Introduction
Since 1990 we have probably seen the most significant economic changes the world has ever faced. The end of the cold war and dismantling of the trade barriers, together with enabling technologies such as internet, workflow software, mobile and wireless communications, has shrunk the world so significantly that doing business at a global scale is now the norm for organisations of all shapes and sizes, industrial, commercial or public.

With the emergence of these globalising forces we have also seen the emergence of new business phenomena such as outsourcing, off-shoring, on-shoring, in-sourcing and so on. Whilst we all understand the meanings of these terms we are often confused with the many terms and definitions, some of which may even be conflicting. More importantly, we are often uncertain about whether these business concepts are appropriate for our business or not.

In this article we will take a look at the phenomena of outsourcing as an overarching business concept that is, in short, about contracting of a specific bit of our business to a third part organisation. Consequently, outsourcing is a natural part of the make, share or buy continuum, as illustrated in Figure 1. We would, therefore, argue that outsourcing is not a new business phenomena as it has been commonly practiced since the early times of industrialisation, even though recently it has been enjoying renewed attention fuelled by the globalising forces.

Outsourcing Today
In this section we provide an insight into today’s outsourcing practices, based on a survey we conducted during the early part of 2007. A total of 72 companies - from Europe, North America and Asia - participated in our survey representing a broad range of business functions, including original equipment producers, suppliers, transport providers, service providers and consultants (Figure 2).
It appears that the key drivers of outsourcing decisions include performance factors such as:

- **Internal operations performance** focusing on improvements of internally facing performance factors, such as productivity, efficiencies, overhead costs, capital expenditure, flexibility and so on (cited on 32 occasions)
- **Business performance** focusing on profitability and growth through competitive advantage (cited on 31 occasions)
- **Strategic and tactical performance** focusing on development of core competencies, time-to-market, accessing skills and knowledge, sharing risks and benefits (cited on 25 occasions)
- **Technical performance**, including access to technical skills and knowledge, standardisation of platforms, technology consolidations and leveraging (cited on 24 occasions)
- **External operations performance** as a result of increased customer satisfaction, including delivery performance, responsiveness, reliability, accuracy and so on (cited on 22 occasions)
- **Product performance** through better design, broader and integrated portfolio, integrated/consolidated services (cited on 18 occasions)
- **Market performance** through accessing new markets and accessing skills and knowledge about new markets. (cited on 18 occasions)
- **Political motives**, such as resolving conflicts, simplification of control, enhancing credibility (cited on 8 occasions)

When it comes to making outsourcing decisions it appears that a variety of approaches and tools are used to support the decision-making process concentrated around spread sheets and similar software tools, as well as integrated systems capabilities such as ERP systems (Figure 3).

![](image)

**Figure 3. Tools organisations use for making outsourcing decisions.**

The range of activities that organisations outsource seems to range from supply chain related activities, such as distribution, production and procurement, to other administrative and support processes. Table 1 presents 129 instances of outsourcing with many organisations outsourcing more than one aspect of their operations. It appears that approximately 90% of these outsourcing instances are considered to be successful, with 10% failing to deliver expected benefits.

<table>
<thead>
<tr>
<th>Activity/Task</th>
<th>Instances of Outsourcing</th>
<th>Instances where benefits have been realised</th>
<th>Instances where benefits have NOT been realised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution</td>
<td>21</td>
<td>20</td>
<td>1</td>
</tr>
<tr>
<td>Production</td>
<td>16</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Payroll</td>
<td>16</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Legal affairs</td>
<td>16</td>
<td>11</td>
<td>5</td>
</tr>
</tbody>
</table>
Problems with Outsourcing Decisions

Although the success rate in our survey seems to be encouragingly high at 90%, we suspect that this is likely to be skewed towards positive results as organizations with positive outsourcing experiences would be more likely to participate in such a survey. However, a positive aspect of this phenomenon is that the respondents are likely to be able to provide valuable insights into the reasons some outsourcing projects fail.

It appears that the most common reasons outsourcing projects fail may be summarized under four headings. These are:

- **Wrong Decision** where decisions are made based on static data without looking into future trends and scenarios, resulting in hidden costs arising from additional management and/or infrastructure costs due to failure to understand all the risks at the outset. Also, decisions made purely on financial metrics, without understanding all the other consequences, seem to be resulting in wrong outsourcing decisions being made.

- **Choosing the wrong partnership** seems to be a common problem with outsourcing decisions that lead to bad relationships that are difficult to reverse, due to lack of flexibility in partnership contracts. This seems to be mainly caused by the failure to identify and agree the scope and objectives of the partnership at the outset.

- **Unbalanced performance criteria** emphasising costs over quality and service seems to lead to wrong outsourcing decisions and selection of the wrong partners. Also, the use of metric-based analysis is considered to be misleading as it fails to recognize and take account of soft issues.

- **Unknown risks** associated with unknown personnel, loss of knowledge, loss of expertise and loss of core competency, over time, together with geopolitics and other global economic trends, seems to augment the above problems.

It is clear from these results that the causes of the majority of outsourcing failures are rooted at the outsourcing decision processes. When we asked the respondents what they thought of the decision process that led them to the outsourcing decision, they identified two main problems with their outsourcing decisions. These are:

- **Inconsistent, unstructured informal decision process** with no consistent strategy, with no set methods that follow a proven plan. This is often made worst by no clear rules about decision factors, resulting in time-consuming and extended decision timescales.

- **Financial decision criteria ignoring overall performance** that seems to be mainly based on purchase price variance as opposed to total cost of ownership or total supply chain management costs. Also, little attempt is seemed to be made factoring for through-life costs and risks.

The outsourcing case study presented in the box below exemplifies the majority of the problems and issues that were identified above as a result of our survey. The key lessons that emerge from this case study are:
Outsourcing decisions cannot be made just on unit cost. The total cost of ownership or the total supply chain management costs need to be understood together with all other risk factors, impact on remaining products and or capacity.

Outsourcing core competencies is futile. It is unlikely that you can get it done better somewhere else.

It is a really bad idea to jump on the bandwagon. Just because someone else is doing it does not mean that outsourcing is the right choice for you.

Do not try outsourcing your current problems. It will only add a whole set of new problems to your portfolio of problems. Get your house in order first and think again.

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**Outsourcing Case Study**

The Company is a division of a blue chip group specialising in tailored design, manufacture, installation and servicing of engineered products operating from a UK base. This particular case study focuses on a single instance of outsourcing, where machining operations - representing 15% of their total output - were outsourced to China.

The business case was built around outsourcing a high mix, low volume business with productivity barely exceeding 50%, to a lower cost region with a view to outsourcing the problem and reducing costs by 20%, as well as downsizing the factory footprint. This decision to outsource was also fuelled by the actions of a sister company with similar issues to outsource their operations to China.

Eventually, in early 2005, the Company selected a Chinese partner and spent 2-3 months developing relationships. Immediately, as the outsourced operations commenced, quality and batch size problems started to emerge and business continuity became an issue escalating costs. Costs were further escalated when the Company resorted to appointing a dedicated team comprising of six senior managers to manage the situation. Eventually, after approximately 24 months the Company brought the operations back in-house after getting its house in order.

Today, they manufacture these very products with efficiencies close to 70% that gave them a cost reduction of approximately 15% on a smaller factory footprint. To achieve this, instead of outsourcing their problem, they focused on their core competencies, which were precision engineering and machining of a high mix, low variety product portfolio - whilst getting their house in order through good manufacturing practices, such as lean, 5S and Total Productive

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**Simple Outsourcing Decision! Beware!**

Any outsourcing decision needs to be based around four decision drivers. These are:

- The suitability of the activity to outsourcing
- The partner profile, including location or locations of the partner
- Impact of outsourcing on the remaining business
- All costs and risks
Figure 4 below depicts these four decision drivers, together with possible risk factors that may be associated with a typical outsourcing decision.

![Figure 4. Outsourcing decision drivers and risk factors.](image)

Now comes the health warning!... to outsource or not to outsource is not a simple decision. Unless we understand all the factors listed above objectively, there is always a chance that we will end up making the wrong outsourcing decision. However, being realistic about this, there are no magic crystal balls, we can never be certain about what is going to happen in the future. But what we can do is to be rigorous about the facts we consider in making outsourcing decisions.

Here comes another health warning!... Beware of solutions that seem to oversimplify the outsourcing decision process by simply suggesting that you can factor in all the cost and risks to identify best alternative. In theory, it is easy to state that having considered the unit cost and the total cost of ownership and accounted for risks, you can easily end up with a decision such as shown in Figure 5 below.

![Figure 5. In theory it seems simple to account for risks as costs.](image)
But how do you account for risks? In practice, risk factors, such as political risk, brand risks, and customer perception risk, are virtually impossible to express in financial terms. One can always argue that this can be done, albeit through an educated guess, but our view is that this would only serve to misinform the outsourcing decision as a result of mixing objective judgement (such as unit costs, total costs of ownership, etc.) with subjective judgements.

In reality, the outsourcing decision is a multi-criteria decision-making problem that needs to be based on an appropriate blend of objective and subjective information. In 2006 we were commissioned by Scottish Enterprise to explore this phenomena further with a view to developing a support tool that is capable of objectively supporting outsourcing decision-making. The remainder of the paper will explain the rationale behind the decision support tool we developed and provide an overview of how the tool works. But first we would need to understand some fundamental truths about outsourcing.

**Outsourcing – Fundamental Truths**

So far in this paper we have provided you with some insights to what organizations outsource and how they make an outsourcing decision, as well as the problems and difficulties associated with these decisions. In this section we will try to simplify this complexity by stating some obvious truths about organisations in general, and outsourcing in particular. These fundamental truths are:

- In all organizations (Public, Private, Commercial, Industrial, Charitable, etc) people do things (with computers, machines, materials, information, paper, other people etc.) that lead to good or bad results.
- If you string what people do end-to-end what you get are business processes.
- An organisation is a series of interrelated business processes (Figure 6). Some of these processes are customer facing (such as product development, order fulfilment and product support) and they create competitive advantage here and now, others merely exist to provide support to the other processes (such as Manage HR, Manage finance, Manage facilities, etc) and some exist to manage the future performance of the business by setting direction, scanning the environment, formulating and managing strategies and change, and so on.

![Figure 6. The business process view of an organisation](image)

- What we really outsource is the whole or a bit of a business process.
- Outsourcing a process does not mean that we do not need that process to support the organisation’s performance. As stated above, these processes are closely interrelated so outsourcing human resource management, for example, does not mean that we do not need that process any more. It merely means that someone
else will be executing the process but the outsourced process must remain seamlessly integrated with the rest of the processes.

- Thus, we must take a collaborative approach to outsourcing. In fact we would go further and suggest that outsourcing should be executed in the coordination and collaboration space of the make-share-buy continuum (Figure 1).

**Outsourcing and Making Outsourcing Decisions**

Based on our discussion so far, we would define outsourcing as: "Delegation of an entire or part of a business process to an external partner organisation, whilst ensuring that it remains seamlessly integrated with the remainder of the business processes to improve performance”.

We would go further to add that the decision to outsource or not to outsource should be the output of a structured cross-functional process that blends objective and subjective factors in an appropriate way to ensure a certain degree of repeatability and, thus, confidence in the decision.

In essence, based on Figure 4 above, the outsourcing decision process should help us identify:

- whether the activity is suitable for outsourcing by considering:
  - the strategic importance of the activity versus existing core competencies
  - the set-up costs, operating costs and risks versus potential benefits over time
- the impact on the remaining business processes, customers and suppliers by considering the complexity and uncertainty of the interface versus the physical and cultural proximity versus the degree of control exercised/required
- the profile of potential partners taking into account of:
  - strategic synergy – the potential fit, or otherwise, between the business model and strategic priorities of the partner organisation and our own organisation.
  - operational synergy – potential fit, or otherwise, between the relevant business processes of the partner organisation and our own organisation.
  - commercial synergy – the nature of the commercial, risk management and service levels agreements between the partners and our own organisation.
  - cultural synergy – the cultural fit between the two organisations both at strategic and operations levels

**The Informed Outsourcing Decision Support Tool**

The outsourcing decision support tool developed brings together all aspects of outsourcing discussed earlier in the paper, to guide the organisation through a structured and repeatable process. At the heart of the tool lies a multi-criteria decision support tool that enables the users (individually or in teams) to objectively assess financial implications as well as risks and benefits that are difficult to quantify in financial terms. This is achieved through a five-stage process as summarised in Table 2 below.
### Table 2. The five stage outsourcing decision process.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
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<tbody>
<tr>
<td>Stage 1</td>
<td><strong>Strategy and core competencies</strong>&lt;br&gt;The value proposition, strategic priorities and core competencies of the organisation are examined and clarified. Relevant metrics are identified and, where relevant, benchmarked against competitors or best in class. Impact of outsourcing is evaluated and, where possible, quantified. The process and product candidates are base lined and the decision criterion is formulated.</td>
</tr>
<tr>
<td>Stage 2</td>
<td><strong>Process and product candidates</strong>&lt;br&gt;The processes and products that are considered for outsourcing are evaluated for their suitability for outsourcing. The key performance criteria and the critical parameters for outsourcing (such as service levels, proximity, infrastructure, etc.,) are established.</td>
</tr>
<tr>
<td>Stage 3</td>
<td><strong>Outsourcing alternatives</strong>&lt;br&gt;Various outsourcing alternatives are evaluated, considering the outsourcing partner as well as geographical locations. The landscapes of qualified partners and locations are assessed to extract sufficient information to start formulating an outsourcing strategy prioritising locations and partners. Further information is sought from potential partners and locations.</td>
</tr>
<tr>
<td>Stage 4</td>
<td><strong>Outsourcing analysis</strong>&lt;br&gt;Information gathered is evaluated and various scenarios are built for various outsourcing options using current facts and future forecasts, with pessimistic, median and optimistic scenarios, if appropriate. All scenarios are modelled against the evaluation criteria identified on the multi-criteria decision support tool. The team is facilitated to interpret the results from the models to make informed outsourcing decisions.</td>
</tr>
<tr>
<td>Stage 5</td>
<td><strong>Sourcing effectiveness</strong>&lt;br&gt;Post implementation evaluation to ensure that the initial objectives and expectations are fulfilled and any lessons learned are internalised. Throughout this process various checklists, guides and tips are provided to facilitate the progress through the process efficiently and effectively. However, the checklists and guides are not prescriptive and the users are able to select subsets, add and delete elements, as they feel fit. For example, the typical list of criteria that companies use to make outsourcing decision is included as part of the processes but, depending on their own particular circumstances, organisations are able to customise this criteria to meet their own particular needs. This provides the opportunity for the decision process to be tailored to meet each organisation’s specific requirements, whilst standardising the decision process and criteria for that organisation. Figure 7 below provides an output from the multi-criteria decision support tool. Here, the left-hand side of the Figure illustrates the criteria that is being used to make the decision to outsource or not to outsource, together with weightings assigned by the users to each criteria, following facilitated discussion supported through the multi-criteria decision support tool. The top right-hand side of the Figure illustrates the overall result indicating that it would be better to keep the process in-house (i.e. not the outsource) and the bottom right-hand side of the Figure illustrates how each alternative scores against each group of criteria such as Costs, Service, Competency and Risk.</td>
</tr>
</tbody>
</table>
In Conclusion
Motivated by global forces, organisations are increasingly focusing on their core competencies and looking to outsource non-core processes to partners who can carry out this process better. It is obvious that the outsourcing trend is set to grow. However, the decision to outsource or not to outsource should not be taken lightly. We must remember that what we outsource is either the whole or a bit of our business process, and that once outsourced that process needs to remain seamlessly integrated into the rest of the business. It is therefore important to take a collaborative approach to outsourcing by ensuring that our selected partner is compatible, in all aspects, with our own business. We must ensure that we achieve synergy at strategic, operational, commercial and cultural levels. It is also important to remember that outsourcing is a cross-functional multi-criteria decision process, thus needing to be supported by a multifunctional team. It is also important to recognise that outsourcing decisions should not be deemed permanent as any one of the variables considered can change at any time leading to a different optimal decision. So we should regularly return to review the decision, respecting the dynamic and uncertain nature of the world we live in today.

We believe that the decision support tool developed as a result of our research provides a unique vehicle to support outsourcing decisions. We would also invite you to try our tool.

Acknowledgements
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