *Not Sure*. As shown in Table 4.3, the results show that supplier reliability ranked lowest while speed of implementation ranked highest. The following is a discussion of these results.

Table 4.3: Deployment Related Obstacles

Overall Vendor Factors		Average % Importance
Supplier related	Supplier reliability	59.4
	Speed of implementation	76.1
	Technology provided	69.4

Vendor Reliability

Since vendor reliability is as much perceived as actual, it is difficult to single out a set of variables that could accurately measure its different dimensions. Concentrating on one or few of these dimensions creates only a partial understanding of the importance of this concept. Perception is affected by many variables such as other people's opinions, promotional campaigns, personal encounters or even by trivial, unaccounted-for variables, such as a nice gesture from a supplier or a supplier's representative. It is very hard to guard against those because they are not tangible and are not under the direct control of the decision makers, who might not even recognise their impact.

The other set of variables impacting on the perception of reliability are the actual variables that can be statistically measured. Those include, among others:

- Ability to deliver according to agreed terms;
- Smoothness of the correspondence lines;
- Response time to both urgent and normal queries;
- Honesty and transparency in the information they provide;
- After-sales services and relationship;
- The provision of off-the-list support.

Reliability was valued highly by the Jordanian decision makers, although it ranked lowest in terms of absolute percentage (59.4 per cent). This could be attributed to the fact that in many developing

countries, including Jordan, many start-up IT vendors have suddenly sprung up and their promotional campaigns promise the ultimate in customer service and support operations. However, when put to the test, many of them prove incapable of fulfilling their promises to their customers. This situation has eventually had a noticeable impact on the way organisations evaluate potential IT vendors and choose among them (Alserhan and Brannick, 2002).

The Technology Provided

IT solutions have short-term lifecycles. Organisations are finding out that most of their solutions become relatively outdated less than a year after implementing them and that all major IT implementation initiatives that extend over a two year period will need to be updated during the actual deployment in order to keep up with the advances made in technologies.

Vendors who do not keep up with IT advances will find it difficult to convince potential customers of the feasibility of the solutions they offer and the ability of those solutions to handle efficiently the organisation's obstacles. However, the information needs in many manufacturing organisations in Jordan are within the abilities of the local IT vendors who are capable of supplying the required applications and providing the necessary support at a reasonable cost. The needs of the few organisations that might undertake complex implementation initiatives could be met through coalitions between local vendors or between local vendors and external parties with the expertise and knowledge necessary to support such initiatives (Alserhan and Brannick, 2002).

Implementation

To be able to make a better use of the acquired applications, it is of significant importance that those applications are installed and utilised shortly after the acquisition decision is made. Delayed implementation will lead to prolonging the obstacles the acquired solutions were supposed to handle and shorter validity time because of the short lifecycle of IT solutions. Historically, this issue was not a persistent problem faced by Jordanian organisations. The Jordanian organisations had an almost virtual monopoly over the sectors in which they operated. However, conditions have started to change dramatically since the

late 1980s when those markets grew increasingly competitive and Jordanian organisations found it impossible to keep operating at the same slow rhythm. A faster pace was required in almost all facets of their operations, including their IT structure; failure to implement an IT initiative in due time could have unfortunate consequences. Also, the information needs of the markets they deal with have changed and become more demanding, in terms of quality and the variety of the information they require. Manufacturers had to swiftly update their information structure because implementation delays were not in their favour (Alserhan and Brannick, 2002).

Specific Factors
The criteria that the Jordanian organisations employ when informating some or all of their operations are diverse, and there is no rule of thumb that sums them all up. However, for the purposes of this study and as shown in Table 4.4, the most widely recognised variables related to IT vendors were divided into two major categories: structured and convenience criteria (Alserhan and Brannick, 2002).

The following is an analysis of the reported responses regarding these two categories and their sub-variables.

Table 4.4: Criteria for Selecting IT Vendors

Specific Vendor Factors		Average % Importance
Structured criteria	Speed of application	94.1
	Costs	88.1
	Localised packages	80.0
	Technical support services	69.3
Convenience criteria	Vendor reputation	89.3
	Special promotions	84.8
	Special recommendation	84.1
	Easiness of application provided	60.7

Structured Criteria

1. **Speed of Application.** The variable that rated highest was the operating speed of the application provided. More than 94 per cent of respondents acknowledged that speed is an important criterion when deciding on an IT vendor. Fast applications are substantial time savers and thus contribute greatly to the overall efficiency of the organisation. They also lead to less frustration when executing commands and waiting for output. Slow applications are a complete turn-off for enthusiasm and can be instant frustration-generating mechanisms. Under uncomfortable information working conditions, performance could suffer and substantial productivity losses could be incurred (Brynjolfsson and Hitt, 1995). Those losses manifest themselves not only in the quantity produced but also in the quality of these products. Hence, speedy solutions that reduce processing time and cut down on idle periods could prove to be main additions to the organisation's information structure (Davidow and Malone, 1992).

2. **Technical Support Services.** The importance of the technical support services that accompany the products is well recognised by the Jordanian decision makers. Those services, which come either as a package with their cost included in the initial sale price, or as a service-per-request, include one or more of the following: pre-sale consultation, installation, training and after-sales services.

   After-sales services can be optional and provided as part of the original deal, although at a premium cost. Such deals usually cover a fixed number of years, months, days or even a fixed number of visits per period. They may be renewed at a competitive discount.

   Organisations usually have to make a careful decision on which option to take. If the system or the nature of operations requires regular servicing, it might be wiser to go for contractual after-sales services: services that vendors are obliged to provide at no extra cost. However, if regular maintenance is not essential and its cost is not daunting, an organisation might be better off with a cost-per-request approach — pay only when they ask a specialist to service the system.

However, cost is not the only variable to be considered when deciding on the technical support services. There are other variables that are of at least equal importance. Those include:

- Availability of services. Many vendors advertise that they offer pre- and after-sales services to their customers. However, whether those services are readily available or not is another matter. Under such conditions, the readiness of the service team is an important factor to consider. If various arrangements and appointments need to be made, and if it takes the service team a long time to respond, the productivity losses will mount every time a breakdown occurs or a check-up is performed. Support services should at least deliver as much as the initial contract states. Any extras will lead to more satisfaction, but any less will lead to an even greater dissatisfaction (Brynjolfsson and Hitt, 1995).
- Quality of services. The quality of services delivered is a decisive factor in determining customer satisfaction with any given vendor. Support teams that get it right from the first visit will spare the organisation many productivity losses in both the number of units rolled out of the production line and the quality of those units (Ching et al., 1996).

In many cases, support teams will always need to come back, and the need for their presence seems to be the norm. Such a situation is attributed to one or more of the following points:

- Inherently defective systems. In this case, the support teams cannot be blamed. The buying decision was made entirely by the firm and therefore the firm should take responsibility for its consequences. These consequences include factors such as low compatibility and scalability, poor integration with the existing systems, and high replacement or upgrading costs.
- Complicated organisational operations. To function effectively in such conditions, organisations will need full utilisation of the system, which in turn leads to a rapid decline of the system's capabilities. In such cases, the organisation could try to streamline and improve its operations, upgrade its current information system, or introduce a new one that could handle the organisation's operational complexities. The organisation could also decide not to make any changes to the existing situation, as it might be the only

feasible situation for it at the present time. In this case, support systems are not to be held responsible for productivity losses. The organisation already knows that those will be incurred anyway.

- Support teams either lacking skills or equipment (Murnane et al., 1999) or deliberately not doing the job right. The case of teams intentionally not performing the required services up to the agreed standard is more common in situations where organisations use a cost-per-request approach than in situations where services are provided on contractual bases. Since support teams will be charging maintenance cost every time they visit or provide consultation, there does not seem to be a point, other than the moral obligation of course, to permanently fix what they have come to fix; it is of greater financial benefit to them to keep the money tap flowing. This attitude results in massive losses in many organisations, especially those that lack the necessary skills to enable them to carry out basic servicing activities. On the other hand, when the support services are part of the contract and no cost is charged for visits, the issue of deliberation almost ceases to exist because it is not rewarded (Murnane et al., 1999).

  However, when services are pre-contracted, the ability of the support services to honour their obligations on time becomes an issue that sometimes offsets the benefits achieved by signing a contract for after-sales services. In many cases, those teams seem to be always busy, their schedule is always full and they are always in a hurry. Those situations might lead to longer idle production times and sometimes even affect the quality of the maintenance performed (Ching et al., 1996).

3. **Provision of Localised Package.** Most software development firms have localisation specialists working for them. Those specialists make the necessary changes and adjustments to the developed software to make it suitable for use in the various regions and environments it will be marketed into. Although much software is developed in German, French and Japanese, the original language of most software is English. IT vendors in Jordan are either local vendors with local expertise and cadre, or foreign vendors. The IT solutions they provide, including software, are also either locally developed or imported. Locally developed solutions:

- Tend to be in Arabic;
- Are designed to suit the needs of the local customers;
- Need few localisation activities aside from those that cater for the needs of special customers.

On the other hand, solutions that are developed elsewhere might need more localisation in order to fit the general requirements of the client organisation. Localisation should not be confined to software only; some might be useful for hardware as well. Systems' capabilities might need to be tuned up or down, the functions performed by those systems could be altered and the durability of those systems could vary according to organisations' needs and/or abilities.

IT vendors who have the ability to provide more localised IT solutions have a substantial leverage over others who do not. Any vendor could provide standard, off-the-shelf solutions and, as a result, the competitiveness of the vendors who depend on such solutions will be at risk due to the large number of vendors who provide them. Also, the manoeuvrability of the vendors who deal mainly with standard solutions will be restricted, because vendors who could provide clients with their specific IT needs are more likely to close more IT vending deals than others who do not.

4. **Costs.** Because most vendors provide, more or less, similar IT solutions that vary only slightly, the issue of cost differences among them gains substantial weight (Emiliani et al., 2005). When organisations decide to informatise some of their operations, they basically know what IT functions are required and, for that reason, whether a vendor provides a solution that is developed by Apple, IBM, Microsoft or a new IT start up is of no major concern to most firms, as long as it includes the required functions. Hence, costs will increasingly become crucial decision variables and they will affect which IT vendor or vendors are chosen (Moyi, 2003). Vendors who can provide solutions at significantly competitive prices will have an apparent leverage over those who do not (Alserhan and Brannick, 2002).

However, it should be noted that some solutions are more popular than others: Microsoft's operating system, Windows, is more commonly used than its Apple counterpart, OSX. Therefore the cost difference between the two must offset the reputation dif-

ference if the vendor trading with Apple solutions is to gain the competitive edge required to market the solution, assuming, of course, that everything else remains constant.

Convenience Criteria
1. **Reputation of Vendor.** Because the people who make the decisions within organisations are exactly that, i.e. people, their decision-making process is not independent of external unstructured influences. Many decisions that are taken do not seem to follow specific processes or procedures, and many of them cannot be easily justified. The reputation of vendors is one such influence that clearly affects the choice among vendors. Approximately 89 per cent of the respondents reported that reputation is an important factor that they take into consideration when choosing among vendors. Although this variable is less structured and making a decision solely based on it seems to lack objectivity and rigor, it is a factor to account for. Organisations that usually make their decisions based on the reputation of vendors will save themselves time and hassle by screening vendors and looking for the most suitable one for them. The rule of thumb in such cases is that 'if Microsoft's Windows is used more than Apple's OSX, then Windows is better than OSX and it should be the obvious choice'. Although this deduction could be true or false, it is still a rule and it could be a real time and resource saver in the short run. Instead of diverting some of the organisation's resources towards locating, screening and evaluating vendors, it would be easier to contact the vendors who are well known and already established.

    This decision-making approach, despite its short-term advantage, could lead to major long-term disadvantages such as:
    • The solutions acquired will be standard, off-the-shelf applications and, as a result, might not fit exactly with the organisation's needs.
    • Such solutions could have added functions that the organisation does not need and thus, cost more to acquire and cost more in terms of their infrastructure requirements.
    • The solutions might be multiple-purpose solutions that could perform a wide range of activities, many of which will not be utilised by the firm in the foreseeable future. Such solutions

usually cost huge sums of money, while at the same time their potential might never be fully utilised.

In light of the above, the reputation of the vendor as a decision-making variable appears to be used more frequently than previously thought in decisions about vendors (Bennett, 2005). Although this approach has some advantages, it also has major drawbacks and, consequently, it should be used with caution and in association with other variables. The reputation is an indicator among others and should be seen as such. Assigning more weight to it might not be the wisest decision that an organisation could take.

2. **Special Promotions.** Promotional campaigns could lead to major short-term advantages for vendors. A carefully designed and well-targeted campaign could motivate potential clients to analyse their information needs and look for means to meet them. For campaigns to be effective, they should not be one-off efforts but should be continuous, structured, and accompany customers in their decision-making processes. They should be present at every stage in that process and be ready to provide deals, extra stimulus, guidance or consultation. The details transmitted in such campaigns should be designed to lead the potential customers towards making a decision that is commensurate with the vendors' interests.

The ability of vendors to offer special conditions to potential clients, whether those conditions are extended payment periods, superior services or additions to the overall solution, should be made known and emphasised in any promotional campaign the vendor undertakes. Offering packages of competitive products, services and costs will greatly enhance a vendor's market position and significantly assist him/her in realising a favourable stand against other competitors. Vendors who are able to sense the market's information needs, know customers' abilities and who are able to use the above positively will be in a more competitive position than those who tend to be reactive and wait to be approached by potential customers (Bensaou and Earl, 1998). Proactive vendors who can stimulate a need, or at least pinpoint it to a customer, are more likely to capitalise on the opportunity that might arise from the possible need recognition or creation at the customer's end. Vendors should not wait for customers to

realise that they have a need or that their performance could be enhanced. Rather, they will be more prepared and in a much better position to offer the solutions that can satisfy that need if they have helped to create it in the first place.

3. **User Friendly-Solutions.** Although this variable is rated low, it is still perceived as an important decision variable, with 60 per cent of all respondents reporting that it is a variable to be considered when deciding among competing IT vendors and the solutions they offer. A complicated solution means that more training will be required if potential users are to reach the level where they feel comfortable with it (Gary, 2000; D'Orville, 1996). Complicated solutions could easily lead to user frustration and reduce users' confidence in their ability to master the application.

   Solutions that are user-friendly tend to break the perceived technological barriers that prevent many users from fully reaping the benefits of the information systems that their organisations use. Easy to use applications should be preferred over those that are not, provided, of course, that their performance is up to the required standard. Vendors who are in a position to offer such solutions to potential customers could have a substantial leverage over other vendors who do not (Alserhan and Brannick, 2002).

4. **Recommendations from Reference Groups.** Such recommendations are usually very effective in the decision-making process. Family members and friends are usually trusted and their opinions tend to be impartial, provided out of sincerity and for the sake of advice alone to the best of their knowledge, with no commercial purposes behind them (Moyi, 2003). The kinds of recommendations they provide are not reward-based and recommenders usually do not expect more than a 'thank you' in return. They might also take the initiative themselves and search for more alternatives or suggest options that were not considered in the first place.

   Recommendations that come from trusted parties are very powerful, especially in situations where the overall picture is still not clear enough for the decision-maker to make an acceptably informed decision. Since such recommendations are strong and those offering them do so in a sincere and relatively 'forceful' manner due to their special relationship, management might be

unconsciously driven towards making 'uninformed' decisions that are not perfectly in line with the organisation's overall direction.

It is helpful to ask for advice from those who are trusted to give impartial advice, but in the end, the decision that should be taken is one that is informed, logical and supports the attainment of the organisation's strategic objectives. Opinions and consultations should be sought from all those who can offer them, but it should be management that have the final say.

CONCLUSION

Choosing IT vendors is an integral component of a firm's IT deployment strategy. Therefore, the final choice of an IT vendor should be the result of careful and in-depth analysis of the various variables involved in the deployment. A helpful tool in this regard would be the use of a checklist matching the needs of the firm with the total package a vendor is offering. This tool could be used either as an initial method for short-listing candidate vendors or, if fully developed, as a comprehensive decision-making criterion. Such a list, though, is time sensitive and needs to evolve along the firm and the solutions available in the marketplace.

Finally, the findings of this study reveal that more emphasis is being placed on the structured vendor criteria (i.e. measurable) than on unstructured ones (i.e. convenience). This finding means that IT implementation initiatives are being carried out more professionally and that they are systematically evaluated to ensure higher overall deployment success.

REFERENCES

Alserhan, B. and Brannick, T. (2002) 'Information Technology in Ireland: The Myth and the Reality', *The Irish Journal of Management,* Vol. 23, No. 1, pp. 1–23.

Bennett, M. (2005) 'Business Apps and Services Vendors Get Bad Reputation', *IT Week,* 9 September.

Ben, L. (2005) 'Going Beyond "Misfit" as a Reason for ERP Package Customisation', *Computers in Industry,* Vol. 56, No. 6, pp. 606–19.

Bensaou, M. and Earl, M. (1998) 'The Right Mind Set for Managing Information Technology', *Harvard Business Review,* Vol. 76, No. 5, pp. 118–29.

Brynjolfsson, E. and Hitt, L. (1995) 'Information Technology as a Factor of Production: The Role of Differences Among Firms', *Economics of Innovation and New Technology,* Vol. 2, No. 4, pp. 71–83.

Ching, C., Holsapple, C. and Whinston, A. (1996) 'Toward IT Support for Coordination in Network Organisations', *Information and Management,* Vol. 30, pp. 179–99.

Davidow, W. and Malone, M. (1992) *The Virtual Corporation: Structuring and Revitalizing the Corporation for the 21st Century,* New York: Harper Business.

D'Orville, H. (1996) *Technology Revolution Study: Communications and Knowledge Based Technologies for Sustainable Human Development,* New York: UN Development Program Bureau for Policy and Program Support.

Emiliani, M., Stec, D. and Grasso, L. (2005) 'Unintended Responses to a Traditional Purchasing Performance Metric', *Supply Chain Management,* Vol. 10, No. 3, pp. 150–6.

Gary, B. (2000) 'Training: The Forgotten Value of Technology', *Accounting Today,* Vol. 14, No. 2.

Moyi, E. (2003) 'Networks, Information and Small Enterprises: New Technologies and the Ambiguity of Empowerment', *Information Technology for Development,* Vol. 10, pp. 221–32.

Murnane, R., Levy, F. and David, A. (1999) 'Technological Change, Computers and Skill Demands: Evidence from the Back Office Operations of a Large Bank', Economic Research Labor Workshop, NBER.