

The Localisation Outsourcing Decision: How to

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The level of localisation outsourcing in the software industry typically varies between outsourcing all translation, engineering, and DTP, to outsourcing only translation and DTP, and keeping engineering in-house. In both cases the project management function is duplicated on both the customer and vendor side.

The first solution is most commonly found in applications with simple engineering, and well documented, independent processes. It requires fewer resources for handling the projects but more resources for structuring them. The second allows for much more complexity on the customer side, and project handling need not be as structured.

Each alternative may be appropriate to an organisation, given its structure, culture, priorities and context. A decision model can help with the decision, helping evaluate the potential advantages and of each alternative, and can provide insight in the tradeoffs involved, and reveal weaknesses and risks of the chosen alternative.

1. Introduction

The potential advantages of outsourcing are:

- ◆ Efficiency, improvement of operational performance, including cost (McFarlan and Nolan, 1995; Embleton and Wright, 1998; Hiemstra and van Tilburg, 1993; Akomode *et al.*, 1998; Downey, 1995; Lonsdale and Cox, 2000; Blumberg, 1998; Lankford and Parsa, 1999), speed (Brown, 1997; Lonsdale and Cox, 2000; McFarlan and Nolan, 1995; Embleton and Wright, 1998), quality (McFarlan and Nolan, 1995; Embleton and Wright, 1998; Akomode *et al.*, 1998), dependability (Embleton and Wright, 1998), and flexibility (Embleton and Wright, 1998; McFarlan and Nolan, 1995; Brown, 1997; Hiemstra and van Tilburg, 1993; Fill and Visser, 2000; Downey, 1995)
- ◆ Strategy, flexibility to redefine the organisation (Peters and Waterman, 1982; Winkleman *et al.*, 1993; Downey, 1995; Quinn *et al.*, 1990; Akomode *et al.*, 1998; Embleton and Wright, 1998; Lonsdale and Cox, 2000)
- ◆ Image, how the operation looks in the books (Lonsdale and Cox, 2000; Beulen *et al.*, 1994; Downey, 1995) or to the stakeholders (Embleton and Wright, 1998; PA Consulting Group, 1996)
- ◆ Human resources and politics, to enhance someone's career or to reduce conflict (McFarlan and Nolan, 1995; Beulen *et al.*, 1994; Embleton and Wright, 1998).

The main disadvantages and risks are:

- ◆ Cost escalation, due to management overhead and vendor profit margin (Embleton and Wright, 1998; Akomode *et al.*, 1998; Downey, 1995; Lonsdale and Cox, 2000; Lonsdale, 1999). Deterioration of the quality of service resulting from the vendor assigning the best resources to other business (Terdiman, 1996; Downey, 1995; Embleton and Wright, 1998; Lonsdale and Cox, 2000).
- ◆ The reduction of the strategic flexibility from hollowing, losing over time the skills necessary for the outsourced tasks, and subsequent dependency on the vendors (Downey, 1995; Lonsdale and Cox, 2000; Embleton and Wright, 1998; Downey, 1995; Lonsdale, 1999)

- ◆ The potential impact on human resources, where outsourcing creates redundancies or limits the careers on the customer side (Papaioannou, 2002)
- ◆ The risk of loss of the opportunity to re-engineer. Once any activity is outsourced, the priority in-house tends to focus on retained activities (Papaioannou, 2002)

2. The Outsourcing Decision

The level of outsourcing most appropriate to the organisation depends on a variety of factors, which even when common between organisations, will often carry different weights and therefore lead to a different recommendation.

To facilitate the decision, a decision model such as the Simple Multi-attribute Rating Technique (SMART) (Edwards, 1977) or Analytic Hierarchy Process (AHP) model (Saaty, 1990), can be used. A software product such as Criterium® DecisionPlus® by InfoHarvest Inc. provides both options.

The criteria need to be established based on the goals of the decision, the organisational context, and the stakeholder issues. Disadvantages and risks need to be represented in the model, to ensure the decision takes a balanced view. So the criteria will include both goals and constraints. The criteria selected may be structured in multiple levels, although not necessarily a tree structure for the AHP model.

Weights to the criteria will likely require multi-point feedback, representing the stakeholder interests, including the organisation, the customers of the process, and the localisation team. These weights can be assigned on user-specified scales, and each alternative then needs to be evaluated for each criterion.

Uncertainties can be factored into the decision, by specifying an uncertainty distribution for any score. The decision scores in conjunction with the sensitivity analysis will not only point to a decision, but aid in better understanding the risks and tradeoffs.

For our organisation, the primary goal was to increase throughput, while maintaining quality and cost constraints. The stakeholders for the performance objectives were the internal customers of the localisation operation, the stakeholders for the HR criteria were the localisation team itself, and the stakeholders for the strategic criteria were the organisation itself.

The stakeholders were asked to evaluate the relative importance of the criteria that affected them. For the regional offices,

the internal customers of the operation, the scores themselves were then weighed based on their budget.

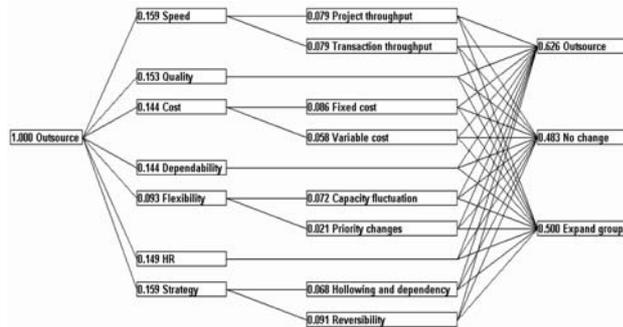


Figure 1: The decision tree

The results based on the assigned weights and scores are (Figure 1):

- Outsource: 0.626, the recommended alternative given the highest score
- Expand group: 0.500
- No change: 0.483

Including the “no change” alternative helps clarify the failings of the current state, as well as the disadvantages and risks introduced with the alternative chosen.

The criteria scores of each alternative provide an overview of the advantages and disadvantages of each alternative. In this case, the recommended alternative is full outsourcing, and while it is expected to improve throughput, dependability, flexibility and the HR scores, it points to reduction of the strategy score, which then needs to be managed (Figure 2).

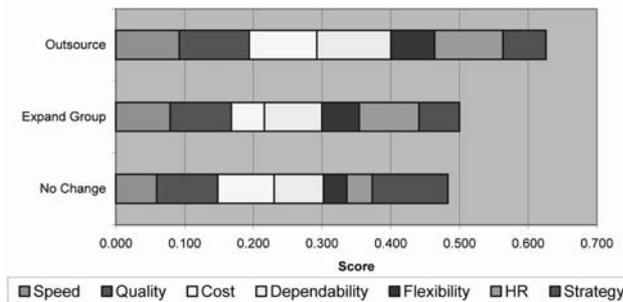


Figure 2: Criteria scores for alternative solutions

Sensitivity analysis produced a criticality score of 27.3%, translating into a very stable model, and many criteria would all need to be weighed incorrectly, and all in the same direction, before the Outsourcing alternative was no longer the recommended alternative. Criticality scores of 5% or less indicate an unstable model.

3. The Implementation – The New Localisation Model

As a result of the decision model scores, the Outsourcing alternative was chosen, and a New Localisation Model (NLM) was developed. The question then became which functions should be outsourced.

In the old localisation model (Figure 3) the client project managers were managing the project schedule and costs, mediating in all communications including problem resolutions, coordinating all source and translated material transfers, as well as discussing business requirements internally, managing vendor performance.

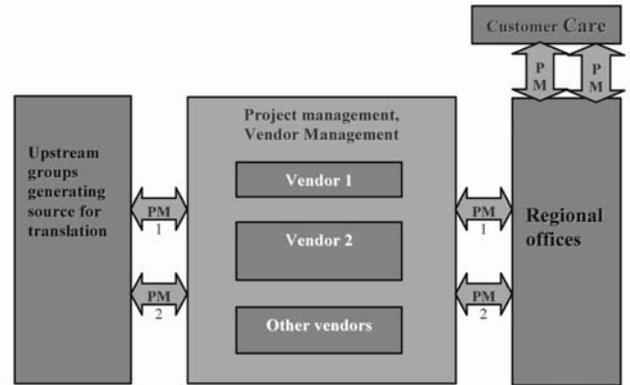


Figure 3: The old localisation model

In the new localisation model (Figure 4), the goal was for the vendors to expand their roles, to handle all day-to-day issues independently. For example, to resolve technical queries, the main vendors were put in direct contact with multiple parts of the organisation, redeploying the customer project managers in vendor, technology, and customer relationship management functions. Upstream, the vendors are in contact with the groups that generate source for translation. Downstream, the vendors were put in contact with the reviewers in the regional offices.

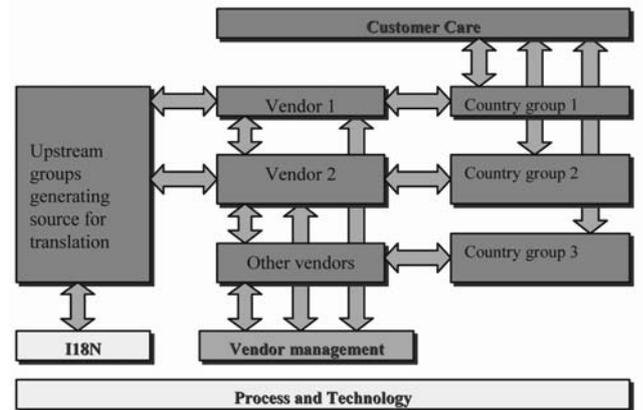


Figure 4: The new localisation model

In summary, the vendors are left to manage the projects day-to-day, and the customer staff is responsible for mid- and long-term goals, in addition to acting as enablers: acting from the sidelines, they provide the vendors with the information they need to do their job.

Vendors access directly the source code control system, retrieve the previous translation, update it, seek linguistic approval with the regional reviewers, and put the updated translation back in the source code control system.

Because the goal is to make the vendors as independent as possible, structuring the communication process and providing up-to-date information was critical. A password-protected Extranet was set up, providing information such as the contacts matrix including phone number and time zone of the contacts, the source materials schedule, product dependencies for installation and leveraging, generic and product-specific instructions, temporary license files, and various utilities.

Vendors post technical queries through a newsgroup, and cc the appropriate contacts so that the query is always “pushed” to the primary recipient. Queries are addressed on the newsgroup. Any information with long-term value is collated into the

appropriate document in the Extranet. Further vendors cc each other in their technical queries, working essentially in collaboration.

4. Actual Benefits

4.1 Customer

With the elimination of the project management bottleneck, initial results show doubling of capacity. With a staff of two, the throughput is expected to reach 250 projects in 2003.

Free from project management, process performance can now receive more attention. For example while in the past schedule performance was only measured vs. the target release date, twelve milestone dates are now tracked for all projects, to ensure that attention is focused on the more important bottlenecks. Further customer performance is now measured systematically, to ensure that the increased capacity offered by vendors is not still hindered by internal bottlenecks.

4.2 Vendors (companies)

Vendors have increased visibility and prestige within the customer organisation. Their value-added is significantly increased from deeper integration and customer understanding. This offers opportunity for additional services, for example consulting. Further it becomes very difficult for any new vendors to compete.

Because of the increased discretion in scheduling, vendors have improved opportunities for capacity planning. The NLM provides the vendors with an important opportunity for organisational learning, and a solid reference account when they pursue similar arrangements with other customers.

The vendors are working in a collaborative relationship, cross-checking leverage statistics and helping each other overcome technical difficulties. Originally counterintuitive, the collaboration was virtually automatic when it was clarified that the customer had a "two-vendor policy" and that no matter the performance, no vendor would ever be assigned all languages.

4.3 Vendors (people)

The vendor teams have found the new set-up very motivating. The expanded scope of responsibility challenges them to grow professionally, and allows them to use a wider range of skills. Increased autonomy is also associated with the new roles. Instead of being asked "here is the source; when can you deliver it translated by?" the question is "we need to release this product up to x days after the English release; you can start when you like, reschedule and rearrange priorities of concurrent projects at will, as long as the product is released by the target delta". Of course there are also cost targets to be met so that early start does not increase rework unnecessarily.

5. Tradeoffs and risks

5.1 Hollowing, dependency and reversibility

The reduction of the strategic flexibility through hollowing and dependency is a key risk, which however had already become a problem as the number of products and technologies proliferated. To reduce the risk from dependency, two main vendors are used in parallel, each handling a group of languages. Because their work does not have interdependencies, they have complete control of their work, and the responsibilities are clear.

Whenever the two vendors handle languages with the same or similar legacy translations, the leverage statistics and proposed work volumes (but not the work unit rates) are compared. This serves to avoid two problems. First, even when their internal processes are different, matching leverage statistics shows that

the processing variables are similar. In cases of differences the reason was either incorrect processing of the source files (for example, trying to leverage unresolved instead of resolved SGML files) or different settings during alignment. Second, inconsistency in engineering or testing hours revealed dramatic differences in work scope. This has been an opportunity to specify exactly the testing steps needed, to ensure that all required testing takes place and no more.

One factor inherent in the reduction of risk is the use of vendors with whom there is a long-standing relationship. This is 7 years with one vendor and 10 years with the other. Shared processes are being developed for the vendors, to ensure that the model is protected from personnel changes, and to provide uniform service.

Further, while the reversibility of this model is reduced, one vendor can act as a backup if the other is having trouble.

5.2 Operational performance risks

If outsourcing allows for increased capacity without proportional increase in internal resources, the cost can be seen as reduced, at least proportionally to the increased capacity. However it should be recognised that outsourcing results in some cost increase. First, if the vendor work increases, so will the cost. The assumption is that the cost will increase less than the work, or that the freed up resources will be put to better use, such as productivity improvements. Second, outsourcing requires management. Relationship management, face-to-face meetings, and increased coordination imply additional costs, including travel and relationship building.

Refocusing at least some of the freed resources on vendor management and productivity improvements can help offset the increased cost.

To protect the organisation from deterioration of service, two vendors are used in parallel, handling similar projects. Vendor performance can then be compared, and realistic targets for improvement may be set.

Process documentation needs to happen before the tasks are outsourced, and the documentation needs to be kept up to date. This can help both standardise the service over time and across vendors, and can help reduce the learning curve of new vendors.

5.3 Human resource risks

Whether redundancies are created or not, human resource planning is necessary. For remaining employees training may be needed as preparation for their changed roles, and for any redundancies both retraining and redeployment may be needed.

Because of the multiple relationships, there is an increased possibility of difficulties due to personalities. To ensure that problems are avoided before they happen, vendors include in their weekly status report, an evaluation of the relationship of each member of their staff, in contact with the customer. The rating is aggregated in a database, watching out for trends in emerging difficulties specific to one person upstream or downstream.

Because of the emphasis on relationships, any time a resource changes relationships (including credibility and trust) need to be rebuilt. This is a bigger challenge than just replacing the skill set and knowledge of products and technologies. To facilitate, the customer care manager and the vendor manager mediate for this, primarily through the organisation of face-to-face meetings.

5.6 Loss of opportunity to re-engineer

Re-engineering and productivity improvements are instrumental in the new set of client responsibilities. In fact, with the

New Localisation Model, attention can now be focused on re-engineering systematically. These can help with cost control, maintenance of quality of service and increase of strategic flexibility.

6. Conditions for success

Outsourcing is not suitable to all clients and vendors. Key factors for success are:

- Suitable company culture
- Senior management support
- Availability of suitable vendors
- Long-term commitment
- Relationship management

The organisation must be flexible enough to change, because outsourcing requires a culture shift, including the willingness to work with interdependencies and to take risks.

While some costs, such as fixed internal resources, will be reduced or avoided, some other costs such as communications and travel will increase. The organisation needs to be able to see these in the context of direct cost savings, and the costs which would have been necessary should outsourcing not have been chosen. Furthermore the benefits of outsourcing can be non-financial, such as improvement of the quality of service.

Vendors need to have a track record with the client, because increased outsourcing is more demanding on the skill sets on the vendor side, and the commitment required on the vendor side to make this work. Investment in relationship building is key, and vendors should be willing to refocus on a relationship level rather than a project level.

Long-term commitment is required from both parties, as responsibilities and processes change. The longer and deeper the outsourcing, the harder it is to reverse the arrangement.

Management does not stop when outsourcing starts. Outsourcing needs constant management, so that it stays on track. The focus shifts from the project level to longer-term performance metrics, but management does become even more important.

7. Conclusion

Outsourcing can increase operational efficiencies, whose benefits outweigh the risks to strategic flexibility and human resource development.

Outsourcing is not optimal for everyone. Each organisation needs to develop its own set of criteria, rate them according to its strategy and stakeholders interests, and manage both the relationships and the risks.

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