

# MARKETING MANAGEMENT AS A POTENTIAL PREREQUISITE FOR SUCCESS OF THE CONSTRUCTION INDUSTRY DEVELOPMENT AGENDA

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## ABSTRACT

The Ghana's Construction Industry Develop Agenda (CIDA) is plagued with many challenges. The objectives of this paper are: to identify the root cause of the challenges and examine the right corporate strategy for overcoming it. The paper adopts a descriptive study design and uses literature review as a method to summarize and examine relevant extant literature on the subject and to show why marketing is indispensable for the development of the construction industry in Ghana. Findings reveal that the challenges confronting the construction industry development agenda are unique to developing nations and largely emanates from competition. The need exist for adoption of marketing by construction businesses as a means to enhance their competitive advantage which are necessary for overcoming the construction industry development challenges. The CIDA may remain a mirage unless the effort to develop the construction industry is underpinned by construction business development through effective marketing management of construction business enterprises, to overcome the effects of competition.

*Keywords: competition, construction, marketing,*

## INTRODUCTION

There is a strong link between construction and economic activity (Anaman and Osei-Amponsah, 2007) and the projected economic growth in Ghana. In Ghana for instance, the construction industry's contribution to GDP has shown an increasing trend from 8.5% to 11.8% from 2010 to 2013 respectively (GSS, 2014); a sign of its growing importance in the development of nations. Not only do these provisions of infrastructure contribute to GDP growth of a nation, they also provide a means by which the construction industry obtains the necessary resources in terms of financial gains needed for its development. Infrastructure delivery can therefore have a twin benefit: it can be used as a means to develop the construction industry of nations' especially in developing nation, where infrastructural needs are comparatively much greater and it can also to be used for the provision of social and economic development needs of nations. This explains why the Construction Industry Development Agenda has become a topical issue of both national and international interest.

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Ghana as a developing economy has a great need for physical infrastructures, which are built through construction activities. Such infrastructure includes schools, hospitals, airports, highways, roads, hospitals, power plants, dams, housing, maintenance on existing infrastructure, and seaports, bridges, roads, houses among others that contribute to the socio-economic development of the country (Ofori, 2012; United Nations Human Development Report/Index, 2008; Jaselskis and Talukhaba 1998: 185). The relationship between infrastructural delivery and the construction industry suggest that the greater the infrastructure needs of a nation, the greater the gains to the construction companies that deliver it. These gains which occur in terms of financial benefits are vital resources needed for the construction industry development. Although these financial gains are highly desirable, it has become hardly feasible for domestic construction companies to obtain them. This is due to the challenges that come along with situations where a nation has great need for infrastructures (Ofori, 2012).

The rest of the paper begins by contextualizing construction industry development and examines the construction industry development challenges and their causes. It further explores marketing as the right corporate strategy for overcoming the challenges hindering the construction industry development agenda.

## **CONSTRUCTION INDUSTRY DEVELOPMENT**

In the view of Ofori (1993: 48-49) construction industry development “refers to the pursuit of the improvement of the industry as an objective in itself ... the approach is direct and continuous ... [it] would incorporate appropriate strategies, and integrated plans and programmes under specific implementing agencies”. This definition suggests that appropriate strategies coupled with integrated plans and programmes implemented and supervised by specific agencies are critical factors for success.

This leads to improvement in the industry itself and the resultant effects are used to achieve social and economic benefits by nations. Although, the various dimensions highlighted in the definition are explored, it appears the aspect that has to do with strategies lack some measure of appropriateness, giving our peculiar characteristics as a nation.

A more concise and yet detailed definition of construction industry development is:

“a deliberate and managed process to improve the capacity and effectiveness of the construction industry to meet the national economic demand for building and civil engineering products, and to support sustained national economic and social development objectives” (Task Group 29). The definition highlights ‘to improve the capacity’. This means that construction industry development must first improve the capacity of the industry to meet the demand for building and civil products before the benefit of ‘supporting sustained national economic and social development’ can be realized. Improving the capacity is a factor

that requires the use of the right cooperate strategy. When the capacity improvement is done, the benefits are enormous.

Ofori (2012:8) notes that the development of the construction industry wills among others things promote:

1. Increased value for money to industry clients as well as environmental responsibility in the delivery process
2. The viability and competitiveness of domestic construction enterprises
3. Optimisation of the role of all participants and stakeholders through process, technological, institutional enhancement and through appropriate human resource development.

From the foregoing, it is obvious that construction industry development is deemed to have the following components in order to achieve the benefits: human resource development; materials development; technology development; corporate development; development of documentation, procedures and operating environment; institution building; and develop. Developments in these areas are necessary for overcoming the inherent challenges that confronts most countries in the construction industry development agenda.

### **CONSTRUCTION INDUSTRY DEVELOPMENT CHALLENGES**

The Ghana construction industry faces more of these problems in addition to many other several constraints. In a report by the Government of the Republic of Ghana (2000) Highway Network Master Plan, 2001-2020, (P. 144–145) the following problems were further highlighted as follows:

“national road contractors face the following problems “regardless of their financial class”

- Inability to secure adequate working capital
- Inadequate management
- Insufficient engineering capacity
- Poor workmanship.

The problems of consultants include:

- inadequate operating cash flow
- inadequate flow of jobs
- low level of fees, hinders the development of their technical support system
- low productivity
- poor quality of work
- lack of means and opportunities for providing training.”

Several other researchers have also identified other challenges of the construction industry. In the work of Fugar et al. (2013), the seven key challenges identified include;

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1. absence of a principal development regulatory body,
2. Inadequate financial resources,
3. Lack of investment in human resource development,
4. Inability to embrace change,
5. Low technology in the industry,
6. Lack of appreciation for workforce in the industry and
7. High level of employee mobility

All these factors can be traced back, directly or indirectly to the fact that domestic construction firms that constitute a greater part of the construction firms that makes the construction industry have not had the chance to participate fully in the infrastructural delivery of Ghana. As a result the firms are denied of the numerous benefits that can result from undertaken infrastructural projects. Principal amongst such benefits are financial gains (Eyiah and Cook, 2003), which is the single most important factor needed to overcome most of the challenges highlighted earlier. Firms with sufficient financial resources can successfully deal with issues with employee mobility since employees mostly move to other firms due better financial gains they hope to receive. In a similar vein, firms with adequate financial resources can also adopt high technologies since such technologies come along with the use of some plants and equipments which require huge capital investment for their acquisition.

The study of Eyiah and Cook (2003) was carried out with the aim to identify the financing needs and constraints of contractors in Ghana; determine the extent to which their characteristics influence financing needs and constraints; examine factors contributing to these constraints and the effect on different groups of contractors; and develop guidelines for policy-makers. In conclusion, Eyiah and Cook (2003) advocated for more but effective financing schemes for local contractors. Eyiah and Cook (2003) also cited contractor inability to service equipment loans; disparity between Ghanaian currency and foreign currency in which cost of equipment was to be repaid among others.

## **ROOT CAUSE OF THE CONSTRUCTION INDUSTRY DEVELOPMENT CHALLENGES**

What is remarkable in other works that highlights challenges confronting the construction industry is that all the authors converge at this one factor: absence of a central agency to regulate and ensure the continuous development of the construction industry. That makes this single factor appear as pivotal challenge amongst all other known challenges confronting the construction industry of Ghana. This factor has been associated with the construction industry development of Ghana as the major stumbling block (Ofori, 2012).

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Although, this is an important factor, it may not be entirely the overall problem. Highlighting on the challenges facing individual construction companies towards the construction industry development, Ofori (2012) argues that the:

local construction consultants, contractors and individual practitioners will face greater competition from their foreign counterparts which are likely to have greater experience and resources. Another challenge will be for the local construction industry to exploit the opportunities offered by the Economic Community of West African States, and address its possible negative impact such as an influx into Ghana of firms from the other member countries.

(P. 16-17)

The enormity of infrastructure needs of many developing countries explains why many multinational firms have moved to developing countries where a lot of markets are emerging to do business (Wooldridge, 2010). Because such countries are mainly developing countries, there are lots of demands for all types of construction work (Jaselskis and Talukhaba, 1998) and that demand presents work opportunities for construction companies. Also, the existence of huge infrastructural deficit in such countries impedes the nation's economic and social growth. In an attempt to accelerate the 'bridging of infrastructure gaps' to overcome existing deficits in infrastructure, many developing countries have instituted incentive packages designed to attract foreign investment and foreign firms including tax reliefs. In Ghana for example, the Free Zones Act, 1995 was passed inter alia to provide incentives such as tax concessions to firms granted licences under the Act (Laryea 2010).

In most countries, especially developing nations, the enormity of such needs attracts construction firms both within and outside which also makes the country ripe for competition. Also, in this era of globalization, which means collapse of boundaries, all nations has become competing nations in an attempt position themselves to attract foreign investment (Ofori, 2012). The opportunity offered by ECOWAS and globalization further increases the intensity of the competition. The Ghanaian construction industry's ability to take maximum advantage of the opportunities for its own growth is the biggest question today because competition remains the biggest challenge of the industry.

High competition and high risk have been considered as the construction industry's major challenge (Schaufelberger 2009). Mochtar and Arditi (2001) contend that, the construction industry is typically characterized by extreme competitiveness, high uncertainty and risks, and generally low profit margins when compared to other industries. In Ghana, these constraints are exacerbated by globalization, which has manifested in an inflow of investment into Ghana from other countries. Although, it creates work opportunities however, domestic construction consultants, contractors and individual practitioners face greater competition from their non domestic (foreign) counterparts that are likely to have greater experience and resources (Ofori, 2012). Similarly, the opportunities offered by the Economic Community of

West African States, has also lead to an influx into Ghana of firms from the other member countries that further escalates the intensity of competition prevailing in the industry.

It is therefore not surprising that market for major projects in developing countries tends to be dominated by foreign contractors (Laryea, 2010). In a study on contractor development in Nigeria, Adams (1997) found that major projects in most developing countries are carried out by foreign contractors because of deficiencies in indigenous construction capacity. A similar finding was reported by Aniekwu (1995) in the study of business environment of contractors in Nigeria. Of the 344 respondents, 266 were indigenous contractors (wholly Nigerian-owned) and 78 foreign contractors (either Nigerian branch of a foreign company or Nigerian/foreign joint venture). Although 78% of contractors were indigenous firms, their total share of annual construction work was likely to be significantly lower than the total annual volume of work done by the 22% foreign firms. These findings are indicative of the major takeover of construction related jobs by foreign firms in developing countries. The stack reality is summed up in the account of an interview with Ghanaian contractors reported by Laryea (2010):

One contractor said that a Ghanaian contractor who wants to increase and build their capacity should approach foreign firms who might like to sublet some of their work. This would help the local contractor in developing capacity and learning and transferring knowledge  
(P. 225)

The above situation is an indication of the extent to which the domestic construction companies are denied of the opportunity to participate in the infrastructure delivery of their own counties. It also shows the extent to which local construction companies are struggling for construction and construction related works that are at the disposal of the non domestic construction companies. Domestic contractors can at best wish for sublet works (not main works) from non domestic construction companies and at worst not get the work at all. Even their desire for subcontracting works from the non domestic construction companies is merely a wishful thinking that has no guarantee.

These indications suggest that domestic construction firms are not able to secure adequate share of the infrastructure projects. This is due to the intensity of competition in the construction industry of many developing nations due to the greater needs of infrastructures. The problem arises where the non-domestic firms wins greater share of projects due their greater resources and experience that gives them competitive advantage over their domestic counterparts. That indicates that the challenges of the CIDA are repercussions of competition in the construction industry of nations especially in developing nations, such as Ghana.

## **MARKETING AS THE RIGHT CORPORATE STRATEGY**

### **Marketing and competition**

Marketing as a management function is now widely adopted by manufacturing, distribution and many more service industries. Although marketing has a wide application in many industries, it has not yet been applied to any great extent by contractors in the construction industry, except those engaged in speculative house building where its benefits are comparatively understood. With intense competition that threatens survival of domestic contractors, marketing is expected to arouse the interest of construction contractors.

To survive competition and to grow, construction companies need to constantly seek ways to outbid their competitors and explore new and/or less crowded areas of construction that may provide more jobs and higher profits. To this end, marketing which has been referred to as “an investment for creating a competitive edge—an empowerment for competitive advantage” (Arditi et al, 2008, P. 255) is recognized as one of the more important functions for helping the construction companies to meet the unprecedented challenges faced by them (Kotler and Conner, 1977). In this context, marketing may help construction companies to differentiate themselves from their competitors, cultivate and/or keep clients, and thereby create competitive advantage needed to effectively compete with non domestic construction companies (Arditi et al. 2008; Chen and Mohamed 2008).

Marketing therefore become the fundamental component for the growth and survival of construction companies by enhancing their knowledge to ensure continuous relevance and to enable them move quickly into new areas of service as opportunities arise. Kotler and Conner (1977) noted that a successful competition of a firm that leads to survival on the market requires the achievement of three major objectives i.e. a sufficient demand a sustained growth and profitable volume. This according to Jaafar et al., (2008) justifies the important role of marketing practices in the management of construction companies.

The need for marketing in the operations of business enterprise is enormous. Notable amongst them are the challenges that came along with the beginning of the 21<sup>st</sup> century.

Kotler and Keller (2012:3), notes that:

“The first decade of the 21st century challenged firms to prosper financially and even survive in the face of an unforgiving economic environment. Marketing is playing a key role in addressing those challenges.

This assertion underscores the role of marketing function in the operations of a business enterprise: to prosper financially and survive in the business environment. This is a top priority for every business. This explains why marketing has aroused the attention of many industries including construction.

Naranjo et al. (2011) notes that:

‘Construction enterprises are aware of the importance of involving marketing in their management functions as a way to adapt themselves not only to the continuous changes in the industry, but also to satisfy their clients’ demands, while being competitive and improving their business strategy’ (Naranjo et al., 2011:245).

The indispensability of marketing for every business industry is summarized by Kotler and Keller (2012:3). The authors concur that:

Finance, operations, accounting, and other business functions won’t really matter without sufficient demand for products and services so the firm can make a profit. In other words, there must be a top line for there to be a bottom line. Thus financial success often depends on marketing ability”

This marketing ability of business enterprises is especially useful for businesses that are operating in intensely competitive business environments such as construction. This underscore the need for marketing in the operations of a business enterprise particularly in developing nations where competition is intense and the competing firms turns to make greater competitive advantage that the local construction businesses. By focusing its marketing activities, a firm can protect its existing customer base and win new client business. This can be achieved through the proper understanding and management of the client base, and in enabling the tailoring of corporate messages, this would improve the chance of winning work and the profitability of that work (Smith, 2001).

### **Marketing and the construction industry**

However, construction enterprise management practices according to Cicmil and Nickolson (1998:96),

“suffers from a “cast in concrete”, inwards-oriented management paradigm which forms a barrier to the implementation of some contemporary managerial techniques and philosophies, now widely recognised and adopted in other industrial sectors”.

Marketing is among the managerial techniques which are now widely recognized in many industries. However, the inward-oriented management paradigm prevents it utilization in the construction businesses.

Cicmil and Nickolson (1998), further states that:

“Construction business practices suffer from parochial attitudes to ownership of projects, technically biased operations, and conservative, efficiency-based approach to management. Novice propositions, such as the acceptance of customer-oriented policies through partnering, synergy, professional concurrence and organisational



systems conducive to learning, have been a topic of major academic and professional debates on culture change in the construction industry” (p. 96)

The authors further argue that:

“Management practices in the construction industry are dominated by the engineers paradigm (Seymour and Rooke, 1995) which leaves a rather limited scope for implementation of contemporary business theories, management processes and behavioural change, such as marketing driven strategic management or total quality management (TQM)”. (p. 97)

Many other researchers such as Betts and Wood-Harper, (1994); Cicmil and Egan, (1996); Seymour et al., (1997) and other have made similar observations. Typical management structure of construction business enterprise is illustrated in figure 1. It is obvious that the addition of marketing to the business functions appears to be a wishful thinking. Morgan and Morgan (1991) states that marketing within the construction profession is considered at worst as an alien concept, and at best as a new development that is viewed with scepticism. Similarly, Pheng (1991) observed that marketing has attracted only little attention among construction professionals. Morgan and Morgan (1990) also stated that marketing is less developed in the professional industry and often performed in most firms in an ad hoc basis. This augments the assertion that marketing is not seen as a source of competitive advantage by most construction business companies.

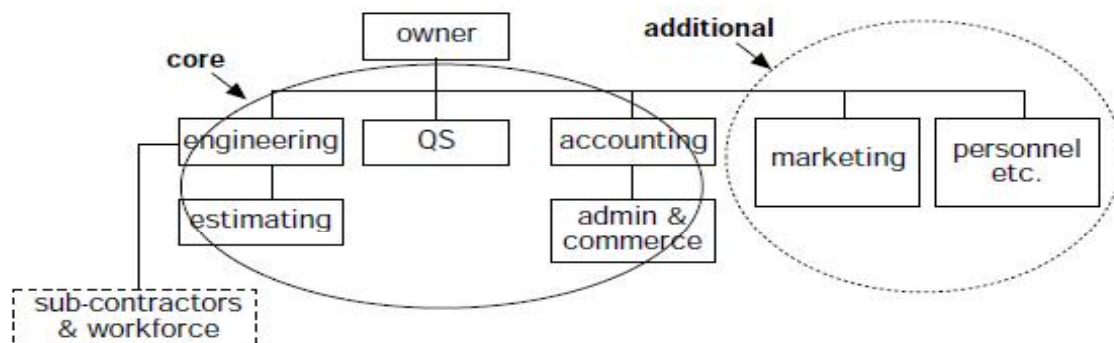


Figure 1: An outline of a typical organisational structure development in a small/medium construction contracting company

Source: Adopted from Cicmil and Nickolson (1998)

### MANAGERIALS IMPLICATIONS AND DIRECTIONS FOR FUTURE RESEARCH

The paper demonstrates that active participation in infrastructural delivery by domestic construction companies may be used to address many of the challenges facing the construction industry in Ghana. This will in turn enhance the effort towards developing the construction industry of Ghana. However, this is hindered by competition.

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The paper has further shown that the establishment of a central regulatory agency may not be the only sure way towards success of construction industry development agenda, as has been indicated by many researchers in this field of research. This is because the construction industry environment is now experiencing a new wave of challenge: competition which has arisen out of globalization and other changes occurring in the construction industry. Due to that, what is equally important is marketing as a management function in the operations of a construction business enterprise. This is essential for competitive advantage which is needed for construction businesses to survive competition, to grow and to be profitable. When these prerequisites are met, the CIDA can be achieved.

### **Managerial Implications**

Management of construction business enterprises must embrace marketing in their management functions. They must acquire necessary marketing skills and manpower, and allocate adequate funds for marketing activities.

### **Directions for Future Research**

Future research must focus on the role of marketing in the operations of a construction business enterprise in face of competition. Especially important are empirical research that will result in integrated models and frameworks for marketing construction business enterprises that will serve to guide construction businesses on the application of marketing to ensure overall effectiveness.

### **REFERENCES**

- Adams, O. (1997) Contractor development in Nigeria: perceptions of contractors and professionals, *Construction Management and Economics*, Vol. 15, No. 1, pp. 95-108.
- Anaman, K. A. and Osei-Amponsah, C (2007) Analysis of the causality links between the growth of the construction industry and the growth of the macro-economy in Ghana, *Construction Management and Economics*, 25, 951-961.
- Aniekwu, A.N (1995) The Business Environment of the Construction Industry in Nigeria, *Construction Management and Economics*, 13, 445-455
- Arditi, D., Polat, G. and Makinde, S.A. (2008), "Marketing Practices of U.S. Contractors", *Journal of Management in Engineering*, Vol. 24, No. 4, pp. 255 – 264.
- Chen, L. and Mohamed, S. (2008), Impact of the internal business environment on knowledge management within construction organizations, *Construction Innovation: Information, Process, Management* Vol 8, No.1, pp. 61-81.
- Betts, M. and Wood-Harper, T. (1994), "Re-engineering construction: a new management research agenda", *Construction Management and Economics*, Vol. 12, pp. 551-6
- Cicmil, S. and Egan, C. (1996), "An evaluation of construction project management in the context of the internationalization process", unpublished paper, presented at BAM'96 Conference, Aston Business School, Birmingham, September 1996.

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- Cicmil, S. and Nicholson, A. (1998). "The role of marketing function in operations of a construction enterprise: misconceptions and paradigms", *Management Decisions*, Vol. 36 No. 2, Pp. 96-101
- Government of the Republic of Ghana (2000) Highway Network Master Plan, 2001-2020: Draft Final Report, Executive Summary. Accra.
- Ghana Statistical Services (GSS), (2015), National Accounts Statistics, Revised Gross Domestic Product 2014, Ghana Statistical Service (GSS), Head Office Economic Statistics Directorate
- Jaafar, M.; Aziz, A. R. A. and Wai, A. L. S. (2008), Marketing practices of professional engineering consulting firms: implement or not to implement? *Journal of Civil Engineering and Management* Vol. 14, No. 3, pp. 199–206.
- Jaselskis, J.E. and Talukhaba, A. (1998) Bidding considerations in developing countries, *Journal of Construction Engineering and Management*, Vol. 125, No. 3, pp. 185-193.
- Kotler, P and Connor, R. A. (1977), "Marketing professional services", *Journal of Marketing*, Vol. 41 No.1. Pp.71–76.
- Kotler, P.,and Keller,K. (2012), *Marketing Management*. Prentice Hall, New Jersey.
- Laryea, S. (2010). In: Laryea, S., Leiringer, R. and Hughes, W. (Eds) *Proceedings of the West Africa Built Environment Research (WABER) Conference, 27-28 July 2010, Accra, Ghana*, pp. 215-226.
- Mochtar, K. and Ardit, D. (2001) Role of marketing intelligence in making pricing policy in construction, *Journal of Management in Engineering* Vol. 17, No. 3, pp. 140–148.
- Morgan, R. E. (1990), *Marketing Professional Services: an empirical investigation into consulting engineering services*, in *Proceedings of the 1990 marketing education group annual conference*, 973-994.
- Naranjo,G. Pellicer, E., and Yepes,V. (2011) "Marketing in construction industry: State of knowledge and current trends," *DYNA*, Vol. 170, No. 78. pp. 245-253.
- Ofori G. (2012) *Developing the Construction Industry in Ghana: the case for a central agency*. National University of Singapore, pp. 1-19.
- Schaufelberger, J (2009) "Construction business management". Prentice-Hall.
- Seymour, D., Crook, D. and Rooke, J. (1997), "The role of theory in construction management", *Construction Management and Economics*, Vol. 15, pp. 117-19.
- Wooldridge, A. (2010) A special report on innovation in emerging markets, In: *The Economist*, 17-23 April 2010 edition, *The new masters of management*, Vol. 395, No. 8678