

**PROSPECTS AND CHALLENGES OF OUTSOURCING IN THE
CONTEXT O POWER GRID COMPANY OF BANGLADESH LIMITED**

A Dissertation

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Submitted to

**BRAC Institute of Governance and Development,
BRAC University**

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Declaration

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Abstract

Power Grid Company of Bangladesh Limited is an Autonomous organization of Bangladesh which is responsible for the transmission of all generated power all over the country. The company is an entity of Power Division under the Ministry of Power, Energy and Mineral resources of Bangladesh. The vision of PGCB is Economic upliftment of the country by reaching electricity to all through reliable transmission.

Cost reduction, efficiency and effectiveness is the main concern of every organization. As a result, most of the organization is now focusing on how cost could be minimized without compromising with the product or services. Most of the organizations now prefer outsourcing for the non-core activities such as security service, cleaning, catering, call center maintenance service and transportation etc. to concentrate more on core activities.

Outsourcing has numerous benefits such as improving the quality, cost reduction, using the technology of the supplier, budgetary control, lower cost of capital, improved resources, concentrating more on core activities, lower administrative cost etc. Outsourcing has some risks and challenges also. The main challenges are internal resistance of the organization, employee regulation, choosing the right supplier etc. There are some risks also which could be losing of skill staffs, loss of control, problem of replacing supplier, legal issues etc.

PGCB is the largest organization in power sector with a man power of around 3000 persons. It has huge infrastructure such as sub-stations, transmission lines, offices and other assets. As per the power sector master plan, 2016 within 2021 the generation of power will be 24000MW, within 2031, 40000MW and within 2041, 60000MW. To transmit this power all over the country PGCB will require huge number of resources and existing manpower will have to be four times. The present cost for a regular employee is higher than other companies including other benefits. If the number of employees increases the cost will be increase more. Different infrastructures of PGCB are KPI areas. As a result for the safety of these structures huge numbers of security staffs are required. For periodic and emergency maintenance around one fourth of the total employees are engaged. If the security service and part of the maintenance service is outsourced to the third party service provider whose core tasks are these, it will save huge cost and time for PGCB. As a result the transmission loss and availability of sub-stations will increase which will impact on the

profit margin of PGCB. Implementation of outsourcing in PGCB is a difficult task because of the internal resistance from the CBA, risk of losing key technical staffs, choosing wrong suppliers, replacing existing suppliers etc.

This research is an approach to find out the prospects and changes of outsourcing in PGCB in the light of procurement and supply chain management.

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Abbreviation

PGCB	: Power Grid Company of Bangladesh
CIPS	: Chartered Institute of Procurement & Supply
TUPE	: Transfer of Undertakings and Protection of Employment
HRM	: Human Resource Management
KPI	: Key Point Installation
CBA	: Collective Bargaining Agency
PPP	: Public Private Partnerships
BPO	: business process outsourcing
SCADA	: Supervisory Control And Data Acquisition
OPGW	: Optical Ground Wire
NLDC	: National Load Dispatch Center
PLC	: Power Line Carrier
KV	: Kilo Volt
MW	: Mega Watt
GMD	: Grid Maintenance Division
IT	: Information Technology
SCM	: Supply Chain Management
TCO	: Total Cost of Ownership
KPI	: Key Performance Indicator
SME	: Small and Medium Enterprise
GoB	: Government of Bangladesh
ADB	: Asian Development Bank
WB	: World Bank

JICA : Japan International Cooperation Agency
IDB : Islamic Development Bank
DoFA : Delegation of Financial Authority
TK : Taka
UK : United Kingdom

Chapter 1: Introduction & Methodological Context

1.1 Introduction

Cost reduction and effectiveness has caused most of the organizations to be specialized in the limited number of crucial areas. This will pave the way for the organization to move towards outsourcing activity. Traditionally, outsourcing has performed mainly for the peripheral activities such as cleaning, catering, security and so on. But now it is mainly focused on more crucial activities of the business such as design, manufacture, marketing, distribution and information system. It is considered that outsourcing is the best way to reduce cost and improve performance.

The aim of outsourcing is to ensure that expert service providers are used to optimise the cost effective delivery of those services. Outsourcing should always be approached with a view to improving value for money rather than simply to save money without regard to the effectiveness and quality of service.

Outsourcing is a common practice among both private and public organizations and is a major element in business strategy. Perhaps most organizations now outsource some of the functions they used to perform themselves. Organisations may expect to achieve many different benefits through successful outsourcing, although there are significant risks that may be realized if outsourcing is not successful. Implementing outsourcing is a challenging task because of internal and external resistance and as well as regulatory bindings such as TUPE regulation.

Outsourcing has been a global trend in business for several decades. Outsourcing can provide major benefits for organization and can add values for customer perspective. Outsourcing of facilities, catering or call center, security or cleaning is advantageous in most cases. One thing to remind that the risk and vulnerability of these items are minimal.

Core competence has received much attention of theorist and management team as strategic choice. Now it is claimed that concentrating on core competencies and outsourcing the rest is a recipe for success. Outsourcing plays an essential role in company performance.

The main focus of this study is to relate the relationship between core-competence thinking and outsourcing decision and find out the impact of outsourcing on company performance. The framework of outsourcing will then be discussed and followed by recent trend of core-competency approach. Relationship between outsourcing and core competence will be evaluated as per impact on performance of the organization.

As PGCB has a lot of activities throughout the country and the main responsibility is to transmit generated electrical power and optical fiber leasing, so it could be considered as core activities. Besides this there are a lot of non-core activities such as security service, drivers etc. So, it is

required to analysis the prospects and challenges of outsourcing non-core activities of the organization to concentrate more on core activities.

1.2 Objectives of the Study

a) Broadly, the research objectives are:

- To find out the current state of outsourcing in the context of Power Grid Company of Bangladesh Limited with a special focus on its prospects and challenges.
- To find out the differences (in terms of the key factors identified), between those that have Outsourced and those that have not with survey-based input from a range of procurement Professionals working for Bangladesh based organisations.
- To find out the impact of outsourcing and resistance for implementing outsourcing.

1.5 Research questions

The research questions developed after understanding the problem are:

- What are the prospects of outsourcing of Power Grid Company of Bangladesh Ltd. (PGCB)?
- What are the key factors need to be considered to implement outsourcing in PGCB?
- What will be the benefits for PGCB if some of the non-core activities are outsourced?
- What are the challenges of implementing outsourcing in PGCB?

1.3 Justification

There has been limited research on the subject; and this study may offer important policy lessons. PGCB is the only government own organization which is responsible for power transmission in all over the country. The core tasks of the organization are plan, promote, develop, operate and maintain an integrated and efficient power transmission system network in all its aspects including planning, investigation, research, design and engineering, preparation of preliminary feasibility and detailed project reports, construction operation and maintenance of transmission lines, substations, load dispatch centres and communication facilities and appurtenant works, co-ordination of integrated operation of regional, national and international grid systems, providing consultancy services in power systems field, execution of turnkey jobs for other utilities / organisation, wheeling of power, purchase and sale of power.

PGCB has grid sub-stations, transmission lines, offices, stores and other infrastructures in different locations of the country. As all these are Key Point Installation (KPI) area of the government, so, it requires proper security service. For operation and maintenance a lot of

transport is required as a result huge number of drivers are employed here. For operation and maintenance of these huge numbers of existing sub-stations it requires a huge number of support staffs. Several mega projects are going on and several are in the queue. As a result the number of Sub-stations and transmission line will increase in a remarkable number in the upcoming years and more and more operations and maintenance personal will be required in the recent future.

As per the power system master plan of the government the generation of the power by the year 2021 will be increased to 24000MW and by the year 2041 the generation will be increased to 60000 MW. All these power have to be transmitted by PGCB in a cost effective way. For this already fifteen projects are going on and more 17 projects are coming soon.

As huge resources are required to fulfill this task it will help PGCB to concentrate more on core activities and to increase quality, reduce cost if some of the non-core activities such as security service, drivers and maintenance are outsourced to third party service providers who are experienced in these fields.

In PGCB it will be challenging to implement outsourcing because a number of stakeholders are involved with this such as Collective Bargaining Agency (CBA). A lot of internal and external pressure has to be faced. As the infrastructures are KPI area there is also a concern of security and Intellectual property right because the third party service provider will work in the restricted areas.

Another main concern is about the fulfilling of the vision of the Government. As power is most important factor for industrialization and development of a country and PGCB has the responsibility to transmit this power from generation to distribution in all over the country, so it is very much important to be cautious about any unwanted incident happening in this sector.

This paper is an attempt to find out the prospects and challenges of outsourcing in Power Grid Company of Bangladesh Ltd. (PGCB).

1.4 Research Methods and Tools

The study has been explorative in nature. The report is the reflection of guidance of course supervisor and organizational supervisors. The area of my study has been covered prospects and challenges of outsourcing maintenance services, security service and drivers of PGCB, which are based on primary and secondary data. Primary data has been collected by questionnaire and interviewing employees, other procurement professionals, experts in power sectors etc. The sources of secondary data has been the analysis of Past studies and other existing data assembled,

Text books, Reference books, Published journals, Articles, company website, annual reports, internet etc.

Several tools has been used for this research such as Secondary literature review, Interview with semi-structured questionnaire, Personal observations etc.

For Secondary literature review several past studies, text books, journals, magazines and different websites has been used.

For semi-structured questionnaire a survey questionnaire has been prepared comprising of ten questions and 25 participants has given their valuable opinions. The target people were employees from different level of the organization as well as from the experienced persons in the field of procurement from other organization.

The author has been working in the organization for about five years. By working in different departments he has gained enough knowledge. From the personal observations and experiences he has given a good number of inputs in this research.

Chapter 2: Conceptual Review

This chapter provides a conceptual overview of the key concepts and theoretical ideas used in this study. The discussion is organized into four sections. The first section reviews the concept of „outsourcing“. In this section Introduction, definitions and explanations, drivers, outsourcing features, arguments and problems with outsourcing has been discussed. The second section reviews the concept of Organisational competence. In this section few examples of organizational competence and core competencies has been discussed. The third section reviews Outsourcing and Competencies. In this section the factors that influence make/do or buy decision, the contribution of SCM to make/do or buy decision and outsourcing strategy and outsourcing decision making framework has been discussed. The fourth and final section reviews a process for outsourcing considering core competence. In this section strategic analysis, selection of target areas, specification of the requirement, supplier selection, implementation & review and ongoing relationship management has been discussed.

2.1 Outsourcing

2.1.1 Introduction and Basic Concept of Outsourcing

Outsourcing is a common practice among both private and public organizations and is a major element of business strategy. Many organizations now outsource some of the functions they used to perform internally previously. Due to widespread outsourcing practices, it has then become an important topic in the literature. Organizations may expect to achieve many different benefits through successful outsourcing, although there are significant risks of unsuccessful outsourcing.

The basic premise of the concept of outsourcing, according to Jennings (1997); Smith (2007); Quinn (2000), is that a specialist organization can perform a particular service more efficiently than what internal operation can achieve because a specialist organization has an inherent advantage in producing and delivering a service. Superior technology, management skills, or economic of scale may contribute this perception. In reference to the work of Gottschalk et al., (2005); McIvor (2005) and Tompkins (2005), the concept of outsourcing non-core business functions is a complex issue, consisting of numerous activities and sub-activities, carrying many managerial dilemmas. It is no wonder that many theories have been utilized to help the academics to understand the nature of those activities, and to help practitioners successfully manage their outsource services.

2.1.2 Definitions and Explanations of Outsourcing

There are many definitions of outsourcing viewed from different perspective. Outsourcing may be defined as the process whereby an organisation delegates major non-core activities or functions, under contract, to specialist external service providers, potentially on a long- term relational basis. Outsourcing is thus the ultimate expression of a buyer's attitude to the supply chain as an extension of in-house resources, as seen in the concept of supply chain management.

CIPS defines outsourcing as "the process of contracting with the most suitable expert third party service provider".

It can take a multiplicity of forms including designing, constructing, managing, financing (PPP (Public Private Partnerships) being one example), administering and providing the service in question. It can also involve the transfer of assets (including human resources). Outsourcing also involves ensuring that all linkages to internal operational departments and customers are seamlessly implemented.

There are other definitions also. Such as "The provision over the longer term of non-core business processes by an external provider of such processes to an organisation which needs them but does not wish to do them any longer itself." (Alder, 2014)

"The placing of contracts with third party service providers to deliver essential support services to an organisation which is normally dependent on such services to be able to achieve its own core business objectives. The aim of outsourcing is to ensure that expert service providers are used to minimize the cost effective delivery of those services. Outsourcing should always be approached with a view to improving value for money rather than simply to save money without regard to the effectiveness and quality of service". (Alder, 2014)

The term business process outsourcing (BPO) is given to „the transfer of responsibility to a third party of activities which used to be performed internally“ (Ellram and Maltz, 1999), mainly back office and front office functions (such as IT, HR, accounting and procurement).

The term facilities management is given to outsourcing solutions in which the customer transfers to an external services provider the responsibility for the operation and maintenance of one or more facilities

The term shared services is given to the outsourcing of a business function to an expert internal department or unit. For example, the procurement unit at one plant may provide procurement services to all sites within a manufacturing company- as well as to external third-party clients.

The term managed services is given to the outsourcing of responsibility for managing service operations and project activity. In the construction industry, for example, it is common for a single main contractor or lead provider to be appointed, whose task is to identify, commission and manage appropriate subcontractors (or lower tiers of the supply chain).

The term in-sourcing is given to the reverse process: the transfer of an outsourced function to an internal department of the company, to be managed by employees. This may include „competitive in-sourcing“, whereby internal employees bid against third-party providers for a defined scope of work.

The strategic view, discussed by Hamel and Prahalad in their work *Competing for the Future* (1994), encourages organization to identify their core business- the parts of their business that are at the heart of their operation and where they excel and build on this. Areas outside this should be considered for outsourcing to providers who consider the outsourced area their core competency.

2.1.3 Drivers for outsourcing

A number of factors may be seen as contributing to the growth of outsourcing. The key drivers for outsourcing are-

- **Quality drivers:** increased quality demands, lack of capability to secure quality in the short term, and the potential for outsourcing to „bridge the gap“ by providing transitional resources and capacity to meet demand
- **Cost drivers:** the potential of outsourcing to control or decrease costs, supporting competitive advantage (e.g. on the basis of cost leadership)
- **Business focus drivers:** the use of outsourcing to enable the organisation to focus its effort and resources on primary value-adding and revenue-generating activities (in Porter’s „value chain“ model), rather than secondary or support activities
- **Financial drivers:** the need to free up (limited) capital funds for investment in competitive, value adding business activities
- **Relationship drivers:** the need to minimize supply chain conflict and divergence of interest, by clarifying responsibility for shared activities, through outsourcing
- **Human resource drivers:** the need to acquire skills, expertise and experience relatively swiftly, compared to in-house recruitment and development; and possibly also to by-pass internal resistance to necessary changes in work processes and structures.

2.1.4 Outsourcing Features

Sometime outsourcing is confusing with subcontracting and service contract. A number of factors distinguish outsourcing from service contract and sub-contracting.

Duration of contract is long-term for outsourcing.

- Suppliers are autonomous to perform their task but scenario is different for other cases.
- Responsibilities is transferred to external organization in outsourcing
- Transfer of employee is possible for outsourcing. In this regards United Kingdom has circulated new regulation, TUPE(Transfer of Undertakings and Protection of Employment)
- Very close long-term relationship with supplier for outsourcing but typical relationship in other cases.

Special features have come out in many researchers' work such as

- A close link between outsourcing process and the key success factors of a firm in an Industry.
- A long-term commitment between the client and the service provider. Previous research, based on more than one hundred major contracts, shows average contract duration of 6-7 years.
- The transfer of ownership of a business function previously 8 internalized, often including a transfer of personnel and physical assets to service provider.

2.1.5 Argument for Outsourcing

The arguments in favour of the outsourcing approach are:

- Enhanced budgetary control.
- More accurate cost forecasting.
- The organisation is able to operate with a smaller workforce.
- Management is able to communicate more effectively on the important strategic issues.
- A greater awareness of, and focus on, customer needs.
- Reduced need for investment in material assets and labour.
- Places responsibility for a difficult/problem departments outside the organization.

Other benefits can be gained by outsourcing services to organisations which are specialists in the provision of the service in question including:

- More efficient and expert service leading to closer compliance with industry standards.
- Improved resources (professionally trained staff).
- Lower overall costs.
- Buying organisation better able to concentrate on core activity.
- Access to better technology.
- Access to specialist knowledge and staff.
- Access to lower cost of capital.
- Access to lower cost of capital.
- Adds competitive performance incentives, where internal service providers may be complacent.
- Leverage collaborative supply relationships, and can support synergies from collaboration or partnership.

However, full realisation of these benefits is dependent on a number of key variables, as follows:

- The degree of efficiency in the in-house service.
- An understanding of the true objectives.
- The elimination of complexity and „messy“ operations before outsourcing.
- The extent to which customers“ needs were already being met.
- The process used to determine the service provider and the outsourced requirement specification.
- Understand the real benefits the outsourced vendor will bring to the table.
- A well written and properly managed contract, eg with a service specification which includes service descriptions and levels.
- The service level agreements reflecting the objectives of the outsourcing.
- Both the criteria for the outsourcing and performance against the service level agreements

being regularly reviewed throughout the contract duration, not least at the beginning.

- Actively manage the ongoing relationship.

Pearson (1999), in his publication „Outsourcing with Effective Contracts“ is of the opinion that the most important benefits are as follows:

Expertise

Careful contractor selection is a key requirement and, if that is achieved, the standard of service might well be higher than that previously provided by the outsourcing organisation. For example, the contractor providing catering facilities might have access to a broader range of food or be able to offer better menus than the in-house catering staff, which are catering for a smaller number within one organisation only.

Resources

The contractor is likely to have been providing the service over a substantial period of time to a range of outsourcing organisations and to have obtained levels of expertise and experience beyond the compass of the in-house provider. The contractor might invest more in training and development than an in-house provider is likely to do.

Compliance with Standards

It may well be easier to ensure compliance by an external contractor with standards or contractual conditions than it can be when controlling employees. Employees, although obliged to follow the reasonable orders of their employer, are not likely to be subject to the same incentives as a contractor to perform to standards, meet targets, earn bonuses and win further work in future.

Devolution of Responsibility

Responsibility for work progress and quality can largely be handed over to the contractor, giving the outsourcing organisation greater freedom to concentrate on its core business without having specialist managers distracted by involvement in other activities.

Cost Savings

A specialist contractor should be able more readily to provide the benefits of economies of scale, bulk buying and the lessons learned through experience of how to produce more cost-effective performance of the work concerned.

Fewer Staff Problems

Many troublesome HR issues such as absenteeism can be transferred from the outsourcing organisation to the contractor.

2.1.6 Problems with Outsourcing

Time and Effort Choosing and Managing

Management time will need to be allocated both to choosing the contractor and in ensuring that the obligations entered into both by the contractor and by the outsourcing organisation are met. This may take up a significant amount of management time if it is to be truly effective.

Losing Key Skills

When a service is outsourced for the first time, the provisions of TUPE will apply. TUPE is the Transfer of Undertakings (Protection of Employment) Regulations 1981, which implemented in English Law the requirements of the EU Acquired Rights Directive. Under TUPE the employees providing the service in-house might have the right to transfer with their work to the new employer (the contractor). The outsourcing organisation might therefore lose the skills which it has built up over the years in managing that area of its noncore business internally and as a result become too dependent on the contractor.

Loss of Control

The outsourcing organisation will not have such close control over those aspects of its business, which it has contracted out. This might not matter if the contractor does a good job, but it could mean that no-one within the organisation knows the market rates for the services and posts involved and an excessive level of reliance might therefore be placed on the contractor. Furthermore, the contractor might enter into transactions or do things in the name of the outsourcing organisation of which it would not approve and which might damage its reputation. This can be overcome by careful attention to the terms and conditions of contract.

Problems when Replacing Contractors

Difficulties can arise when the contractor is replaced. Although the contract between the parties can to some extent cover a hand-over period where a new contractor is found, termination and its management gives the company many more difficulties than if it had not outsourced in the first place.

Overlooking Policy Issues

If the non-core business area outsourced is handed over to the contractor to manage, the outsourcing organisation might lose sight of and not consider policy issues relevant to that area of business, simply because it is no longer directly managing that area. Thus, the broader picture of how that non-core business is operated might never be considered again after contracting out. The outsourcing organisation must make the necessary effort to put in place

procedures for regular meetings and reviews with the contractor to ensure the satisfactory progress for both parties of the outsourcing exercise.

Legal Liabilities

There is a risk of the outsourcing organisation being held liable in law for the actions of the contractor when they are done in the organisation's name. For example, the contractor might enter into other contract arrangements either as an agent of the outsourcing organisation, or in such a manner as will expose it to claims under the Contract (Rights of Third Parties) Act 1999.

2.2 Organizational Competence

Competencies refer to skills or knowledge that leads to superior performance. These are formed through an individual/organization's knowledge, skills and abilities and provide a framework for distinguishing between poor performances through to exceptional performance. Competencies can apply at organizational, individual, team, occupational and functional levels. Competencies are individual abilities or characteristics that are key to achieve the goal and reach the vision of the organisation.

The concept of organizational competencies is one of the most misunderstood and misapplied concepts in organizational management. Organizational competencies are often thought to be simply employee skills rather than the compelling cross company core competencies that drive integrated business execution and management alignment. Some of the greatest companies such as 3M, Google and Pixar have come to understand the power of identifying competencies and realigning all elements of the business to support them. The result is a clearly aligned team with prioritized focus on executing the company's core strategy.

Organizational competency is a term that has been used in the world of performance management for many years. It is routinely used by human resource professionals and by organizational change consultants to refer to the universe of employee skills that the company must have in order to achieve their plans.

Many companies define the required competencies based on the goals that are identified within the context of the strategic plan. A competency map is developed over time for each part of the business and, in sophisticated applications; managers can develop methods for tracking essential skill gaps in order to ensure that the organization is staffed appropriately to achieve its mission.

The concept of organizational competencies as traditionally applied is far too narrow to ensure that an organization is positioned to meet its strategic plan goals – let alone to meet and beat the competition

A broader definition of organizational competencies focuses on the first word – “organizational”. Under this definition, the organization becomes the focus. It is the organization as a whole that must perform – not just an individual employee. And so the definition of organizational competencies itself must change.

Under this approach the organization must step outside itself and evaluate, conceptually, what things, as an organization, it does on an ongoing, systemic basis that enables it to achieve its mission. Generally, but not always, the organization will have more than one such competency – but not many of them. In this context we can define organizational competencies as the combination of required skills, necessary information, appropriate performance measures and the right corporate culture that the company requires to achieve its mission.

Figure 2.1 Organizational Competencies are Not Just Skills



Source: www.cips.org

2.2.1 A few examples of Organisational Competence

Arriving at the right competencies often is an iterative process. A classic example is 3M Company – formerly Minnesota Mining and Manufacturing. 3M has become famous for their ability to foster a culture of innovation – which brought us Post-It Notes among other essentials in our daily lives.

Innovation

For 3M however, as with many companies, innovation doesn’t come easily. Over time they came to appreciate the critical importance of fostering a culture of innovation as the way to

ensure that they could reliably produce a stream of practical inventions that could be converted into commercialized products by the other parts of the company. And so they structured a large part of the company around the things necessary to stimulate innovation.

Famously, the company ensures that all engineers take time out of the workweek to advance creative projects of their own devising. When engineers see an opportunity they can then apply internally for funding – much like a venture capital model – to move the projects to they attract increasing levels of corporate sponsorship and support.

Google has also determined that innovation is a critical competency for their success and has designed the entire business to support it. But innovation is not something that individual employees can make happen through a defined skill set. Instead, innovation can only be achieved across the company if all parts of the company contribute.

Competitive Differentiation

A major media advertising company realized that they were selling what was becoming a commodity product. Their competitors were taking business away by differentiating their products in various ways. The company realized that having the entire organization focused on finding ways to differentiate what was basically a highly commoditized product was essential to their success.

So they had the finance department change the way they managed payment processing and payment inquiries, they changed the look of their invoices and payment details, they changed the way they handled telephone inquiries and they changed the timing of payments. The production department completely changed the way they provided support for small advertisers and the sales department bundled products and services differently to offer a major distinction from the competition – all of this was entirely customer centric and customer focused – and differentiated.

Creativity

Pixar has become a prime example of how a company can marshal all of its resources in support of an organizational competency. In the case of Pixar – the digital animation movie production studio, in the interest of creating a “culture of creativity” that they have deemed essential to their art and to their success as a business.

Pixar has designed a headquarters building that fosters creativity, it offers professional development classes to foster creativity, it encourages iconoclasts to foster creativity, it enables animators to design their own offices to foster creativity, they have designed production software that supports individual creativity while increasing efficiency and it organizes and runs meetings in a way that fosters creativity. Everything about the organization is run in a manner that supports the culture of creativity.

2.2.2 Core competencies

A core competency is a concept in management theory originally advocated by CK Prahalad and Gary Hamel. The concept of core competencies evolved from the resource-based view of the firm which emphasized the fact that competitive advantage rests on the firm's possession of unique quality difficult to imitate e.g. skills, knowledge, resources and competencies. These causally ambiguous inimitable capabilities serve to provide sustainable competitive advantage to the firm. This view emerged as a counterpoint to market structure analysis of competitive strategy.

Three criteria that distinguish a core competence from competence are as follows:

1. A core competence must contribute significantly to customer benefit from a product
2. A core competence should be competitively unique, and as such, must be difficult for competitor to imitate.
3. A core competence should provide potential access to a wide variety of markets.

A firm's core competencies are thus defined as a set of problem defining and problem-solving insights that foster the development of idiosyncratic strategic growth alternatives.

Core competencies when viewed as unique knowledge for problem definition and problem solving can form the basis of a firm's competitive advantage and can also be leveraged in a wide variety of markets for future products. The concept of core competencies is distinct from the traditional strategic thinking of competing for market share and also from Porter's low cost-differentiation Strategy. The competition in the product/market arena is essentially for market share.

Organizational competencies must pass three tests to be considered core competencies.

1. The competency must make a significant contribution to customer perceived value or to the financial health of the organization.
2. The competency must be unique or performed in a way that is substantially superior to its peers.
3. The competency must be capable of being applied to a range of new products and services.

Core competencies are determined by a business's tangible and intangible resources and its capabilities. But core competencies often have their roots in areas that are very hard to quantify. Qualities such as personality traits, background, and market pressure can influence an individual or business into developing the resources or capabilities needed to maintain a core competency.

2.3 Outsourcing and Core Competence

Outsourcing is a common practice among the organizations and is a major element in business strategy. The primary question is to choose appropriate activities for outsourcing which leads to a make-or-buy strategy. Make-or-buy decisions are normally considered as strategic decisions. However, there are many factors influencing the make-or-buy decisions such as quality, delivery performance, cost, flexibility and innovation. A good decision on buy or make could be made through investigating the available resources. Many researchers analyzed make-or-buy decision-making based on resource viewpoint where the decision is made by focusing on the firm's resources. In this chapter, I will discuss about the influence of core competence thinking on outsourcing decision.

2.3.1 Factors that Influence Make or Buy Decision

Outsourcing has close relationship with core competency. Many researchers proposed core competency as the make or buy decision making tools or factors.

Williamson argues that make or buy decision depends on comparison of transaction cost of every approach. The determinant of transaction cost is asset specificity. An asset is "specific" if it makes a necessary contribution to the production of a good and it has much lower value in alternative uses. There are various kinds of specificity including physical asset specificity, location specificity, human asset specificity, dedicated assets.

So what activities should -and should not- be outsourced? Drawing a range of arguments together, we can argue that strategic outsourcing should only be applied to non-core competencies which, if outsourced:

- Will benefit from the expertise, cost efficiency or synergy of a specialist supplier.
- Will enable the firm to leverage its own core competencies.
- Will not disadvantage the organisation with loss of in-house capability or vulnerability to market risks.
- Will enable the firm to exploit technology or other operational capabilities which it lacks (and would find too costly to develop) in-house.

Activities such as strategic planning, finance, quality management and legal compliance, for example, may be regarded as too strategically sensitive and central to the business to be outsourced without a very strong justification.

Even non-core competencies should not be outsourced unless external contractors have required competence or capability. Various options can be summarised in a simple matrix originally devised by Ray Carter:

Figure- 2.2: Competencies and contractor competence

Core Importance	High	In-house	Collaboration
	Low	Develop contracting	Outsource/buy in
		Low	High

Competence of Contractor

Source: Sourcing in procurement and supply, The Official CIPS course book, 2012

Non-core competencies should not be outsourced unless value for money is offered by outsourcing (due to the supplier's cost and profit structure, economies of scale, or potential for the buyer to divest itself of assets), in relation to the service levels that can be obtained.

Even then, non-core competencies should not be outsourced unless they meet the following additional criteria.

- They are resource-intensive (especially in terms of high labour or capital costs, which can be borne by the contractor).
- They are relatively discrete (so that they can be separated out from the organisation without undue trauma or complexity: eg catering, cleaning, security, IT, HR, transport or procurement)
- They are characterised by fluctuating demand and work patterns (leaving internal capacity sometimes over-utilised and sometimes under-utilised), which outsourcing absorbs efficiently and flexibility (being resourced as required by the contractor)
- They depend on specialist competencies (which would be costly for the organisation to develop and retain in-house) but not on a specific or unique knowledge of the business (which only in-house resources can really develop)

- They are performed in dynamic, fast-changing markets (so that it would be costly for the organisation to recruit, train and retain specialist staff, or invest in fast-developing technology, itself);

Chopra and Meindl argue that sourcing decisions are particularly important in affecting the level of efficiency and responsiveness achievable in the supply chain. So, for example, firms may outsource to responsive third parties if it is too costly or difficult for them to develop responsiveness on their own. Other firms may keep responsive processes in-house to maintain control over key customer service performance. Firms may also outsource with the aim of efficiency, if a third party has a lower underlying cost structure, perhaps through achieving significant economies of scale.

2.3.2 The contribution of SCM to make/do or buy and outsourcing strategy

Make/do or buy decisions require the input of many different functions and supply chain collaborators. The supply chain management function may be particularly well placed to assess the implications of the 'buy' option, because it is familiar with the supply market; supplier capabilities, capacity and compatibility; and likely comparative costs.

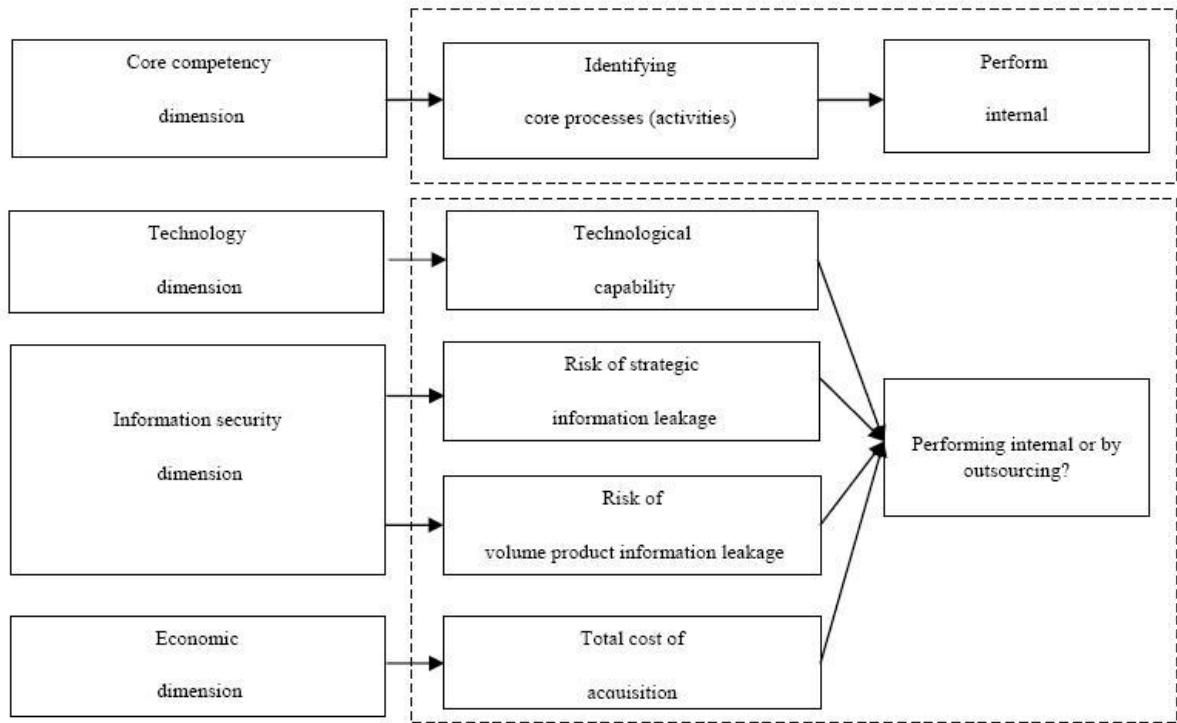
It will also have a key role in the successful implementation and control of any outsourcing strategy, through supplier evaluation and selection, price negotiation, quality and service level specification, contracting, and ongoing contract and relationship management through supplier evaluation and selection, price negotiation, quality and service level specification, contracting, and ongoing contract and relationship management.

2.3.3 Outsourcing decision making framework

Every decision-making process is triggered by some stimulus, which may be the output of some preceding process. The process is terminated by a definite output (response). It is this output that is used to identify/designate the decision making process. The process receives information input that can be subjective (e.g., opinion of other persons) or objective.

M. Cheshmberah et al (1999) propose four dimensional framework of outsourcing. The framework is as follows-

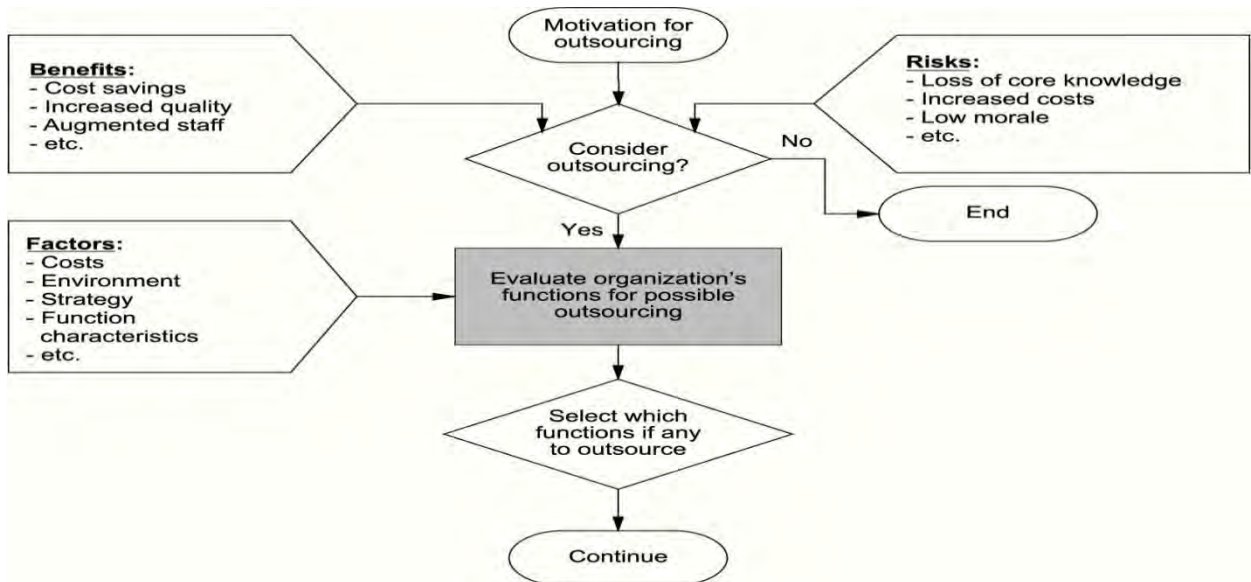
Figure- 2.3- Outsourcing decision making framework



Source: Cheshmberah et al, 1999

Kremic and Tuckel (2003) propose a three stage outsourcing decision framework:

Figure-2.4: Outsourcing Decision Framework



Source: Kremic and Tuckel (2003)

An outsourcing framework is provided by McIvor. It is a four stage framework, as follows:

Stage-1: Define core activities

It is essential to distinguish between non-core and core activities (those adding value to the customer and therefore key source of competitive advantages. Companies such as IBM, Apple, Honda build their strategies around their core activities and outsource as much of the remainder as possible.

Stage-2: Evaluate relevant value chain activities

This involves analyzing the competence of the company compared to those of the potential providers comparing the ability to add value and the implication for the TCO. Activities for which the company has neither a strategic need for special capabilities can be outsourced to more competent providers who have a lower cost base.

Stage-3: Total cost analysis

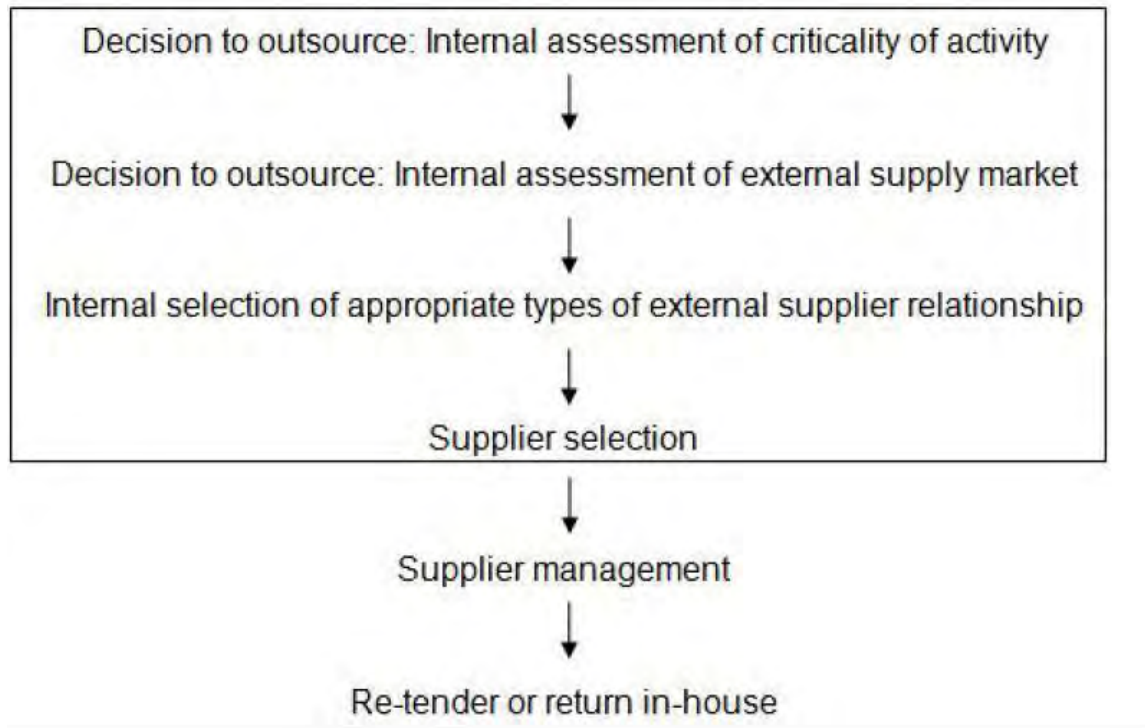
At this stage if after analysis of total costs the company is more capable than the external source then it should retain in-house capability. If a number of capable suppliers exist, then move to the final stage.

Stage-4: Relationship analysis

At this stage companies are attempting to select suppliers who have the ability to initiate to and develop suitable relationships which will add value and provide kaizen.

Lonsdale & Cox illustrate outsourcing as a six step process. They divide the process in two main stages: internal assessment and external assessment. This logic is followed in this framework as well. Thus, the decision framework contains two main parts, internal analysis and external analysis. In addition, third part is an analysis of the type of appropriate relationship between a buyer and a supplier.

Figure-2.5: Outsourcing Decision Framework



Source: Lonsdale and Cox (1998)

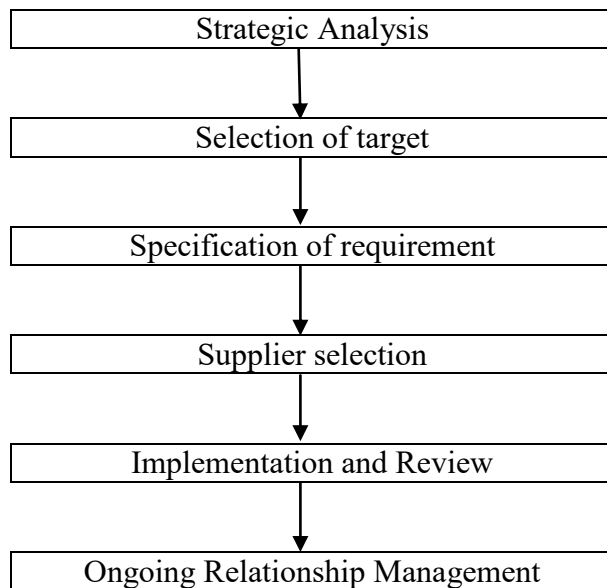
From the above models it is clear that the main determinant of outsourcing is core competence. Every model of resource based view take considers the core competence thinking as the decision making factors. So for outsourcing, a company need assess their core competence and outsource anything else.

2.4 A process for outsourcing considering Core Competence

Many organizations have rushed into outsourcing and many of them regretted it. Sometimes those who advocate processes which take time and cost money before making a decision are ridiculed as being over-cautious.

Mike Fogg has cited six stage processes for outsourcing. A process for outsourcing must include the flowing steps.

Figure-2.6: Outsourcing Process



Source: Improving the competitiveness of Supply Chain, The Official CIPS course book, 2012

2.4.1 Strategic Analysis

The first step of the process identification of core competence. **Hamel and Prahalad** gives three tests to see whether competencies are true core competencies:

1. **Relevance:** Firstly, the competence must give your customer something that strongly influences him or her to choose your product or service. If it does not, then it has no effect on your competitive position and is not a core competence.
2. **Difficulty of Imitation:** Secondly, the core competence should be difficult to imitate. This allows you to provide products that are better than those of your competition. And because you're continually working to improve these skills means that you can sustain its competitive position.
3. **Breadth of Application:** Thirdly, it should be something that opens up a good number of potential markets. If it only opens up a few small, niche markets, then success in these markets will not be enough to sustain significant growth.

This gets to the heart of the organization and must involve key stakeholders.

2.4.2 Selection of target areas

Once the core areas are identified and ring-fenced, areas of the business which form a target for outsourcing must be identified. Again this must involve key stakeholders. For each target area this process will involve-

- A supply positioning analysis, with particular emphasis on the risk.
- An assessment of the extent to which the problems in the target area can be corrected before outsourcing.
- Understanding whether a better return on investment can be obtained from retaining in-house or outsource.
- A clear understanding of the objectives of the outsourcing projects.
- A clear plan of the project including stakeholder involvement and sign-off.
- A clear statement of how and where this area interfaces with core process.
- Considering other options like internal SLAs, JVC.
- Considering the financial, tax, and legal implications of all options against the status quo.
- Communication to members of the organizations impacted by the process.

Developing a business case may be the vehicle which encompasses this information.

2.4.3 Specification of the Requirement

Specification is the statement of needs or what organization actually wants. There should have the reflection of the current scenario. The specification must:

- Be clear and unambiguous
- Include measurable performance criteria of the level of KPI
- Recognize any remaining problems and highlight them
- Describe the relationship sought with the supplier
- Reflect issues like confidentiality and security
- Identify licensing issues and contract assignments necessary as part of the outsourcing contract
- Consider the terms and condition of the contract

2.4.4 Supplier selection

Supplier selection must be rigorous and include a supplier appraisal, a tender process or alternative a negotiation based upon the specification, due diligence concerning the supplier, and result in a business case which demonstrates clear benefits to the purchasing organization before the outsourcing projects goes ahead. Factor which need to be considered are:

1. A supplier preferencing and market management matrix analysis

2. Whether the market will be interested in this requirement
3. Sharing any outstanding problems with the potential supplier
4. Assessing the cultural fit between the two organization
5. Sharing sufficient information with the supplier to enable them to make their best offers
6. A site survey by supplier and discussion with users
7. Selection criteria not based only price but also other factors
8. Appropriate terms and conditions and the means of termination

2.4.5 Implementation and Review

Implementation of the contract may take few months. Communication internally is vital, particularly to people impacted by the change and joint working parties need to be establishing with supplier to discuss:

- Contract management processes, including meetings, reporting and escalation process
- Handover planning
- Changes in working practice
- Changes of procedures
- Status of the projects that will be live across the boundary of the outsourcing
- Linkages with other areas of the business and other suppliers

It is vital that communication channels remain open between the people managing the contract of both organisation. At the end of the process it is essential for both organisation to review the process.

2.4.6 Ongoing relationship Management

The key to a successful ongoing relationship is the ability to alter them as the true extent and scope of the work required emerges. To enable effective relationship management many firms operate with an alliance board and alliance team structure.

There is a debate over the question whether companies should use adversarial or partnership relationships. However, some guidance is provided by Leavy. He points out that having the right mix of relationships seems to be most successful strategy. However, the question remains what type of relationship should be used for each outsourced activity. Selecting the right relationship is a decision that depends on many factors, like company's competitive positioning, value proposition, flexibility needs, and needs of control, supplier capabilities, and criticality of activity, asset specificity and number of available suppliers.

If outsourced activity is critical, partnership relationship may be more advisable. On the other hand, for peripherals activities adversarial relationship may be more appropriate. If the main motive for outsourcing is an access to supplier's technology, partnership might be preferable. So the relationship is depending on the context. One relationship style is not feasible for all cases of outsourcing.

2.4.7 Conclusion

Now-a-days the concept of outsourcing is widely used in most of the organisations all over the world. This has been widely accepted to lessen the cost and administrative hassle as well as to enhance the supply chain visibility. The organizations can concentrate more on the core activities by outsourcing the non-core activities which is adding more values to the organization. There are risks and challenges involved with implementing outsourcing in any organization and there are also records of failure. Though it has some challenges most of the companies are implementing it successfully.

Chapter 3: Organizational Overview: An Introduction to PGCB

This chapter provides overview of Power Grid Company of Bangladesh Limited (PGCB). The discussion is organized into five sections. In the first section introduction of PGCB, in the second section prime objectives, in the third section activities, in the fourth section organization chart and in the final section offices & substations has been described.

3.1 Introduction

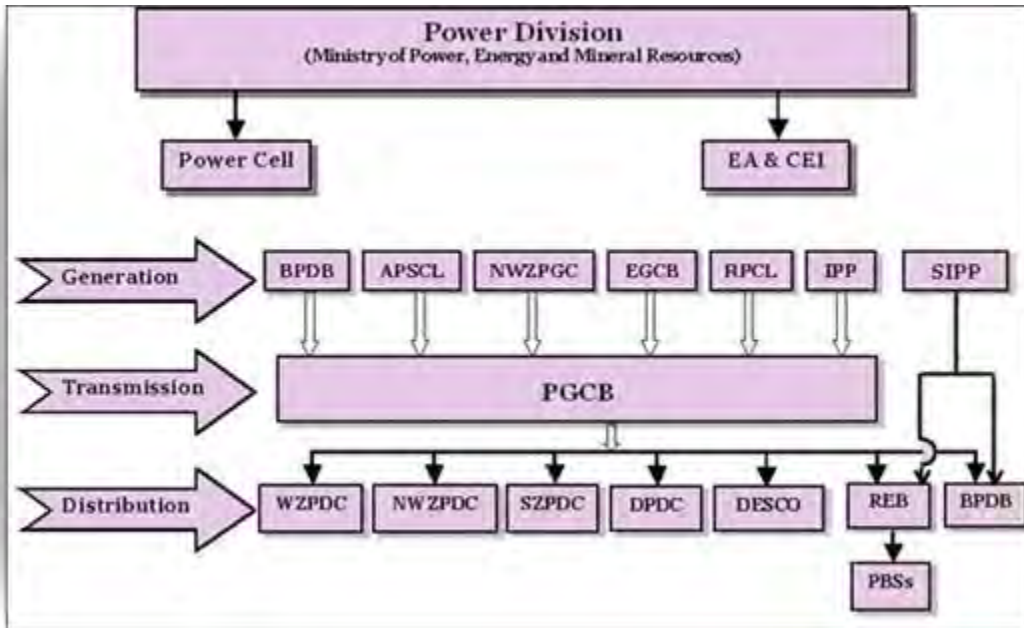
Power Grid Company of Bangladesh (PGCB) Limited is a Government own company which transmits generated power all over the country. Power Grid Company of Bangladesh Ltd. (PGCB) was formed under the restructuring process of Power Sector in Bangladesh with the objective of bringing about commercial environment including increase in efficiency, establishment of accountability and dynamism in accomplishing its objectives.

As on June, 2016 PGCB has 220.70 Circuit km 400 kV, 3185.166 Circuit km 230 kV , 6401.628 Circuit km 132 kV transmission line and 01 nos. 400kV back to back substation, 01 nos. 400/230kV, 19 nos. 230/132 kV, 90 nos. 132/33 kV substation.

As on June, 2016 PGCB has 2599 regular employees and 452 daily basis workers. All the functions are divided into four sections-Planning & Development, Operation & Maintenance, Human Resource Management and Finance. Each section is headed by an Executive Director. As an Engineering organization major two sections are planning & development and Operation & Maintenance. Planning & Development is divided into different circles & divisions such as planning, design & quality control, procurement, civil works & Projects. On the other hand Operation & Maintenance sections has largest network and activities which are divided into system operation, system protection & metering circle, research & technical services, SCADA & maintenance, telecommunication & grid maintenance division.

Bangladesh power sector structure is as follows:

Figure-3.1: Power Sector Structure



Source: www.powerdivision.gov.bd

3.2 Prime Objectives

The primary objectives of PGCB are to plan, promote, develop, operate and maintain an integrated and efficient power transmission system network in all its aspects including planning, investigation, research, design and engineering, preparation of preliminary feasibility and detailed project reports, construction operation and maintenance of transmission lines, substations, load despatch centers and communication facilities and appurtenant works, co-ordination of integrated operation of regional, national and international grid systems, providing consultancy services in power systems field, execution of turnkey jobs for other utilities / organisation, wheeling of power, purchase and sale of power.

3.3 Activities of PGCB:

- Operation & maintenance of grid sub-station and transmission line, under the supervision of Chief Engineer Transmission-1 and Transmission-2, five grid circles headed by Superintending Engineers.
- Load dispatching, under the supervision of Chief Engineer (System Operation), Load Despatch Circle is headed by a Superintendent Engineer

- Operation & Maintenance of SCADA System, under the supervision of Chief Engineer (System Operation), SCADA Circle is headed by a Superintendent Engineer.
- Operation & maintenance of communication system, under the supervision of Chief Engineer (System Operation), Communication Circle is headed by a Superintendent Engineer.
- Protection, relay co-ordination of Transmission System, under the supervision of Chief Engineer (P&D), SPMC is headed by a Superintendent Engineer.
- Design & evaluation, under the supervision of Chief Engineer (P & D), Design Circle is headed by two Superintendent Engineers.
- Transmission network planning, under the supervision of Chief Engineer (P & D), Planning Circle is headed by a Superintendent Engineer.
- Implementation of development projects, under the supervision of Chief Engineer (Projects), five Project Offices each headed by a Project Director and Superintendent Engineer.

Leasing Optical Fiber

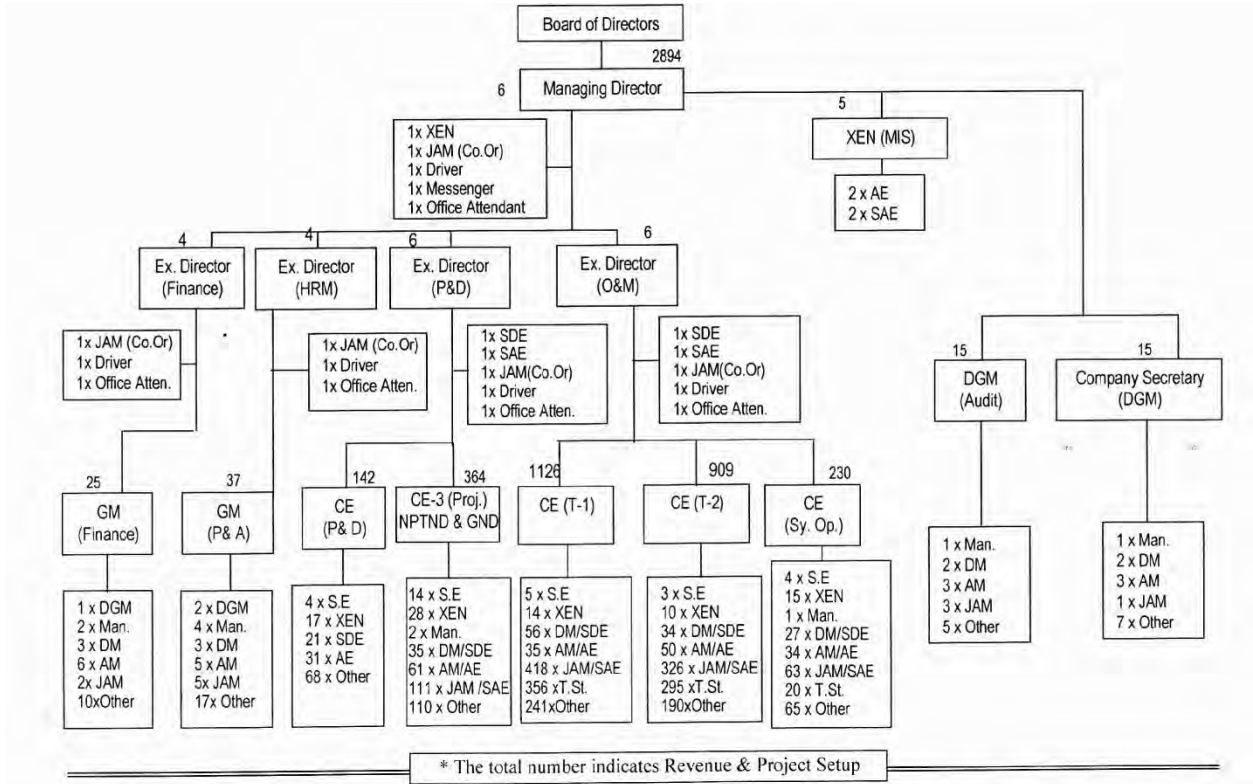
PGCB has installed OPGW (Optical Ground Wire) on high voltage transmission line to protect the transmission lines from thundering. This technology of placing optical fiber within the ground wire is being widely used throughout the world at present.

The instant communication between NLDC and different grid substations, power stations are being maintained through PGCB's own telecommunication PLC (Power Line Carrier) system for the purpose of reliable power transmission. Besides voice communication, the above PLC telecommunication system have got the additional facilities of tele-protection for protecting the transmission lines from external faults & tele-metering for instant data transfer and to take necessary actions. Due to the inadequate speed of existing PLC communication equipments, efforts are being taken to improve the telecommunication system of PGCB by installing & using high speed Optical fiber with multiplexers.

The length of the OPGW installed in the transmission line of PGCB till June 2012 is approximately 4300 km and covering the major part of the country. After PGCB's own communication need, the spare optical fibers are being leased out to local telecom operators to develop national communication infrastructure for their commercial use.

3.4 Organisation Chart

Figure 3.2: PGCB Organogram



Source: www.pgcb.org.bd

3.5 Offices and Sub-stations

A. Head Office

- Office of Managing Director
- Office of Executive Director (P&D), (O&M), HRM, Finance.
- Office of Chief Engineer (P&D)
- Office MIS Division
- Office Company Secretariat & Share Division
- Office Personal & Administration (P&A) Division
- Office Civil Works Division
- Office Accounts & Finance Division

- Office Audit Division
- Office Design & Quality Control Division
- Office Planning Division
- Office Procurement & Store Division
- Office Computer Section (ICT)

B. Project Office

- Chief Engineer (Project)
- Bibiyana-Kaliakoir 400 KV and Fenchuganj-Bibiyana 230KV Transmission Line (NG2)
- Enhancement of Capacity of Grid Substation and Transmission Lines for Rural Electrification.
- 400/230/132 Network Development project (TRANCHE-2)
- National Power Transmission Network Development Project
- Barisal-Bhola-Burhanuddin 230 kV Transmission Line Project
- Western Grid Network Development Project
- Ashuganj-Bhulta 400 kV Transmission line Project.
- Amnura 132/33 kV Grid Substation with associated 132 kV Transmission Line Project.
- Capacity Upgradation (500 MW) of the existing Bangladesh (Bheramara)-India (Baharampur) Grid Interconnection Project.
- Mongla-Khulna(S) 230 kV Transmission Line Project.
- Dhaka – Chittagong Main Power Grid Strengthening Project
- Institutional Strengthening of PGCB project.
- Feasibility Study to Connect Nuclear Power Plant with National Grid Project.

C. National Load Dispatch Center

- Office Chief Engineer (System Operation)
- Office Chief Engineer, Transmission-2
- Office of CNST
- Office of SCADA and Maintenance

- Office of Load Dispatch Circle.
- Office of Telecommunication Circle.
- Office of Telecom and RTU.
- Office of IMD Division
- Office of EMD Division.

D. Biddut Bhaban, Dhaka

- Office of Chief Engineer, Transmission-1
- Office of Grid Circle Dhaka, North and South
- Office of System protection and Metering circle.
- Office of Research & Technical Services Circle.

E. Office of Grid Circle- Comilla, Bogra, Chittagong, HVDC-Ishardi, Khulna.

F. Grid Maintenance Division-Dhaka-Central, South, North, East, North-West, Mymensing, Comilla, Sreemongal, Chittagong-Central, North, South, Khulna, Faridpur, Barisal, Bogra, Rajshahi, Rangpur, Ishardi, Aricha.

G. Sub-Stations:

- 01 nos. 400kV back to back sub-station
- 01 nos. 400/230kV sub-station
- 19 nos. 230/132 kV sub-station
- 90 nos. 132/33 kV substation.

H. Transmission Lines:

- 220.70 Circuit km 400 kV Transmission line.
- 3185.166 Circuit km 230 kV Transmission line.
- 6401.628 Circuit km 132 kV transmission line

3.6 Conclusion

Power is one of the most important sectors for the development of a country. PGCB works as the backbone of whole power sectors of Bangladesh which is connected both with the generation and distribution. As the Government has the vision of generating 60000 MW power within the year 2041, all these power have to be evacuated by PGCB to reach all over the country. To implement such a huge task PGCB will be required to concentrate more on power transmission rather than other non-core activities such as transport, driver, cleaning etc. So, implementing outsourcing will be much more beneficial for PGCB in the long run.

Chapter 4: Major Findings and Observations

This chapter provides the major findings and observations of this study. This chapter includes six sections. In the first section introduction, in the second section procurement of PGCB, in the third section procurement in PGCB & its prospects, in the fourth section challenges of implementing outsourcing in PGCB, in the fifth section major findings and in the final section conclusion has been described.

4.1 Introduction

In this research, a well known public limited company of Bangladesh, PGCB was studied to understand outsourcing strategy, outcome, prospects and challenges. The research questions are as follows: What are the prospects of outsourcing in PGCB, What are the key factors need to be considered to implement outsourcing in PGCB, What will be the benefits for PGCB if some of the non-core activities are outsourced, what are the challenges of implementing outsourcing in PGCB. In this chapter we will find and analyze all the answers and will calculate how it on the expenditure of PGCB.

4.2 Procurement of PGCB

PGCB uses GoB, Donor such as World Bank, ADB, JICA, IDB etc and its own funds for procurement. For using GoB fund PGCB needs to strictly follow Public Procurement Act-2006 and Public Procurement Rules-2008 and it has own procurement guide lines for their fund. The procurement guide line is approved by the board of directors. PGCB has a well established procurement department under the Superintending Engineer, Procurement & Stores which is responsible for local and international procurement. All the procurement of turnkey projects is performed through Design & Quality Control department headed by Chief Engineer, Planning & Design. Procurement structure is centralized. All related decision is taken by the procurement department. Despite this, every head of department enjoy some sorts of procurement power within a specific value as per the Delegation of Financial Authority (DoFA), PGCB.

As a public limited company, owned 75% by Government, the main focus of company is to achieve value for money. It has basic options of procurements, like open tendering, limited tendering, quotation method and cash purchasing. Quotation and cash purchase options are used for small volume emergency procurement. For large and critical projects where technical particulars are important PGCB use single stage two envelope process.

As per the power system master plan 2016, the targeted power generation in 2021 is 24000 MW, in 2031 is 40000 MW and in 2041 is 60000 MW. To evacuate this large volume of power PGCB

needs to construct new transmission lines and grid sub-stations. As a result a huge number of procurement is going on and will be undertaken in future. At present 15 large projects are going on and 17 mega projects are in pipeline. All of these are procurement of large volume. On the other hand, for the operation and maintenance of this huge and large infrastructures it is required procure a large volume of spare and other equipment.

4.3 Outsourcing in PGCB and its prospects

PGCB started the outsourcing concept after few years of its beginning of journey but with a small scale. The area which was outsourced is security service, but only in few places. But in recent time PGCB started to outsource its security service in a larger scale because of the prospects of cost minimization and easiness of operation and to concentrate in core activities.

As all the Grid sub-stations and transmission lines are Key Point Installation (KPI) of the Government, so proper security system is required. As well as for the safety of transmission line huge numbers of security staffs are required. In a 230 KV sub-stations around 18, in a 132 kV sub-station around 12, in a GMD office around 10 and in NLDC around 100 security staffs are required. Overall in PGCB for safety and security around 1000 security staffs are required. To handle these security guards one security Manager, one Deputy Manager and several security inspectors has been employed here. Recently PGCB has started to outsource security staffs to their party service providers. The major portion has been outsourced to Bangladesh Ansar which is a Government own entity to provide security as per the requirement with and without arms with payment fixed by the government. The minimum contract period is three years with Ansar. The cost and cost savings by engaging ansars is as follows:

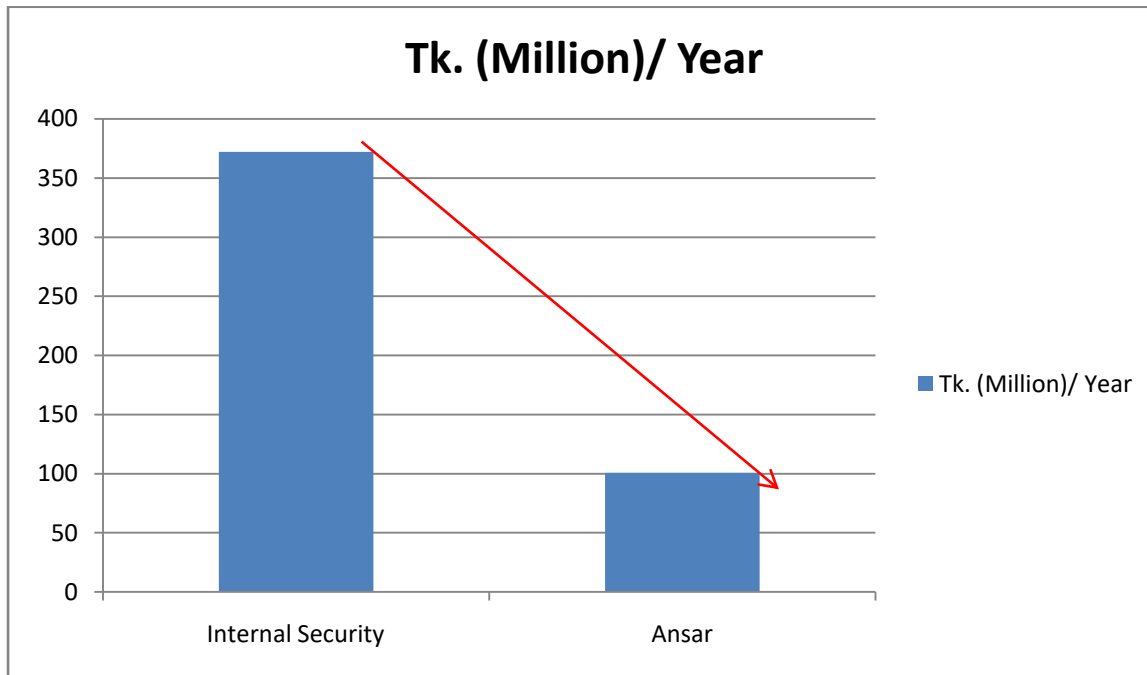
SL	Average Salary/Cost per person (Monthly)	
01	Internal Security	Tk. 31000.00
02	Ansar	Tk. 8400.00

Table-4.1 Monthly Average salary per person

For 1000 internal security staffs the average monthly cost is =	31000*1000	= 31000000.00
For 1000 Ansar the average monthly cost is	= 8400*1000	= 8400000.00
Total Savings per month		= 22600000.00
Total Savings per year		= 271200000.00

Per year cost savings only from the security service is huge.

Figure 4.1 Annual cost comparisons of Internal Staff and Ansar.

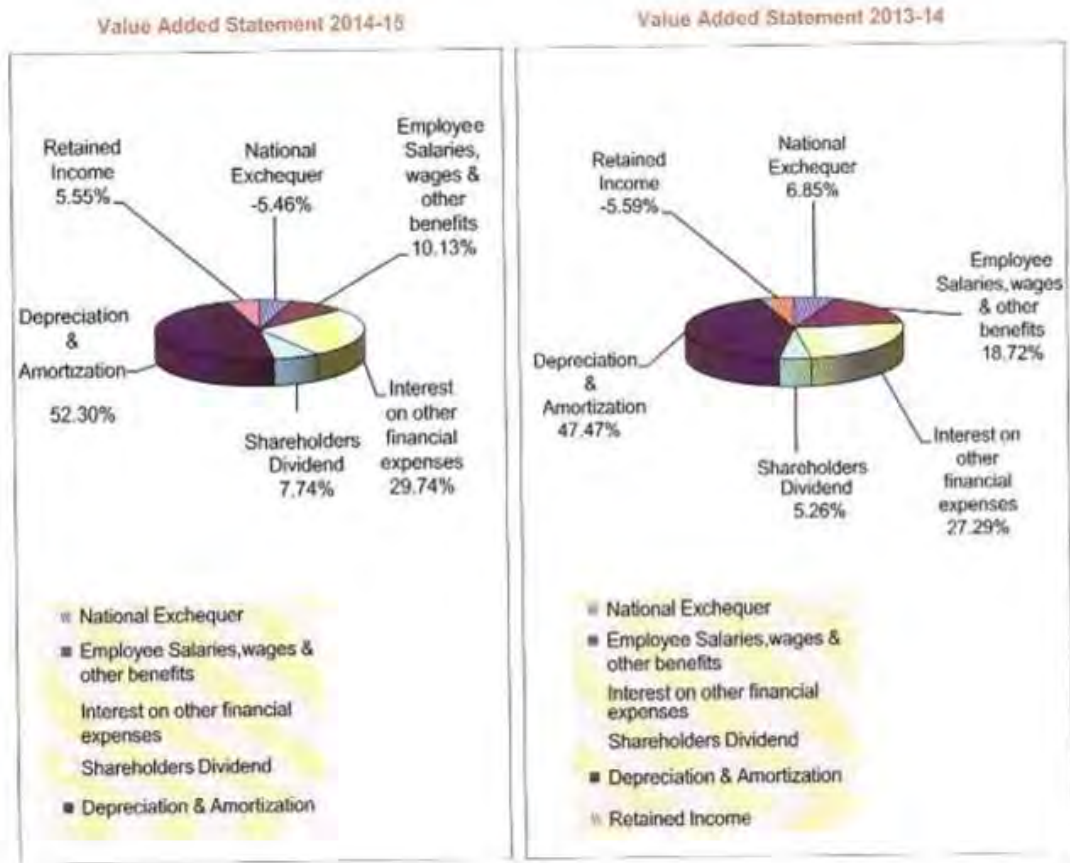


Source: Author's field survey

From the above graph it is clear that the cost of security will be sharply decreased if the total security is outsourced to Bangladesh Ansar and Annual cost savings will be around Tk. 271.2 million.

The impacts and results of the above calculation will be clear if we analyse the values added statement of PGCB. As per the value added statement of FY 2013-14 total employee salaries, wages and other benefits were 18.72% which has been reduced to 10.13% in FY 2014-15. The comparison of the value added statement of FY 2013-14 and 2014-15 are given below:

Figure 4.2 Comparison of Value Added Statement of FY 2013-14 and 2014-15



Source: www.pgcb.org.bd

Around 8% reduction in salaries, wages and other benefits in a FY is a huge achievement and it has been possible for outsourcing some of the non-core activities such as security service.

If we analyse the statement of the comprehensive income then we will be able to find out the trends of profit of PGCB. Here is the overview for the period ended on March 31, 2016:

Table 4.2 Income statement

Profit Before Income Tax	July 01, 2015 to March 31, 2016	July 01, 2014 to March 31, 2015	January to March 31, 2016	January to March 31, 2015
	Tk. 1242450136.00	Tk. 23493301.00	Tk. 428110157.00	Tk. 46329345.00

Source: www.pgcb.org.bd

We have seen the profit has been increased as well as the earnings per share have also been increased.

Other prospective areas of outsourcing in PGCB are major technical activities like scheduled maintenance of the sub-stations and switching stations, trouble shooting & breakdown maintenance, overhead transmission line maintenance and driver. In every winter season when the demand of power is lower than the other seasons, at that time schedule annual maintenance of transmission line and grid sub-stations are performed. For the operation and maintenance of sub-stations and transmission line in every sub-stations around 7-12 support staffs of different designation has been posted. Most of them are regular employees and some of them are contractual. As the outage, breakdown and schedule maintenance are not regular these can be outsourced. Keeping some of the technical staffs for emergency support schedule maintenance work could be outsourced which will save a large amount of money because the per person cost of a regular employee is a healthy amount including salaries, wages, overtime, transport allowances, daily allowances and other benefits.

Average per head cost of a regular staff in the entry level is around Tk. 35000.00, for the senior positions it is much higher. If we calculate the lowest cost then annual cost per person will be Tk. 420000.00

As a result for around 700 support staffs the cost per annum is = $700 \times 420000 = \text{Tk. } 294000000.00$

If for emergency services keeping 300 regular employees other are outsourced then the cost will be = $300 \times 420000 = \text{Tk. } 126000000.00$

If the schedule maintenance is outsourced per Grid Maintenance Division the average annual maintenance cost will be around Tk. 1000000.00 , As a result for 20 GMD the cost will be = $20 \times 1000000.00 = \text{Tk. } 20000000.00$

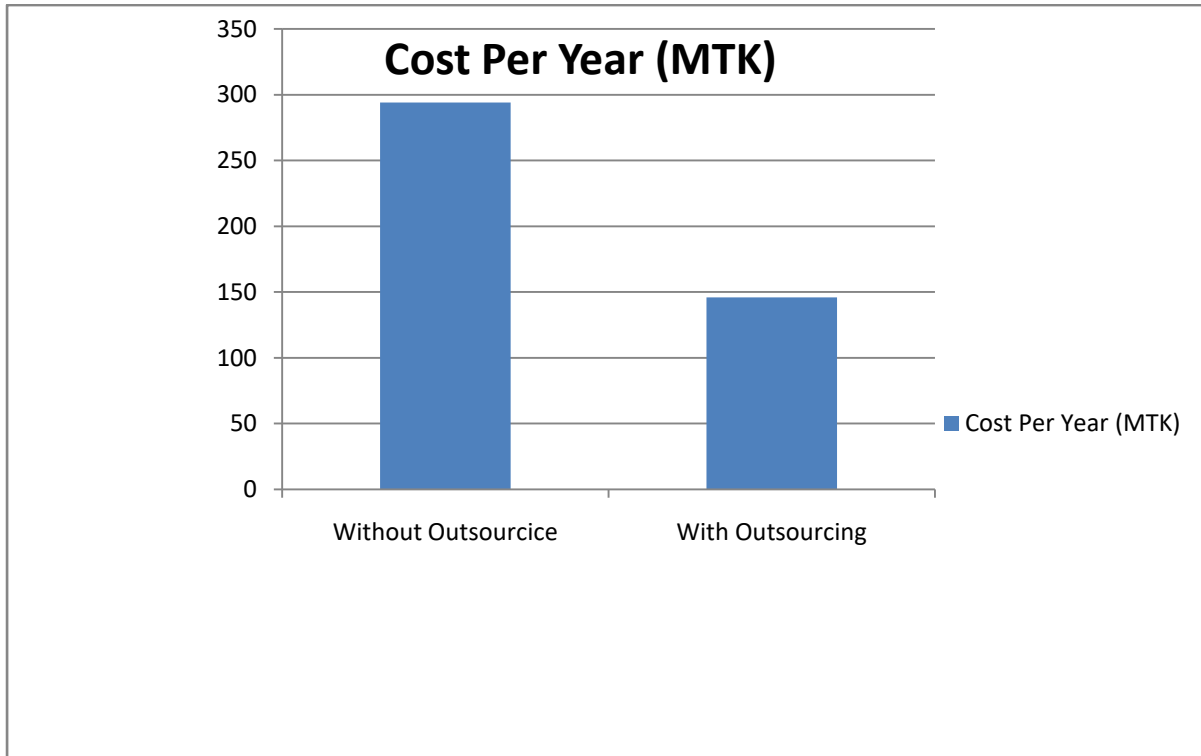
For 400 additional employees the cost is = $400 \times 420000 = \text{Tk. } 168000000.00$

If schedule maintenance outsourced cost will be = Tk. 20000000.00

Total savings per year = Tk. 148000000.00

Per year cost savings is a remarkable amount if part of the maintenance service is outsourced.

Figure 4.3 Comparison of Cost if some of the Maintenance service is outsourced.



Source: Author's field survey

All the above calculations are prospects for outsourcing some of the non-core activities. If these are outsourced it is now clear that it will save expenses as well as other difficulties of handling them.

If we see the result of concentrating more on core activities by outsourcing some non-core activities as per the transmission loss and availability of grid sub-station, it is as follows:

Table 4.3 Transmission Loss & Availability of Sub-Station

Fiscal Year	Transmission Loss	Grid Sub-station Availability	Number of Outage
2013-14	2.82%	99.958%	9
2014-15	2.77%	99.988%	8

Source: www.pgcb.org.bd

It is clear the performances are increasing gradually

4.4 Challenges of Implementing outsourcing in PGCB

There are some challenges found by consulting with PGCB officials and other stakeholders who are closely related with PGCB. These are as follows:

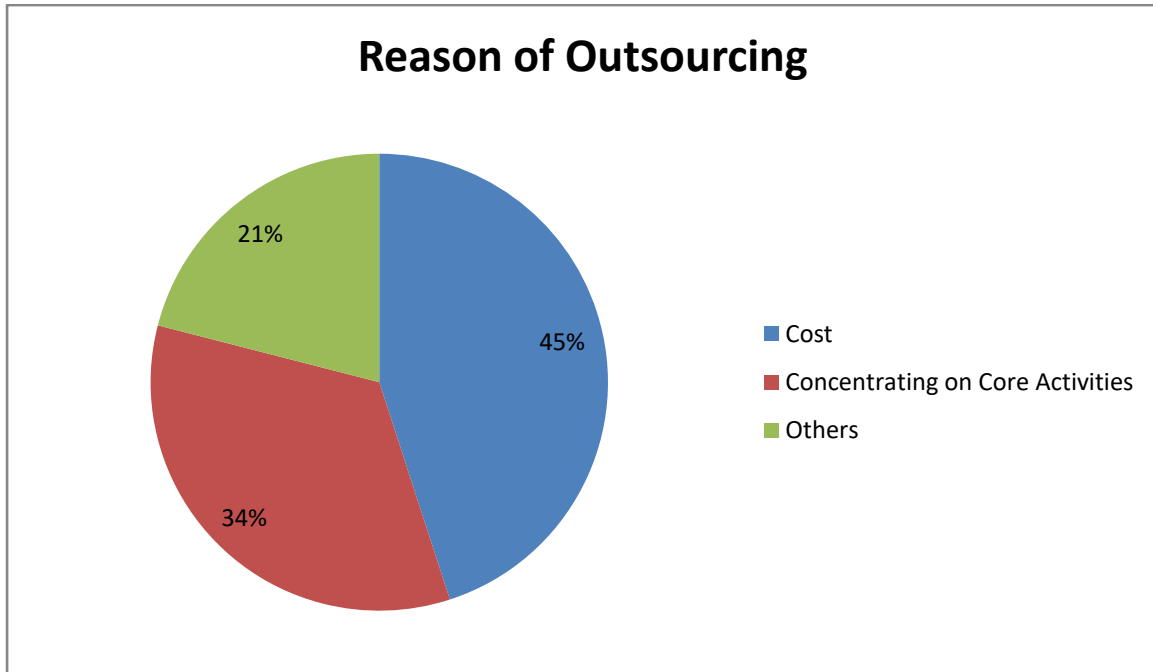
- (a) The major obstacle will come from CBA. For bargaining with the management the staffs of PGCB elect their representative in every two years. In a Government own entity they are strong enough and if any decision goes against them the call for protest and even go for strikes. Overcoming the obstacles from CBA is a key challenge.
- (b) Another challenge is risk of passing information and intellectual properties. As the security staffs and maintenance staffs of the third party service provider will work on the KPI area, they have to be given the permission of entrance in those areas. Here, there is always a risk of passing confidential information.
- (c) Choosing the right supplier is challenge. If a wrong supplier is chosen then it will cost time as well as money. It may hamper the reputation of the organization.
- (d) There is a risk of losing the skilled technical personal. If some of the staffs are reduced it may create a gap of shortage of technical staffs. For this shortage the dependency with the supplier will be increased which may cause huge problems.
- (e) Locking with incompatible supplier is a big risk. It may ruin the reputation, and the cost will increase because selecting a new supplier is a challenge and expensive task.

4.5 Major Findings

Quantitative data were obtained from the respondent through survey questionnaire (Annexure-1) from different departments of PGCB. Questions were asked about the impacts, challenges, risks and prospects of outsourcing in PGCB. The data which are obtained, are fully qualitative and obtained from a limited number of respondent (not more than 20), as a result actual facts can be different from surveyed data.

One of the questions was about the reason of outsourcing, 45% of the respondent said cost, 34% said concentrating on core activities and 21% said other reasons.

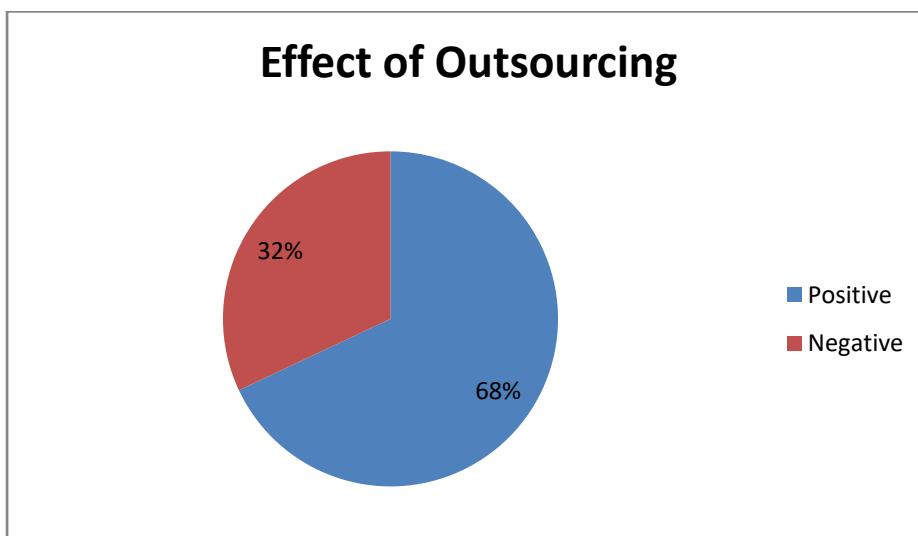
Figure 4.4 Opinion about reason of outsourcing.



Source: Author's field survey

Another question was about the positive and negative effect of outsourcing. 68% of the respondent said positive and 32% of the respondent said negative.

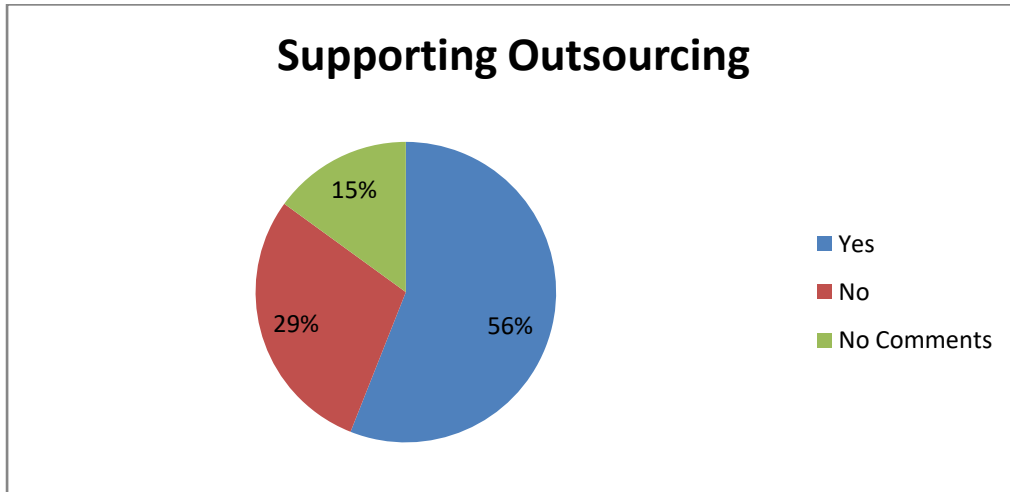
Figure 4.5 Opinion on effect of outsourcing



Source: Author's field survey

One of the questions was about supporting outsourcing. 56% said yes, 29% said no and 15% didn't have any comments.

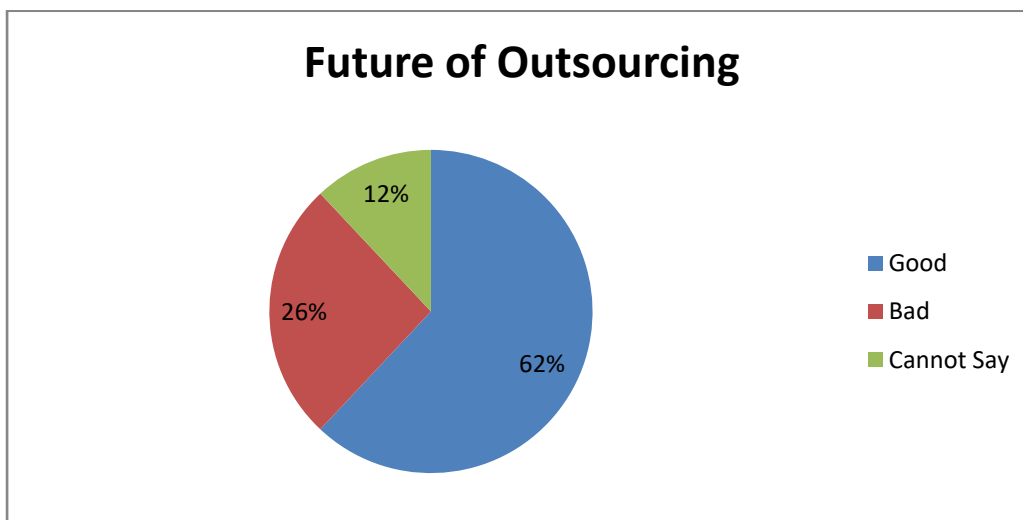
Figure 4.6 Opinion on supporting outsourcing



Source: Author's field survey

Another question was about the future of outsourcing. 62% said good, 26 % said bad and 12% said cannot say.

Figure 4.7 Opinion on future of Outsourcing



Source: Author's field survey

4.6 Conclusion

PGCB uses the public fund for their development, so maximum utilization of the fund is always desirable. As its activities are all through the country, it has involved huge amount of labor and works. From the above analysis it is clear that, if outsourcing could be implemented in PGCB it will save huge amount of money, labor and administrative burden. Though implementing these will face resistance from internal and external stakeholders but over the long run it is possible to overcome these resistances and every year it will add a good amount of profit in PGCB's account.

Chapter-5: Summary and Recommendations

5.1 Summery

In this concluding chapter, we summarize the major findings of the research by way of recapitulation, and offer some recommendations for future study as well as policy and functional recommendations.5.1 Summary

Outsourcing can be an element of competitive advantages for businesses. For outsourcing to be successful the decision needs to be informed. Good, hard, detailed information in the hands of capable management can help avoid a costly step, one that is not easily reversed. Ultimately, for outsourcing in any form to be successful, quick response times to strategic opportunities and threats are essential. Effective management of the outsourcing relationships is an organizational imperative.

Throughout this study many impact for outsourcing have been identified. Furthermore, this study has proved that outsourcing incorporates a wide variety of advantages for organization that leads to a conclusion that, outsourcing brings lots of benefits for the organizations. It is also evident from the study that, outsourcing has some risks and there are some challenges needs to be faced to implement outsourcing in the organization.

As per the survey questionnaire and feedback from the respondent the data about reason of outsourcing, effects on organization, future of outsourcing, challenges and risk etc. has been found. From the data found from different departments of PGCB and from annual report clearly indicates the prospects of outsourcing in PGCB. It has been calculated from the data how cost savings is increasing due to outsourcing some non-core activities and how outsourcing can be used to save huge amount of money. It has also been found that, transmission loss is decreasing and sub-station availability is increasing due to concentrating more on core-activities.

There are also some challenges of implementing outsourcing in PGCB which has been shown in the study. This is natural everyone wants to maintain status que and every new concept faces resistance. Proper policy, management and leadership can help to implement any change. Sound change management policies have to implement to overcome these challenges.

5.2 Recommendations

5.2.1 Recommendations for further research

Within limited time frame this study has been completed with a limited number of respondents. So, there is a scope of improving the research findings. Some of the suggestions for further studies are:

- Benefits of outsourcing security services and schedule maintenance services have been calculated in this study. Other field of outsourcing such as drivers and transport, cleaning etc. could be calculated and it may be a scope for future study.
- By collecting more data by increasing the respondent and time, more accurate research may be accomplished in future.
- This study was an explorative type based on qualitative approach. Other types of research methodologies could be used for future research.

5.2.2 Functional and Policy Recommendations

- This study may help in functional and policy making of the organization. Because outsourcing is a strategic as well as functional procurement policy which is widely used in different organization all over the world. Outsourcing helps in cost minimization, time saving, enhancement of supply chain visibility and development of core competencies. This study will help an organization by guiding how outsourcing can add value in functional and policy making level.

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Annexure-1

BRAC Institute of Governance and Development (BIGD), BRAC University

Outline of the Survey Questionnaire (Sample)

Research Topic: Prospects and Challenges of Outsourcing in the context of Power Grid Company of Bangladesh Limited.

This research is fully needed for academic purpose only to fulfill the requirement of —Masters in Procurement & Supply Management program under BRAC Institute of Governance and Development, BRAC University. This survey questionnaire has been prepared for obtaining opinion of the respondent from PGCB like officers and staffs. And allocated data will be restricted within report document. I solicit your support and cooperation for providing information. All information provided by the respondent will be kept confidential, and, in no way will personally identifiable information be made available without your knowledge and consent.

Part A: Demographic Information

1. Designation:
2. Position:
3. Length of Service

Part B: These 10 questions are about outsourcing, its impacts, reason, future, risks and challenges. You are requested to explain and share your opinion.

1. Do you know about outsourcing?
 Yes
 No
2. Are there any effects of outsourcing in PGCB?
 Yes
 No
3. Does, it has any positive effects?
 Yes
 No

4. Does, it has any negative effects?
- Yes
- No
5. What is the reason for outsourcing in PGCB?
- Cost
- Concentrating on core activities
- Others
6. What is the future of outsourcing in PGCB?
- Good
- Bad
- Cannot say
7. Does outsourcing impact the economy?
- Yes
- No
8. Do you support outsourcing in this sector?
- Yes
- No
- No Comments
9. Are the challenges overcomable?
- Yes
- No
10. Are the risks higher than the benefit in PGCB?
- Yes
- No

