Strategy formulation capabilities of construction professionals

This item was submitted to Loughborough University's Institutional Repository by the author.


Additional Information:

- This conference paper was presented at the 5th International Conference on Innovation in Architecture, Engineering and Construction, AEC2008, June 23-25 2008, Antalya, Turkey. The event was jointly organized by Civil Engineering Department, Middle East Technical University and Centre for Innovative and Collaborative Engineering, Loughborough University: http://www.lboro.ac.uk/cice/conferences/AEC2008/

Metadata Record: https://dspace.lboro.ac.uk/2134/9898

Version: Accepted for publication

Publisher: CICE, Loughborough University

Please cite the published version.
This item was submitted to Loughborough’s Institutional Repository (https://dspace.lboro.ac.uk/) by the author and is made available under the following Creative Commons Licence conditions.

For the full text of this licence, please go to:
http://creativecommons.org/licenses/by-nc-nd/2.5/
STRATEGY FORMULATION CAPABILITIES OF CONSTRUCTION PROFESSIONALS

Sameedha Mahadkar¹ and Francis T Edum-Fotwe²

f.t.edum-fotwe@lboro.ac.uk²

Department of Civil and Build Engineering, Loughborough University,
Loughborough, Leicestershire, LE11 3TU, UK¹,²

ABSTRACT

Strategic formulation involves synthesising complex, uncertain and often ambiguous information that necessitates a continuous need for senior managers to develop appropriate cognitive attributes. Professionals involved in strategy formulation should be able to exhibit flexibility along with creativity to ensure that the organisation they lead is steered in the right direction in response to a changing and demanding business environment. This paper is set out to explore the strategy formulation capabilities of construction professionals. A range of senior managers from multidisciplinary construction organisations were interviewed in order to explore the various factors that contribute to the strategy formulation capabilities of the professionals. The key factors identified were knowledge and skills. It is suggested that such an evaluation can have a significant role in increasing and improving strategic thinking, thereby enhancing the process of strategy formulation.

Keywords: capability, strategy formulation, construction, professionals, innovation

INTRODUCTION

The career of every construction professional would normally start from a technical role and progress to a managerial one, and with increasing strategic orientation. The practise of strategic management enables organisations to adapt to the changes in their internal and external environment. The skills required for managing strategically are often assumed to be naturally disposed among senior executives, and deemed as a reflection of their experience. Construction professionals traditionally are educated and trained in the technical aspects of the sector’s production operations. Their transition to senior management however, would call for knowledge and skills that reflect decisions of a strategic nature Johnson and Scholes (1999). Ansoff and McDonnell (1990) for example describe the capability implicit in such a strategic role as the propensity and ability to engage in behaviour which optimises the attainment of the firm’s objectives. The ability of construction professionals to cope in such roles could be inferred from their capability to formulate strategies. A study of the strategy formulation capabilities of construction professionals will help in identifying gaps in essential skills and knowledge necessary for formulating and implement effective strategies (Graetz, 2002).

Within this paper the authors explore the strategy formulation capabilities of construction professionals. The initial step was to review strategic management focussing on the strategy development process. Following which, managerial behaviour and the various tasks that senior management undertake along with their strategic role were identified. It was then proposed that a professional gains knowledge and skills through various modes and it these
factors that contribute to their capabilities. A number of senior management professionals within the construction industry were interviewed and assessed on the basis of the above factors. An attempt was made to identify any existing capability gap.

**STRATEGY FORMULATION**

Byars et al. (1996), express strategy formulation as ‘Concerned with decision making with regard to defining organisation’s guiding philosophy, establishing long range objectives to achieve mission and selecting the appropriate strategy to achieve long range objectives.’ Mintzberg et al. (2004) combine the opinion of different schools of thought and evaluate strategic formation as judgemental designing, intuitive visioning and emergent learning. They further add that it is about transformation as well as continuation and that it should involve individual cognition and social interaction.

**Strategy Formulation Approaches**

Strategy formulation deals with the understanding the various aspects of the organisation (both internal and external) and developing a vision to lead the business to achieve the organisation’s mission and objectives. McLellan and Kelly (1980) have identified four approaches.

**Bottom-up Approach** - experienced and qualified managers of a particular business unit would be involved, in formulating the strategy. Operational managers can also be involved to integrate the business level strategies with the respective operational strategies. The only disadvantage of this approach is that the organisational strategy as a resultant combination lacks the overall direction of the business strategy.

**Top-down Approach** - the strategy is exclusive to the senior management or directors. Thus the overall strategy is influenced by the principles, ambitions and expectations of a limited number of people. The lack of involvement of the operational staff in the strategy formulation process could hamper their performance at the operational level.

**Interactive Approach** - allows open negotiation and interchange of ideas between different levels of management. Thus, numerous opportunities are created to ensure that all levels are involved in the strategy and it also allows for more creativity and innovative ideas.

**Semi-Autonomous Approach** - most managers would be involved at the business level and the organisational strategy would mainly deal with overall future development and expansion. Senior manager’s involvement would be restricted to planning at the corporate level.

Anderson and Paine (1975) have also suggested a perceptual model of strategy formulation which provides the means to consider environmental effects and organisation responses along with the perceptual process of the decision makers in the organisation.

Hart and Banbury (1994) also suggested a strategy making model which focuses on the interrelationship between top managers and organisational members in strategy making/formulation. The various roles that can be assumed by the top managers are explained in this model. They assume the role of a commander where the strategy is formulated at the top and issued to the rest of the organisation; or the role of a sponsor - where the strategy is issued at the bottom and is approved by the top authorities. Similarly
the organisational members also play varied roles. These can be described as ‘good soldier’, where the members just execute orders issued by the top managers or ‘entrepreneur’, where the members are expected to pursue new initiatives. The model is presented in table 1. The various approaches provide an insight to identify the different roles that senior management can undertake in order to formulate strategy.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>STYLE</th>
<th>ROLE OF TOP MANAGEMENT</th>
<th>ROLE OF ORGANISATIONAL MEMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMAND</td>
<td>Imperial</td>
<td>Ruler</td>
<td>Soldier</td>
</tr>
<tr>
<td></td>
<td>Strategy driven by leader or small top team</td>
<td>To provide direction</td>
<td>To obey orders</td>
</tr>
<tr>
<td>SYMBOLIC</td>
<td>Cultural</td>
<td>Coach</td>
<td>Player</td>
</tr>
<tr>
<td></td>
<td>Strategy driven by mission and a vision of the future</td>
<td>To motivate and inspire</td>
<td>To respond to challenge.</td>
</tr>
<tr>
<td>RATIONAL</td>
<td>Analytical</td>
<td>Boss</td>
<td>Subordinate</td>
</tr>
<tr>
<td></td>
<td>Strategy driven by formal structure &amp; planning system</td>
<td>To evaluate and control</td>
<td>To follow the system</td>
</tr>
<tr>
<td>TRANSACTIVE</td>
<td>Procedural</td>
<td>Facilitator</td>
<td>Participant</td>
</tr>
<tr>
<td></td>
<td>Strategy driven by internal process and mutual adjustment</td>
<td>To empower and enable</td>
<td>To learn and improve.</td>
</tr>
<tr>
<td>GENERATIVE</td>
<td>Organic</td>
<td>Sponsor</td>
<td>Entrepreneur</td>
</tr>
<tr>
<td></td>
<td>Strategy driven organisational member’s initiative</td>
<td>To endorse and sponsor</td>
<td>To experiment and take risks.</td>
</tr>
</tbody>
</table>

**CAPABILITY**

*Management capability is concerned with an appraisal of the endeavours of the managers who participate in strategic management* (Greenley, 1989). Senior managers within the construction industry require a certain level of competency in order to execute good strategic decisions. This capability can also be referred to as the ability that has potential for development. Ansoff and McDonnell (1990) proposed that managerial capability can be assessed on the basis of:

1) The responsiveness of the company to anticipate and react to changes in the environment. This responsiveness can be described by three capability attributes namely *climate, competence and capacity*.
2) An assessment of certain managerial attributes which would give resultant capability profiles.
They further proposed that capability of managers can be evaluated by the following:

- Mentality: Manager’s values, expectations, personal goals, ability to take risk, managers perspective
- Power: position within the organisation, ambitions of the managers.
- Competence: knowledge about the environment, functioning of the organisation, manager’s talents, personality, problem solving ability, leadership style.
- Capacity: personal work capacity, work habits
- Climate and Culture of the organisation.

The above attributes formed the foundation for evaluating the strategy formulation capabilities of construction professionals. In order to analyse their capabilities, the main factors that contribute to capability were initially identified. These mainly comprised of background of the individual, development and skills, education, experience, formal systems like mentoring, informal systems such as intuitive skills. Although these formed a basis of the emerging themes, they were further categorised into three main areas namely, knowledge, skills and other factors (formal and informal systems for skills development). Strategic decision making is multifaceted and involves synthesis rather than decomposition. The complexity, uncertainty and ambiguity of strategic decision making present a continuing need for senior managers to develop well articulated cognitive structures; which should adequately map the key aspects of their business and environment. Hence, professionals involved in strategy formulation should have the ability to adapt to a changing environment and should exhibit flexibility along with creativity to steer the strategy in the right direction in response to a demanding environment.

The characteristics of a strategist are defined by numerous factors; the individual’s approach to the strategy would be guided by the set of values, body of experience, knowledge gained through education, skills and competencies honed by training which inversely is converted to a knowledge base which the individual utilises to execute strategic decisions. The key characteristics of emotional intelligence and superior leadership as suggested by Graetz (2002). Knowledge and skills form the main themes for determining capability of professionals and these formed the backbone of this research.

**RESEARCH METHOD**

A qualitative paradigm was selected for this research along with explanatory case study method. The central theme of this research is exploring the strategy formulation capabilities of construction professionals. In order to achieve this, questioning or discussing issues with professionals along with establishing interpersonal contact would be prove necessary for explaining and describing some of the questions. This research requires an explanation as to why the respondents are answering or feeling the way they do rather than a simple yes or no. It requires an insight into the respondent’s perspective. It seeks to discover the meanings that the respondents attach to their behaviour, how they interpret situations and what are their perspectives on particular issues (Woods, 2006). Considering the above parameters, interviewing technique was found suitable for this research study, as it would not only provide a rich source of data but also satisfy the above requirements. It is a very useful method of data collection which would not likely be accessible using techniques such as observation or questionnaires. The area of ‘capability’ is subjective in nature. To explore the capability of an individual a purely exploratory technique such as unstructured interviews, would prove inadequate as it would be difficult to establish relationships between the
different subjects interviewed. To pitch only ‘open questions’ and to let the interviewee lead
the direction of the interview would add a number of complexities to the data collected and it
would be difficult to categorise and analyse such responses. Semi-structured interviews on
the other hand, refer to situations that have been analysed prior to the interview. This method
was also deemed inappropriate as it would not have been possible to analyse a situation based
on an individual’s strategy formulation capabilities as it constitutes of various factors such as
background, past experience, education, knowledge and skills gained by him. Using
structured interviews one can receive accurate answers and the response rate is relatively
higher than the other methods. The answers can be explored with finding out ‘why’ the
particular answers are given (Blaxter et al., 2006). Thus, structured interviews were
identified as the most appropriate method of data collection; furthermore discourse analysis
was utilised to evaluate the collected data. The interviews aimed to collect information from
senior management within the construction industry on the basis of following areas:
1) Background of the professional- in order to gauge the societal and environmental
influences that could have shaped their development. An investigation into the professional’s
background would assist in identifying the drivers responsible for their growth and
development.
2) Position within the organisation- to identify the area of activity, identification of roles and
tasks undertaken, magnitude of decision making.
3) Future Aspirations- to gain an insight into the thought process of the professional, personal
development drive, values, expectations and personal goals.
4) Education- to judge the extent of knowledge gained and skills developed through
knowledge.
5) Past Work-Experience- to gauge the extent of practical knowledge gained, it would also
provide an indication of skills developed.
6) Formal options for developing skills- training courses. This was evaluated in order to
establish which training options are significant to the professional and contribute to their
capability.
7) Informal Options for developing skills- To identify the significance of mentoring, societal
influences for developing skills.
8) Managerial attributes- To explore the significance of various skills which the professionals
perceive as essential.
9) Development of skills, strategic insight.
Thus, six professionals from senior management and one from junior management were
interviewed for the purpose of this research.

RESEARCH FINDINGS

The next section presents summary findings of the research based on the various areas that
the professionals were evaluated.

Knowledge from background, past experience and education

Background of Professionals

Every individual has a distinctive background and an investigation of the same provided key
drivers that could have been responsible for their growth and development. These drivers
were identified as:
1) One can be inspired by an influential figure within his/her family or environment.
2) Enthusiasm & excitement of building or construction can also provide an aspiration.
3) A difficult and harsh childhood could also drive an individual to achieve a better future.
4) The desire to handle more than just the technical aspects of construction drives professionals into managerial roles.

Job profile
Senior management professionals who operated at a functional and corporate level had additional roles within the organisation. It was observed that the magnitude of influence of such professionals within the organisation was higher. All senior management professionals influenced the policies of the entire organisation either directly or indirectly; as opposed to the junior management professional. Professionals who are directly engaged in decision making that affects the entire organisation display enhanced competencies. Hence, this confirmed Zabriskie and Huellmantel (1991) view about the duality role of senior managers. One of being an operation leader who is already skilled in managing already invested resources to gain market share and profit in the current markets. The other role of being a strategic leader who is skilled in selecting and identifying future markets in which to invest the organisations resources for growth.

Education and Work-Experience
Every senior management professional had a sound technical background and had pursued technical roles before transcending into managerial roles. Thus, one must have requisite theoretical knowledge within his field which enables him/her to understand the problems in delivering projects and also provides a better understanding of the business as one advances into managerial roles. Professionals involved at a corporate level of operation had pursued further education (master’s degree in either a technical field or an administrative field). This factor could have enabled them to enhance their knowledge and perform better within their designated role. Every senior management professional had a substantial amount (20-30 years) of work experience. This contributes to the knowledge they gain through practical aspects as opposed to only technical knowledge.

Hence an individual gains knowledge and expertise within a particular field which enables him to execute his job effectively. Past work experience provides an understanding of the application of the knowledge gained through theoretical means. It also highlights the importance of good work experience in the relevant fields at the onset of one’s career, which enables the professional to perform better at a senior management post. Thus, this asserts Gray’s (2005) view that fundamentally managers should be able to think wisely and flexibly; to do this sometimes good amount of exposure or work experience empowers the managers to do so. Lively and enquiring minds provide the best forms of leadership and are the basis of the best strategic thinking.
A professional’s background and aspiration provides an insight into his values, expectations and personal goals. This can be utilised to compare it against the skills they hone or develop to gain wider knowledge. The following section provides an assessment of skills required for strategy development.

Skills to aid in strategy formulation/development

Development of skills through formal modes: Training Courses
Development of skills was a conscious process for most of the professionals. Each of the professionals had undergone some form of training. Amongst all the training options provided, most of the managers found technical and managerial courses important. Although,
at senior management posts professionals do not need to deal with too many technical issues; technical training courses were still important for most of the professionals as it allowed them to keep up to date with the advancing technology. Professionals who aspired to achieve higher positions within the organisation and also at the board level signified the importance of managerial courses. Training courses in team building were also deemed important, as it is necessary for the team to integrate and work well together. All the professionals agreed that training courses were useful in order to develop skills or to hone their skills. A fraction of the professionals had attended training courses related to strategic management. The professionals perceived that these courses enabled them to enhance their strategic thinking; which leads to good strategic decision making.

**Development of skills through informal modes**

*Social environmental influences*
The social environment that a professional is exposed to plays an important role in developing skills. If the organisation provides the professional with a good learning environment; it encourages the professionals to hone their current skills and also gives them the opportunity to develop additional skills. On the other hand, a professional could be subjected to a learning environment outside his work environment which may be conducive for his development. Ultimately, it is up to each individual to develop his/her skills as the opportunity presents itself.

*Mentoring:*
Mentoring is a significant mode which aids a professional to recognise his weaknesses and enables him to develop skills in areas where he may lack. Although a structured mentoring system would not be beneficial as the individual should be able to choose his mentor. An unstructured mentoring system should be adopted so that the professional could have someone who he can trust, as his mentor. Only then does the system of mentoring function well.

*Strategy formulation- an intuitive process?*
Strategy formulation could be an intuitive process at times, although this opinion is purely subjective. It would depend on the professional’s character and intellect. But all the professionals agreed that training courses enable one to make better strategic decisions.

*Decision making at the top of the organisation*
All the professionals were provided with alternatives based on type of decision making at the top of their organisation to indicate the option that closely matched their experience within the organisation. This was done in order to gauge the role of the professional within the organisation based on Hart’s Strategy making model (1994). The findings provide an insight into the type of strategists the professionals are.

In general most of the construction organisations had their strategy driven by a vision and mission of the future and for some organisation’s strategy was driven by a leader. As pointed out by some professionals, there was no definitive way of implementing a strategy. A combination of approaches was usually implemented within the organisation. The role of the strategist was to either follow orders as provided by the senior authorities or to respond to the challenges of the changing environment. It was only one construction organisation that implemented a combination of; strategy driven by the organisation member’s initiative as well as strategy driven by vision and mission of the future.
Managerial Attributes

The key attributes required by managers were identified on the basis of Mintzberg et al. (2004) model for understanding managerial work. These were based on the activities of managers, such as exercising control, developing system for planning, delegating responsibilities, designing structure of the business unit, managing people, solving problems, crisis resolving, dealing and negotiating with others, linking the internal and external environment of the business.

All the professionals interviewed perceived their skills in communication, team management, team appraisal, integrity, understanding others, collaborative working, self awareness and problem solving ability as good. Areas such as negotiation skills and self awareness required improvement for some of the professionals.

Based on these managerial attributes and also identification of skills required to manage at the top of the organisations the strategic insight of the professionals was estimated. It can be inferred that professionals engaged at junior management operational level had moderate skills in essential areas such as communication, leadership, self assessment and required to hone their skills in order to develop strategic insight. Some professionals did not possess the drive to lead the vision of the business although they exhibited good strategic decision making skills. The professionals who are driven and focussed; continuously work at their personal development; posses the vision and creativity to engage in strategic decision making at higher levels within the organisation.

DISCUSSION

Skills should be developed at an early stage in a professional’s career. Although currently organisations provide training on technical aspects at the onset of each professional’s career; they should also include some aspects of managerial training. This would prove effective as it would provide professionals with the opportunity to start honing their skills in management related issues early on in their career.

In order to develop efficient strategy formulation capabilities managers should improvise their skills in areas such as negotiation and self assessment. It is only when one knows his strengths and weaknesses; can one realise the areas where he could improvise his skills.

It is suggested that it may be advantageous for senior management professionals to undergo strategic management training courses. Such courses would allow them to develop an enhanced strategic insight and provide direction for implementing their thoughts and ideas as a plan for the organisation. Construction organisations could also identify professionals in senior management that have potential to execute strategic decisions and who aspire to achieve higher positions within the organisation which would engage them in strategic decision making at higher levels. They could have tailor made courses for each individual based on his background, characteristics and training needs. This would ensure that the company has well trained and knowledgeable professionals who would guide the company’s future.

Although mentoring systems enable professionals to hone their skills or develop skills in requisite areas; it should be noted that a structured mentoring system would not prove to be as beneficial as an unstructured mentoring system. An unstructured mentoring system provides professionals with the flexibility to choose a mentor that they could trust. This would definitely prove advantageous for the development of the individual.
Senior management professionals should be encouraged to pursue further education as this would prove to be an added dimension for the individual’s development in terms of knowledge and skills. Construction companies can do this by implementing certain schemes through which the professional could be sponsored either partly or fully to undertake further education courses either in management or technical related fields. This can be done after evaluating the capability of the individual.

CONCLUSION

Professionals develop requisite skills and gain valuable knowledge through experience and education. Education is an important aspect for the development of professionals; as one learns to appreciate particular angles and perspectives of looking at certain issues. Although certain skills like people skills, negotiation skills are all harnessed through experience. Experience provides a good learning opportunity for the professionals to gain knowledge; interactions with other people with better intellect, also contribute to one’s knowledge and development. Construction organisations should cultivate a culture which encourages management professionals to develop capabilities early in their career. They could utilise tailor made training courses and mentoring systems to achieve this. It is also important for a construction organisation to foster an environment that would facilitate the development of the professionals, along with adopting several process skills into a complex strategy making capability.

This research mainly studied the capabilities of senior management professionals. The key issues identified for developing the capability of the professionals were knowledge and skills. It is suggested that further research should be undertaken in this area which would enable identification of other factors that may contribute to the capability of the professionals.

REFERENCES


