# Developments of the construction industry: economic analysis



## **INTRODUCTION:**

The construction Industry has been hailed as the back-bone of many economies, in part or as a whole. It adds in large parts to the GDP of a nation and as a whole enables trade and encourages growth. It currently contributes about one- tenth (1/10) of the world's GDP. ' The total global AEC (Architecture, Engineering and Construction) market is about \$7. 2 trillion and expected to grow to \$12 trillion by 2020' (Global Construction 2020. http://www.globalconstruction2020.com/).

The Construction industry provides employment for about 7% of the total global employed work force. It also accounts for being the largest energy consuming sector globally where it is recorded to consume about 2/5th of the total consumed energy worldwide and it is responsible for about half the total resources used worldwide. (http://www. economywatch. com/worldindustries/construction/trends. html#sthash. 8UZZiQEb. dpuf)

This technical report examines the sum and a specific part of the industry. Looking at factors; Political, Economic, Social, Technological, environmental and social that may affect the industry's growth and the strategic analysis employed by businesses in this industry. This would be done using the PEST analysis and Porters Five Force model when researching the Industry as a whole and the SWOT and Portfolio Analysis in researching a specific part.

Being a multi-trillion global industry, it remains an attractive competitive industry where managers must strategically manage their individual companies as it is a project centred industry characterized by short-term

partnering between a range of teams with varying levels of Industry https://assignbuster.com/developments-of-the-construction-industryeconomic-analysis/ experience, information and communication technologies' capability. To remain competitive, managers must ensure they have effective strategies to continue to win work for their project centred businesses.

# The CONSTRUCTION INDUSTRY:

What is the construction Industry? The business dictionary online defines this as; "The Sector of national economy engaged in the preparation of land and construction, alteration, and repair of buildings, structures, and other real property."

It is an industry known worldwide for operating on narrow profit margins (P. 51 Anthony E Henry. Understanding Strategic Management) and it constitutes one of the most important sectors in any countries national economy. It can be split into three broad categories: Architecture, Engineering and Construction;

 The construction of heavy and civil engineering which covers the construction of railway tracks, bridges, highways, tunnels, airport and other functional capital intensive ventures.

 The construction of real estate which covers both commercial and residential buildings.

 And, the construction of specialized items; pipelines, electrical equipment, decorative materials, and the likes.

It is considered as being the world's single largest industrial employer. Estimates of its size and importance vary from country to country. (http://www. cnbc.

com/id/100419943/Research\_and\_Markets\_Analyzing\_the\_European\_Constru ction\_Industry\_2013)

The construction industry like most other industries is affected by a nations financial crisis as government cuts in spending and other factors such as population growth, material costs, climate, urbanisation, globalization and technology can have their direct and indirect toll on the industry.

pondering on our modern-day construction consumerism and deliberating the mismanagement of resources and the austere warnings heavily laced by speculation of the ever increasing unstable financial markets taking our world to the threshold of scarcity that analysts in the major resource departments; material, energy, finance and water have warned. In an age of depleting resources and a need to continue to create, the construction industry is facing many threats and has sought many methods to become more efficient and less resource consuming. With this sees a new area of job markets opening up in the construction industry.

## **PEOPLE IN INDUSTRY:**

The construction industry currently employs;

- Architects,
- Engineers,
- Surveyors,
- Builders,
- Town Planners,

• Building inspectors, https://assignbuster.com/developments-of-the-construction-industryeconomic-analysis/

- Project and Construction Managers
- Contractors (who employ; Electricians, Plumbers, joiners, crafts trades, etc.)

However, with the need to be more efficient and streamlined, the construction industry has created new employment in the sustainability sector that deals with using less, working smart and taking responsibility for resources to decrease waste and increase production. With the advent of cutting edge technology used to greatly enhance precision and efficiency, the introduction of Building Information Model (BIM) sees a more efficient stream lined team enabling more specific designers and their design teams to work in a collaborative manner on one platform of information technology minimising error as well as cost.

### **TRENDS:**

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The trends that will continue to drive the industry in the coming years include global warming and new innovative materials to be used to achieve a more sustainable environment (Bjorn, 2009); it would also include population growth and urbanisation world-wide.

The global construction industry has seen decline over the last six (6) years. However, there are many emerging markets and a global growth is expected looking up to 2020 through to 2050.

With the introduction of BIM and a need for development, recorded fast growths have been in the Asian markets where China now holds the lead and Japan, once the emerging global construction leader has almost altogether halted. Africa has had big construction growths and constitutes one of the https://assignbuster.com/developments-of-the-construction-industryfastest growing emerging markets in the construction industry. Although, the vast majority of firms that operate there are international firms especially from the Chinese construction industry. The Middle East continues to grow and Eastern Europe and Latin America are expected to have continuous growth. Most of this growth is influenced by population growths, globalization and urbanization worldwide.

Merco Press suggests the global construction industry contributes over 10% to the global GDP and predicts this will rise to about 13% of the global GDP by 2020. This will see a financial input of over \$97 trillion up to 2020 with yearly increments of over 5% (global Construction Perspectives and Oxford Economics).

Laing O'Rourke suggests the majority of the world's population now lives in towns and cities, with the balance shifting from a rural existence largely in the last three years. By 2050, over 6. 5 billion people will be urbanites, with the total world population estimated to rise towards 11 billion in the same period. Thus, they are positioning themselves in the market to be able to cater to this big shift in global living

## THE CONSTRUCTION GROUPS:

Strategic Analysis is; A theoretically informed understanding of the environment in which an organisation is operating, together with an understanding of the organisation's interaction with its environment in order to improve organisational efficiency and effectiveness by increasing the organisation's capacity to deploy and redeploy its resources intelligently. (http://www. cimaglobal. com/) There are many construction companies around the world. International construction firms are large multi-billion pounds firms that operate in several countries world-wide delivering construction solutions and growth. A number of the larger industry firms undertake construction work internationally however; majority of work is carried out by the local or national small and medium sized enterprises.

The majority of international construction companies will have commenced with limited operation, normally involving one country. Those who experience initial success will be more likely to expand their businesses, eventually leading to growth by investing in other countries. Conversely, a lack of success is likely to encourage withdrawal back into the domestic market. (Howes and Tan, Strategic Management Applied to International Construction P 59)

These companies to stay at the top of their markets would have strategically analysed their industry and would use results to try to stay ahead.

This report would consider 2012's top 20 construction Groups world-wide focusing on number 1-Balfour Beatty and Number 20- the Mace Group. This report would cover the years running up to 2012 specifically looking between 2009 -2011.

Clear changes are seen in the work that were bid for and carried out in a space of 2 years of an economic downturn. More significant market changes are seen with the Bottom two Laing O'Rourke and the Kier group.

# **INDUSTRY ANALYSIS:**

# **PEST ANALYSIS OF THE INDUSTRY:**

PEST stands for; Political, Economic, Social and Technological. These are the Factors used in studying to gain an understanding on the factors that affect an industry. Using the PEST analysis on an industry gives insight on the environmental factors facing that industry. It can also be applied to individual companies, firms and businesses.

# (P)olitical Factors;

The political factors affecting the construction industry are mostly new government changes, changes in legislation, documentation, new policies and permits that have to be obtained and submitted before, during and after the works and at various phases of the construction process to its official hand-over.

Globally, it could be affected by unstable governments in emerging markets, law variations and business taxes.

It could also cover things like sustainability, reduction of the carbon foot print in the construction industry, the remediation of brown land, the protection of national landmarks, ecology, and habitat.

# (E)conomic Factors;

Price fluctuations of goods can have an impact on the industry. Government cuts, a recession, VAT rises, fluctuations and a decline in economic growth all can affect the construction industry. This can have knock-on effect when jobs have to be placed on hold which invariably costs the industry more losses. Also, a change in demand for services and a change with the financier of the construction bodies could all have an effect. Positively, a decrease in the stamp duty could signal a good sign for the residential construction industry.

# (S)ocial Factors;

Various things affect the social aspect; a development is 'judged' on its location, its proximity to services, the nature of the construction; materials used aesthetic appeal, functionality and safety. The perceived image of the constructing firm, provisions offered by the constructed space, age distribution, Population Growth, cultural and career provisions.

# (T)echnical / Technological Factors:

The Construction industry is a very technical one. Technology changes happen rapidly and the advent of the use of BIM, has seen big changes in the way work is carried out. Techniques change, needs change, new building systems to meet with Zero carbon buildings, prefabricated materials, premixed cement mixtures. The industry works, faster and smarter now. Many new buildings are put together like a puzzle piece.

# **PORTERS FIVE FORCES;**

The Porter's five forces is a framework used for diagnosing an industry's' structure. Forces that erode long-term industry average profitability. This framework can be applied at industry, group or individual firm level. (Lecture notes Feb 2013) It breaks down the competitive rivalry within an industry focusing on; the threat of new entrants, the bargaining power of suppliers, the bargaining power of customers and the threat of substitutes.

### **Competitive Rivalry within the Industry; (HIGH)**

With the down-turn in the economy, the major Construction firms have shown contrasting responses to the downturn in public sector construction work, amid warnings that public sector capital investment will drop by 24% by 2013/ 2014, three of the biggest firms increased their proportion of public sector work won.

Balfour Beatty no 1 of the top 100 construction firms moves towards plans for acquisitions of major gas-fired stations. It also uses its US business Parsons Brinkerhoff to become an end-to-end provider for major clients such as SSE. (http://www. cnplus. co. uk/news/balfour-beatty-plans-acquisitionsfor-major-gas-fired-stations-move/8643974. article? blocktitle= Top-Stories&contentID= 7501)

Many of the larger firms are expanding and diversifying their portfolios to stay at the top. Bidding in new categories and offering more. Brand identity gives an advantage in contract acquisition however; there is a level of fair play in that not all construction companies can carry out the same job specs.

The small and medium enterprises lower down the construction firm ladder however have steep competition as they all go for the same projects and are bidding on the same levels.

And everyone on that ladder competes against itself on; improving technology, continuous innovation and integration to optimise cost.

# The Threat of New Entrants; (LOW)

The construction Industry is very capital intensive. The brand names in the construction industry are well known and well established, location for most of the top 100 construction firms is not an issue as they can easily absorb the costs of travel to win work and diversify their portfolios in other countries. Profitability in the construction industry relies heavily on the economies of scale. It does not offer much for consumers switching costs and retaliation from the top 100 would be an issue for a new smaller firm that does not have the heavy capital investments required. Regulatory approval and licensing is paramount in this industry and it comes with high operational costs.

Smaller firms and businesses operate and do smaller jobs and contracts. They are sub-contracted from the larger construction firms and operate in the local markets. They also offer product and service hires which can prove profitable for them.

With larger firms having the intensive capital required, they are able to bid lower than smaller firms and win jobs.

# **Bargaining Power of Customers: (High)**

The Buyers are the clients and end users of the construction industry. They can be government bodies, a consortium, or high net- worth individuals. As most jobs are won through a tender / bid process, the consumer / customer has a fair amount of ' force' here as they naturally have a say in who they would like to carry out their project usually based on best price for quality, portfolio, trust in brand, knowledge of brand and in some instances this can be decided by ' word-of-mouth'. Firms need to keep a good name and work ethic to keep business, win repeat business and win new business from referrals.

When dealing with residential property, the consumer has the option to also renovate or buy an already done house. So, they do have a fair amount of force.

# **Bargaining power of Suppliers: (LOW)**

Supplies are many and products and services can be substituted. New products are constantly coming into the market and as the construction industry is a future forward one, it would move with the better global trends for goods and services.

Most goods have a set non-negotiable price range across board which leaves the supplier with little or no force on the industry.

# **Threat of Substitutes: (LOW)**

Products and services in the construction industry are ' as they are' it is virtually impossible to substitute them.

The rise of the Boat-home, the mobile-caravan homes, and holiday cabins are all short-term substitutes. Many other buildings and large civil construction services cannot be substituted.

As explained by (Saidi, O'Brien and Lytle, 2008), 'There is limited or no direct substitute for the industry's product, some services can be replaced with others within the industry such as the use of robots in place of human labour. Robotic system cut down labour requirements in a Japanese construction site by approximately 30%'. It however does not completely substitute the need for human input.

## THE ORGANISATION:

http://books. google. co.

uk/books/about/A\_Strategic\_Analysis\_of\_the\_Construction. html? id=

hk\_VT8JpCIMC

http://books. google. co. uk/books? id= hk\_VT8JpCIMC&pg= PA11&lpg=

PA11&dq=

how+do+i+strategically+analyse+the+construction+industry&source=

bl&ots= LF7UCRNx\_K&sig= 2P8J4vBhZuubow1Ui9bPP3nrbq0&hl= en&sa=

X&ei= POsvUfbwLImb1AXrkoDoAg&ved= 0CDsQ6AEwAg

http://www.amazon.co.uk/Strategic-Analysis-Construction-Industry-

Emirates/dp/3836699206#reader\_3836699206

http://www. cimaglobal.

com/Documents/ImportedDocuments/cid\_tg\_strategic\_analysis\_tools\_nov07. pdf. pdf

http://www.economywatch.com/world-industries/construction/research. html#sthash.U3p84gQD.dpuf)

http://www. businessdictionary. com/definition/construction-industry.

html#ixzz2N8qeZD8M

### Strategic Management Applied to International Construction

https://assignbuster.com/developments-of-the-construction-industryeconomic-analysis/ By Rodney Howes, Joseph H. M. Tan

Berge Bjorn, (2009) The Ecology of Building Materials. 2"d Edition.

Architectural Press

(- See more at: http://www. economywatch.

com/world-industries/construction/research. html#sthash. U3p84gQD. dpuf)

LOOK AT (http://www.sloanvalve.com/Dec11\_global\_outlook.pdf)