Knowledge-Intensive Outsourcing

Partnering in R&D and product development: Benchmark Study

Executive Summary

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Note: This document is an excerpted and gratis version of the full knowledge-intensive outsourcing analysis. Should you wish to have the whole analysis, please contact Trellis at info@trellis.dk or at +45 7020 4283.

Trellis' full benchmark study of knowledge-intensive outsourcing is available for purchase at 800 dkk. The study is 75 pages long. In addition to 25 pages of detailed quantitative analysis based on the questionnaire executed by the participating companies, there are more than 40 pages of qualitative analysis and assessment touching on topics such as value for money, the learning curve, relationships with vendors and partner decision making responsibility, along with measurements, risk management and internal process improvement . The full study also includes individual industry assessments.

Introduction

Trellis has conducted a benchmark analysis of how companies operating in Denmark engage in knowledge-intensive outsourcing. Typically, this means outsourcing and partnering in product development, R&D and/or service development where suppliers are brought in based on specific competencies. These competencies directly contribute to production or development of the sponsoring company's product and/or service offering, for example engineering, programming and design.

Our study of knowledge-intensive outsourcing included 25 firms engaged in this kind of partnering in addition to a broad selection of advisors, academics and vendors. The companies are both Danish and international with the decision making responsibility for this kind of outsourcing being based in Denmark. For our quantitative analysis, we have roughly grouped our participating companies into four categories: IT, pharmaceutical, manufacturing and design.

The companies in our study together represent a total revenue of 399.173.225.000 dkk., operate in over 150 countries and collectively have over 632,106 employees worldwide. Clearly, this is a group of companies with global reach and consequence.

The study consisted of in-depth interviews with strategically positioned employees who were directly involved in the outsourcing strategy, decision making and execution. Each of these participants also filled out detailed questionnaires which provide the basis of our quantitative comparisons.

Our study has resulted in a strong understanding of how organizations in Denmark are working with knowledge-intensive outsourcing. We have uncovered trends and underlying conditions which influence necessities and choices along with gaining a clear understanding of motivation and results. As there are few benchmark studies focused on Denmark and none on knowledge-intensive outsourcing, we're confident that this study adds to the growing demands of the market to master this kind of qualitative partnering.

Trellis helps our clients to maximize the potential of external resources and relationships, typically those with suppliers and outsourcing partners.

We assist our clients in building strategically cooperative relationships which leverage strengths and capacities of both parties.

Learn more at www.trellis.dk or contact Katie Gove, Founder and Principal Consultant at kg@trellis.dk.

Executive summary

Echoing many of the themes that we uncovered in our generalized study of outsourcing, we see notable similarities. Primarily, that knowledge-intensive outsourcing, like outsourcing in general, is considered to be an operational tool with little strategic traction among the companies of our study. In large part, this is due to the decision-making arena being populated almost exclusively by operational leaders. Few companies with whom we spoke have top leadership which is evangelically and transparently involved in external partnering and outsourcing. This means that solid connections between outsourcing activities and overall business strategy are few and far between. That's not to say that they don't exist but merely that those that do are the exceptions.

Why is this so? We know that this is partially so because Danish companies tend to be flat and non-hierarchical. Decentralized decision-making is one of the cornerstones of the Danish enterprise. And while this strength goes a long long way towards enabling contextually relevant operational decisions, it tends to limit the ways in which a company can conceive and realize strategic directions and initiatives.

Broadly stated, one of the biggest differences we see between generalized outsourcing and knowledge-intensive outsourcing is that the intention to increase outsourcing is larger in the knowledge-intensive arena. This means a substantial coming investment by many companies in processes and competencies which directly support their product development.

That being said, there are strong similarities between the two focus areas. We see a somewhat immature expectation regarding the investment of time and management resources involved in successful outsourcing. Far too many of the organizations in our study have experienced that their initial forays into outsourcing were accompanied by not much more than a barely adequate requirements specification and hearty "farewell" from those making the decision.

Why should companies, particularly those in Denmark, care about and engage in knowledge-intensive outsourcing? Well, the financial crisis will one day recede and the Danish employment market will once again be characterized by an under-supply of knowledge-intensive competencies, *e.g.* engineering, programming and design competencies.

Companies will be compelled to look outside of Danish borders in order to secure the volume of resources that they need to deliver their products and services to existing and future customers. Therefore, the ability of companies to actually grow will be dependent upon leveraging volumes and flexibilities of external competencies.

In addition, it is getting increasingly unlikely that a single company can not only field but master the expertise necessary to orchestrate the product complexity which the market increasingly demands.

Therefore, companies which wish to survive and thrive in the coming years will need to become great at integrating external technology and resources into their products and services.

Clearly echoing some of the most interesting findings from our earlier report on generalized outsourcing in Denmark are the findings around internal process improvements and outsourcing. What we saw earlier and see in an even stronger relief in this analysis is that companies which state that they have undergone improvements of internal processes, and these can be processes which aren't directly involved in outsourcing, are companies that are much more satisfied with outsourcing and with their own efforts to manage them.

We have learned that companies which have undergone internal process improvements as a result of outsourcing are companies which possess an ability to look self-critically at themselves. This extends to processes, individual resources and teams. These are companies which are willing to acknowledge that they are perhaps part of the problem and critically, are willing to do something about it. These are companies which seem more willing to experiment in many dimensions and are able to learn from failure. The culture at these companies seems to allow failure as long as corrective action is appropriately brought to bear.

One could theorize that it would be best to have a full strategic vision prior to going into knowledge-intensive outsourcing but anecdotal evidence is heavily weighted towards project-based decision-making almost exclusively being the context for getting started. Bowing to that reality, how can success in knowledge-intensive outsourcing be measured if not through achieving clear strategic goals?

In this context, we would argue that the true indicator of ability to capitalize on the potential strategic benefits of knowledge-intensive outsourcing is how fast a company moves through the general learning curve. So, the key to success must be accelerating the pace of the trip. The toolbox for accelerating the pace is not lacking, for example focusing on measurable milestones, critical success factors, corrective action, process improvement, and re-training/re-focusing/promoting resources to support these efforts. In effect, we see success clearly linked to capitalizing on the reality of an operational entry into knowledge-intensive outsourcing by building a strategic environment as rapidly as possible.

What's clear is that organizations have just begun to scratch the surface of the benefits of knowledge-intensive outsourcing. The ability to leverage not only internal but a comprehensive network of external competencies and resources in the developing, production and distribution of products and services is an enormous competitive advantage for those who can master it.

Pharmaceuticals

The pharma industry is ranks the lowest of the industries in our analysis when it comes to achieving value for money for their outsourcing investments. This is somewhat ironic as it is the industry which leads the others regarding outsourcing strategy formulation and for having been prepared for managing the outsourcing relationship. In addition, they rank the highest among the industries for achieving a fair and equitable agreement through the contract negotiation process. With all of these ducks in a row, how is it then possible that they can't achieve a higher value for money?

We can see a clear change in the industry profile over the course of the past 18 months when we began the first part of our research. Within this knowledge-intensive outsourcing arena, we see the pharma industry now being much more likely to outsource in new areas and just as importantly, is interested in giving its partners more decision making responsibility. Corresponding to this transformation of thinking, we see a higher than average willingness to consider outsourcing in core areas. Probably the most revealing is that it is the industry which is most interested in trying new business models. We see a foundation of process maturity across the value chain in pharma that we don't necessarily see across the other industries.

The pharma industry is an industry in transition. Its approach to outsourcing is in the process of shifting from a traditional transactional model to one that is more able to include the vendors at the table. We believe that we have only seen the tip of the iceberg and are certain that the transformational trends underway will make the pharma industry a fascinating and fertile place for outsourcing in the coming years.

IT Industry

Across the industry, we see less than average feelings of satisfaction with outsourcing along with a less than average ability to achieve value for money. Significantly, there is less than average support from management for outsourcing efforts and this is one of the significant cross indicators we have found for achieving value for money. Related to this vacuum of management presence is that the IT industry is below the study average for the likelihood of having an outsourcing strategy; of those that actually do have an outsourcing strategy only a minority indicates that that outsourcing strategy directly supports business strategy.

The IT industry consistently ranks the lowest among all the industries regarding indicators of quality and growth of competence in outsourcing. They are less likely to want to try new business models, the least likely to trust partners and suppliers, and in a generously honest self-assessment, consistently rank themselves at the bottom of the scale as far as being a great firm for vendors to have as a client.

Against this backdrop of woe, the IT industry ranks the highest among all the industries of the study regarding their intent to increase outsourcing in the next 12 months. The only positive thing on this note is that the IT industry is also the industry which is least likely to outsource in the same way as they have before. However, if they are unwilling to try new business models and do not trust their partners and suppliers one wonders what mechanisms they will employ.

The IT industry is clearly an industry in flux and under pressure. This in and of itself is not a bad thing: this kind of pressure can bring about innovative solutions and change. The problem is that we don't necessarily see indicators which would point towards rewarding problem solving, *i.e.* learning from others, trust and internal process improvement initiatives along with encouraging experimentation and cross functional work. Without those kinds of indicators we must be honest that the outlook for the industry isn't positive.

Design

The design industry is atypical for the industries included in our study of knowledge-intensive outsourcing. They are much more satisfied and show consistent indications of achieving value for money via outsourcing. There is ubiquitous agreement across the design companies in our study that management supports their efforts and the companies in our study say very clearly that they will continue to outsource in the same way in which they currently are.

At a macro level, the industry is posting consistently positive indicators. However, we see contrarian underlying indicators which we find a bit paradoxical. For example, the design industry is the least likely of all the industries to have an outsourcing strategy and should they actually have one, there's a less-than-average likelihood that it supports their business strategy. Across the other industries, we see a clear connection between outsourcing strategy and achieving value for money. In the design world, that connection seemingly evaporates.

The picture we see is a contradictory one. There is tremendous openness yet no interest in sharing decision making. Grappling with these various indicators, we start to see an outline of an industry which is quite good at synthesizing ideas, technologies, trends and learnings from others but where owning and controlling the idea and/or concept is something for which to fall on your sword. It appears to be quite hard for compromise and mediation regarding the final vision of the project.

It's perhaps not unsurprising then that the biggest challenge for knowledge-intensive outsourcing as seen from the design industry's perspective is the management of projects and processes. In a way, there is a disconnect between the overall vision for the project and reality into which it must be fitted.

Manufacturing

As an industry, manufacturing has lengthy experience with outsourcing. For volume and scale, it can't be beat. However, that kind of outsourcing has primarily been focused on shedding non-core activities with a tight rein on cost reduction and quality. In the knowledge-intensive outsourcing arena, we see that the main drivers for doing so are the access to skills and flexibility, in that order. In a steep departure from manufacturing's approach to generalized outsourcing where we saw a super-articulated focus on costs, in knowledge-intensive outsourcing, we see a looser focus on costs and a greater focus on shortening time-to-market.

Looking at the industry as a whole, we see an industry which is less satisfied with outsourcing than the other industries in our study. Ironically, the manufacturing companies in our study collectively say that they achieve value for money with their outsourcing efforts. However, they are slightly more likely than average to have an outsourcing strategy and as we have seen, this is one of the cross-indicators for achieving value for money with outsourcing.

Manufacturing is also the industry which is more pro-active about finding sources of external technology or innovation. It's within the manufacturing industry where we tend to see "scouts" who are deliberately tasked with finding promising new technologies. They are aware of the power of leveraging external researchers and developers. The desire is there. The difficulty seems to be in both anchoring that promising technology with internal stakeholders as well as formulating the business model for doing so.

The traditional business model has been 100% ownership of IPR. The problem is that this model may not be the most applicable for leveraging a robust and sustainable external value chain. The manufacturing industry's challenge will be to develop and employ a larger portfolio of business models so that the true advantages of knowledge-intensive outsourcing can be achieved.