

The Fronteira Post

Economic Policy & Corporate Competitiveness

Why Not Outsource Your Corporate Research Function to Gain Competitive Advantage?

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- Power J. Mark et al (2006).

Is Your Research Department Dead?

Perhaps you are not performing as well as you ought to because your corporate research and development unit does not possess the competencies that would orchestrate new vista of business opportunities for your firm. Perhaps you have also tried to inject this obviously missing capacity into the firm's value-delivery processes but not much has changed. The challenge you are facing is probably persisting because you are undecided on doing the right thing: outsourcing your organization's research and development functions to firms that are more suited to deliver on the mining of new profitable business opportunities for your organization's enhanced competitive advantage. This may sound brash but it is true. Try and give it a second thought!

Ordinarily, research and development outsourcing is contracted in order to deal with the challenges of meeting overall corporate goal as well as the absolute and implicit costs associated with carrying out the R&D services in-house. Realistically however, the associated cost saving and fast-return expectations can sometimes be very unrealistic as they depend on a lot of variables outside an organization's control, albeit that the variables that it can control in the overall cost saving and returns-generation model are strongly impactful. In spite of this, attempts by organisations to manage this cost internally without regards to the obvious deficiencies of intelligence generating

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capabilities can considerably affect the overall research delivery process. The end result is less than optimal performance by the research team. This sub optimal performance outcome is quite prevalent among "so-called" corporate research and development departments as many of them have improperly articulated and developed research/analytics delivery team and structure. Often times, research and development functions are not perceived as core to the firm's everyday operations, and therefore do not receive the kind of attention which is required to enable them support business lead generating potentials. When these benefits also appear undelivered, the research and intelligence group becomes further alienated. This vicious cycle is sustained and may lead to an ultimate shutting down of the unit if unfortunately any negative shock occurs.

This scenario played out within the capital market and to a large extent most industries that were directly hit during the 2008 and 2009 financial/economic meltdown. The immediate and expected response of many of these organizations was to reduce costs, and the first lines of casualty were the research departments. The reason was quite obvious and consistent with the thinking that these departments were not value-adding. The idea of value-added capabilities is subject to series of debate. Most CEOs do not even understand what a typical research and development unit should be doing. To over 70% of the operators in the financial services market, a documented forecast of share prices would do. To some, good write-up in the market would equally do. Some would also expect the department to combine these activities. The implication is that most of these departments end up reporting over-rehashed trends in economic indices, market performance etc which also unduly further pressure the company's cost exposure. Worse still is that majority of the persons who manage these research and intelligence departments understand very little of the demands of best practices in business research not to talk of distilling intelligence that provide good business leads, enhance corporate innovation and profitable creativity.

In the course of my career, as head of research and intelligence at BGL Limited, Restral Consulting, Bank PHB and in working at the Lagos Business School in mid-1990s, I have come to realize that most firms will maximize more benefits from their strategic research and intelligence units if they outsource most of their data acquisition, management, processing and business intelligence to specialist firms that have the necessary competitive advantages, technical

competences, expertise advantages and the full-complements of the analytic infrastructure. Under this kind of arrangement, a major performance indicator for evaluating and retaining the services of the outsourcing contract executing firm will be the volume and frequency of business leads and profit-rewarding opportunities that had been created. The essence of having a research and intelligence department is strictly to help in un-earthing insights that will open up new vistas for profit-making. If any research and economic intelligence department cannot live up to this, then their strategic relevance and need for continued existence ought to be re-examined. Outsourcing research and development will enable entrepreneurs to be able to wring out from the company to which it has been outsourced, every drop of possible profit generating value.

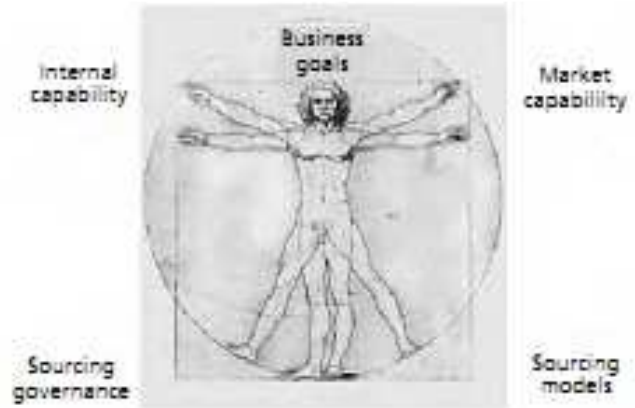
Why Outsource?

“As a business practice, outsourcing is flourishing in almost every conceivable domain. Organizations today outsource software development, innovation and research and development efforts and even functional areas such as marketing, human resource administration and finance and accounting. Outsourcing of knowledge-intensive work is increasing at an astonishing rate. Just a few years ago, you would never have heard of companies outsourcing their research and development (R&D) areas; today, this is quite common. Moreover, outsourcing R&D even occurs when organizations realize that this is their core competency, i.e. the key differentiator between them and their competitors. The rationale is quite simple – an organization had better seek out and form alliances with companies that have mature processes in place, even in the areas of its core competencies, if it is to take advantage of the added value of mature practices.”²

The above excerpt has in a more general sense, explained why organizations delegate some of the processes or functions handled internally to an external service provider? There are however a few more reasons which can be gleaned from the adaptation of Gartner’s five key dimensions of strategic sourcing³ namely business goals, internal capability, external market capability, sourcing models and sourcing governance. Gartner’s graphical

representation of this complex sourcing scenario is presented in figure 1.

Figure 1: Gartner’s Sourcing Dimensions



Source: Patel and Aran (2005)

The need for an organization to achieve its overall business goals is clearly a primary driver for the search and acquisition of all relevant capabilities that will enable it achieve same. Business values perceived to be necessary for success are co-opted if they are external through varieties of sourcing arrangements. Such differentiator is research which is key to the discovery of new knowledge that enables organization to discover new markets and sustainably innovate. This reason also supports the next which primarily recognizes the fact that the rapidly evolving needs in a connected economy most times requires capabilities which are not domiciled within the firm in the form and at the size that will ensure that such changes in the competitive landscape are sufficiently dealt with. Consequently, “sourcing strategy must help organizations to bridge the gap between the capabilities required to succeed in this fast-changing world and its internal capabilities.”⁴

Furthermore, since the market for certain activities lie outside the immediate control space of particular firms it is therefore required that the expertise of firms that can navigate through these external market spaces to effectively play therein are sourced. Good examples may include web-based activities of firms that are typically outsourced to competent web-management organizations. Against this background, sourcing models will be designed to define the modes for delegating desired functions to external service providers.

² Power J. Mark et al (2006). ‘The Outsourcing Handbook: How to Implement a Successful Outsourcing Process’. Kogan Page. Pxxiii

³Patel B. Alpesh and Aran Hemendra (2005). ‘Outsourcing Success: The Management Imperative’. Palgrave Macmillan. P44.

⁴ ibid

Furthermore, it will also be good to point out that typically the service efficiency inherent in the capabilities of the firms to which the research and development service has been outsourced will reflect in more cost savings. Ideally, experienced experts in a field should be able to produce more value at cheaper rates which will in turn rub-off positively on the firm outsourcing the service. What it therefore means is that the achievement of the strategic goal of an organization is over-arching in the decision to outsource particularly as it is expected that such decisions should reduce costs.

Is Your Department Researching or Merely Reporting Statistics?

I have tried to classify the typical corporate research and development functions by their stages in learning and in doing!! Two frameworks adopted for this analysis are the Blooms’ taxonomy of learning domains and the traditional business analytics evolution pathway. The use of bloom’s taxonomy is to evaluate the stages in organizational learning in the area of research and business analytics. Typically the taxonomy has six stages which shows the various domains in learning. See Table 1.

Table 1: Adaptation of the Bloom’s Taxonomy to Corporate Research Learning⁵

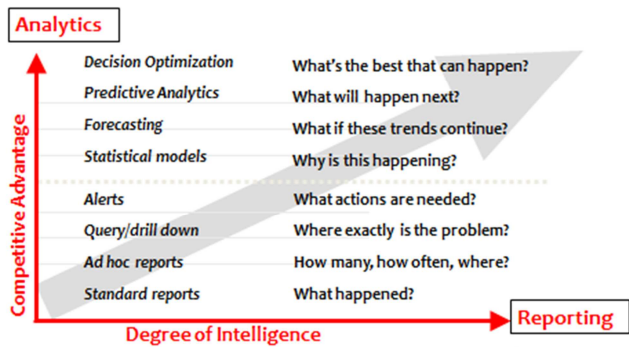
S/No.	Category	Meaning	Adaptive example	% of Firms
1.	Knowledge	Recall data or information.	For Instance, repackage macroeconomic data as presented by either the CBN or the Nigerian Bureau of Statistics and send them out to customers as research work.	80%
2.	Comprehension	Understand the meaning, translation, interpolation, and interpretation of instructions and problems. State a problem in one's own words.	For example being able to present the same macroeconomic data differently say as charts or the trends in the statistics over a period of time.	10%
3.	Application	Use a concept in a new situation or unprompted use of an abstraction.	Apply the knowledge of the macroeconomic statistics as given to explaining other phenomena or events that are taking place within the economy.	5%
4.	Analysis	Separates material or concepts into component parts so that its organizational structure may be understood. Distinguishes between facts and inferences.	Find out the make-up of the various statistical indicators for instance the make-up of the reported composite price index or the constitution of the GDP in order to better appreciate magnitudes and sources of observed phenomena.	3%
5.	Synthesis	Builds a structure or pattern from diverse elements. Put parts together to form a whole, with emphasis on creating a new meaning or structure.	Identify the sources of patterns discovered in constituents parts of the indicators with a view to finding out ideal composition and areas of sustainable improvement if need be.	1%
6.	Evaluation	Make judgments about the value of ideas or materials.	On the basis of the above come up with policy suggestion or suggestions on strategic improvements.	1%

⁵<http://www.nwlink.com/~donclark/hrd/bloom.html> (Browsed on 2/1/2012). The adaptive examples are mine.

Although the above firm participation frequency at each stage was based on my unofficial guesses, those who have closely observed activities and performances of the research and intelligence units of many firms in Nigeria will realize that the guesses are not far from the truth. Perhaps, in the future we may subject those suppositions to more empirical assessment. There is however another way to look at it. Turning to the business analytics process pathway will reveal almost the same patterns although in a slightly different way. Thus while the Bloom’s taxonomy is adopted to understanding the level of learning exhibited by the research and development units, the analytics pathway reveals the doing levels which is predicated on what has been learned. Figure 2 shows a pathway from standard reporting (the equivalence of knowledge in the bloom’s taxonomy in table 1) all the way to full decision optimization. Just as in the adapted Blooms taxonomy above, most (over 80%) of the research departments of most companies in Nigeria do not carry out analytic operations that are advanced beyond the second stage of data processing and analytic inquiry. Most research and development merely produce standard and ad hoc reports.

Figure 2⁶: Business Analytic Pathway

Business Analytics Explained in a Graph



Source: Davenport and Harris (2007)

Apart from a few firms that have expatriate investor origin and a handful of local firms with reasonable investment in research and development, rarely have we seen research departments that ask further questions such as “why is this happening” using appropriate statistical models. Even this category of those who ask such questions does not constitute up to 1% of the entire corporate research and development universe in Nigeria. Of course the hunches and guesses

⁶ Davenport H. Thomas and Harris G. Jeanne (2007). ‘Competing on Analytics’. HBS Press. P. 7

that tend to replace appropriate analytic inquiry, are always used to determine the reasons for certain occurrences. As anyone should expect, the resulting outcomes are always less than optimal. It is not that those outcomes will be written away as wrong, but ideally such guesses ought to be predicated upon and be driven by some level of statistically generated evidence. Similarly, rarely do we have firms really keen on finding out what is likely to happen next using appropriate predictive analytics techniques and infrastructure.

The question now is: how much business leads can you get from a research department without substantial capacity for predictive analytics? How much intelligence can they generate? It is the capacity to answer key corporate market intelligence searching questions such as: why is this happening? what if these trends continue? what will happen next? what is the best that can happen? that they can unearth hidden business opportunities in a way that gives their organizations the much desired competitive advantage. Recycling ad hoc or standard reports only signals the physical presence of research capabilities while the true ‘altar’ and ‘spirit’ of corporate research and development in most instances are non-existent. Organizations with such research departments should either restructure by realigning the research delivery process to satisfy the firm’s strategic goals and expectations as well as retrain those involved to be able to deliver desired intelligence. Typically, good entrepreneurs will expect such structural re-alignments and capacity enhancement to result in a result oriented marketing, lean production, cost reduction, maximum output generation, workforce optimization etc. Where the research department does not seem to possess the capacity to deliver on these expectations even post-restructuring, the function is best outsourced to dedicated research and business analytics focused firms⁷.

What Must You Outsource?

Any and every stage in the data management and processing service chain can be outsourced. Data generation and acquisition, data warehousing, data understanding, data preparation, modelling and evaluation, analytic model deployment all of which are typically found within the research function can be treated independently and outsourced. It will be important to point out that in larger firms, some of

these functions are no longer under the control of the research unit but constituted into enterprise databases which are typically managed by the information technology units. Nevertheless, any analytically conscious organization should give access to relevant constituent units to carry out some analytic work where necessary and where they possess necessary competencies provided it is very strategically risky to do so.

Whatever the case, in medium sized firms and even for the large firms, research and intelligence units always do have access to centrally hosted data or own generated data managed within its own servers.

Borrowing from our own experience, we have had to provide consulting services on different activity stages as if those activities existed independently of the other. We have also managed the entire research delivery chain subject to client specifications and under varying terms depending on the goals and protections required by the firm. It all therefore point to the fact that organizations ought to study and understand their peculiar research and intelligence capability contexts and accordingly determine for themselves which stage or stages of the research function that they may need to outsource to other firms.

Another important consideration pertains to the cost saving and associated benefits. Although the issue of performance expectations from the research/analytics firm handling is discussed in the section below, mention need to be made that if the combination of cost saving and new business generation from the newly outsourced departments are not consistent with the expectations of the firm, it may not be a worthwhile venture. Decision optimization firms that are worth their oil should possess unique capabilities to quickly distill out intelligence that will enable firms to launch into new paths of success with massive competitive advantages. These unique capabilities encompass both the understanding and experience in authentic/rigorous research, business analytics, logic and sound economic theory as well as cutting edge informatics infrastructure.

Performance Measurement of the Sourced Firm

If a firm does not have clear deliverables on the aspect of its strategic process that it intends to outsource, as well as clearly articulated metrics for evaluating the achievement of these deliverables, then it is not yet ready to outsource. In our several engagements with organizations, one of the assistance we always provided was the articulation of deliverables that

⁷ ValueFronteira Limited provides enormous research management support to firms. We also help with the restructuring of research units for enhanced performance.

completely zero into the actualization of the firms' strategic dream. Armed with that, we also assist firms with the design of metrics and performance indicators for measuring the success achieved in each of those deliverables. This is not any different in the outsourcing of the research and analytics function of an organization.

The primary deliverables that must be extracted in the research outsourcing deal is that the outsourced function must result in frequent and robust development of winning market/business leads. Essentially, the primary objective of setting up a research and intelligence unit in any organization is the expected generation of new business ideas that are easily convertible into actual profit-yielding businesses. In sourcing for a research management vendor, it must be obvious that such a vendor has the capacity to ultimately orchestrate a flurry of new and exciting business opportunities that generate prosperity.

A second important consideration is the cost saving benefits of the outsourcing arrangement. As mentioned earlier, the sourcing of competent research firms should reflect in actual optimized efficiency. Firms are keen on competitiveness optimization and will like to have as much additional value as possible at lower cost where possible. It is my conviction that experienced providers of research management services should have the capabilities to deliver high quality business/policy research output at lower cost. Therefore, a cost-saving deliverable must be incorporated into the deliverables that such a firm will have to sign up to. A point of order! Cost saving here is actually in a relative sense. A better way to look at it is from the prism of improved value for money.

The third deliverable is organizational reputation and visibility. This expectation applies much more to firms that try to externalize their own branded publications as a way of enhancing their visibility. While this has improved on the visibility of some firms, it has actually destroyed the reputation of many firms by exposing their capability-inadequacies. Research outsourcing with visibility and reputation promoting goals must ensure that the ultimate research outputs not only meet the highest levels of stakeholder quality expectations but must be truly visibility and reputation promoting. The balance of the actions needed to create maximum positive perception and visibility such as determining where and how such research output get into the hands of the desired audience will actually depend on the outsourcing firm except where the

research firm has added contracted responsibility in that regards.

The fourth deliverable will ensure that even though the research and intelligence capabilities of firms are sourced externally, it must have capacity to enhance organizational learning. What this means is that the outsourced function should not be positioned as a process that is fully divorced from the organization. How can this be achieved? In a model we ran with Goldbank Management Associates in 2009, what we did was to appoint a Research Liaison officer who had coordinating responsibility for the research process. Essentially what the role entailed was the identification and compilation of the research needs of the various functional units in the firm and communication of those identified research problems to us for solutions provision. In turn we would pass the solutions as requested through his office and in turn fix a date to meet with the various unit heads to discuss what we have done, why we adopted any particular methodology / technique, how to interpret the results, how to use it and the business leads and opportunities which we have identified.

In summary, therefore for any organization that intends to capture as much differentiating value from research and analytics, the deliverables can be much more than these. Nevertheless, these are considered fundamental. Reeling out the deliverables however is not where the challenge lies but in determining whether these deliverables were actually delivered by the sourced research management firm as agreed. Accordingly, the agreement of clear metrics for evaluating performance on each deliverables as well as the actual evaluation using such system of performance indicators is even more important.

Next Steps

It is known fact that knowledge is the last competitive advantage as it opens the door for creativity, innovation and new business opportunities. The search for that knowledge and the fruits which it should bear has led organizations to establish research and intelligence units. But the challenges associated with a rapidly changing rivalrous business landscape and the limitations of internal capabilities, external market knowledge etc have made the external sourcing of research and intelligence activities indispensable and inevitable. There is no good entrepreneur that would allow a dysfunctional research and intelligence unit that does not open up new market opportunities and or at worst enhances its reputation and visibility to stay and upwardly pressure its costs of doing business. It is

also my own submission: in uncertain times like this, that businesses must force its research and intelligence units to authentically lead it to prosperity through the discovery of new business opportunities. Where such is not possible, such units should be shut down and its activities be transferred to an external provider of such service. Perhaps decision makers may in sequencing its actions under such circumstances may need to be made to structure the operations but from experience, such restructuring efforts yield very little results unless the leadership research departments is overhauled.

The next step really is for business leaders to ask themselves this critical question: what new business generating value does my research and intelligence department bring to my organization? What new vistas of opportunities have the research and intelligence unit ushered into the organization? The will of a decision maker to cut costs and maximize value through this decision is at the heart of the truth that will make the firm acquire the much needed competitive advantage.

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ValueFronteira is a competitiveness optimization firm that leverages the techniques of data mining, business research and economic science to provide robust insights that enable decision makers to achieve accelerated innovation and sustained competitive differentiation.

Our service offerings comprise the following:

1. Competitiveness strategy design and implementation, driven essentially by data-mining, economic theory and business research methods;
2. Marketing research, competitive intelligence, value chain analysis, industry analysis and other strategic business studies;
3. Economic policy research and project impact analysis;
4. Intelligence gathering and analytics for fraud, criminal detection and counter-terrorism;
5. Training on business analytics, research methods and executive economics.

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