DOI: https://doi.org/10.29117/sbe.2019.0112

ENHANCING FINANCIAL AND STRATEGIC PERFORMANCE THROUGH CORE COMPETENCIES AND COMPETITIVE ADVANTAGE: A THEMATIC ANALYSIS

Deven Krishnan

Graduate School of Management International Islamic University Malaysia Email: deven.krishnan@yahoo.com

Rafikul Islam¹

Department of Business Administration Kulliyyah of Economics and Management Sciences International Islamic University Malaysia Email: <u>rislam@iium.edu.my</u>

Abstract

This paper aims to explore the realm of core competencies, competitive advantage, financial performance, and strategic performance of an oil and gas company in Malaysia and to develop a model depicting the relationship among these constructs. Semi-structured interviews were conducted with ten experienced executive officers from the company to solicit information about the organisation's core competencies, competitive advantages, financial performance, as well as strategic performance. The study identified that most organisations often mistake core competencies for capabilities. Furthermore, the study lends support to the theoretical finding that firms which develop core competencies result in having a competitive advantage and have superior market performance. The study is a pioneer for a Malaysian oil and gas company; the work develops a model that can help enhance an oil and Gas Company's financial and strategic performance.

Keywords: Core competencies, competitive advantages, financial performance, strategic performance, oil and gas company, Malaysia

.

¹ Corresponding author

1.0 Introduction

Core competencies are the efficient integration of employee skills, knowledge, management skills, resources, techniques, and technology of an organisation (Yang, 2015) with this integration of multiple capabilities making core competencies difficult to imitate (Schilling, However, core competencies can be easily mistaken for capabilities (Hamel and Prahalad, 1994). Thus, interviews were conducted, and the results were analysed using Braun and Clarke's (2006) six-step thematic analysis procedure to identify the core competencies, competitive advantage, and financial and strategic performance.

Core competencies have been postulated to be a source of competitive advantage (Gupta, Woodside, Dubelaar and Bradmore, 2009). firms that develop Eventually, competencies develop competitive advantage and are anticipated to have a superior market against their performance competitors (Wernerfelt, 1984). Whitehill (1997) has pointed out that financial performance offers to decrease competitive advantage against strategic performance. Therefore, the study gives importance to strategic performance indicators, as well as financial performance indicators.

As oil and gas companies are going through changes, this study could not come at a better time than the present. Though the players are aware of the importance of core competencies, research related to core competencies in the oil and gas industry is lacking (Inkpen and Moffett, 2011). The present study has two primary objectives.

First, to identify the constructs (core competencies. competitive advantage. financial performance and strategic performance) via interviews and using a stepby-step thematic analysis procedure. Second, to develop a model that shows the relationship between core competencies, advantage, competitive financial performance and strategic performance.

2.0 Literature Review

2.1 Core Competencies

Capabilities are the building blocks of core competencies (Miller, Eisenstat and Foote, 2002). Valuable capabilities that collective and unique in their characteristics, as strategically flexible contributing to the success of potential businesses are core competencies (Hafeez, Zhang and Malak, 2002). This combination multiple capabilities makes competencies hard to imitate (Prahalad and Hamel, 1990; Pitt and Clarke, 1999; Schilling, 2017). Scholars have noted that a firm with core competencies have superior performance than a firm that does not. Gallon, Stillman and Coates (1995) mention that core competencies are the things that some firms know how to do uniquely well, and have the scope to provide them with a better-than-average degree of success over the long term. Wang, Lo and Yang (2004) reported sound support that competencies have a significant effect on performance in high-tech companies in China. Duysters and Hagedoorn (2000) have also identified the considerable influence of core competencies on firm performance in the worldwide computer industry.

Capabilities that help the firm drive its operations are referred to as operational capabilities. These underpin the firm's potential to perform an activity on an ongoing basis using the same techniques, on the same scale to support existing products for the same consumer population (Stadler, Helfat, and Verona. 2013). With continuous improvement and learning, firms develop competencies that eventually lead to having operational knowledge and skills as their core competency. Srivastava (2005) views core competencies as a 'dynamic learned resource', which is subject to continuous metamorphosis in relation to dynamic internal and external environments. Pitt and Clarke (1999) and Barton (1992) view core competency that is knowledge-based as what distinguishes the firm from others and provides a competitive advantage. Prahalad and Hamel (1990), in their article, mention that competency development takes a substantial amount of time and is a result of accumulated shared learning within the organisation.

(1996)specified Ashton has talent management as one of the eight core competencies, which have certain implications. Shuen, Feiler, and Teece (2014) remark that even ordinary capabilities might be difficult for a given firm to achieve without talent, and this is more so the case in the achievement of core competencies. Henceforth, having talent management as a core competency is imperative and vital in achieving higher performance. Hamel and Prahalad (1994) emphasise the importance of coordinating diverse product skills and integrate multiple streams of technologies in the name of collective learning for an

organisation's core competencies. Özbağ (2013) remarks that having unique resources as the first step is highly important in the process of integrating these capabilities into all parts of the corporation effectively.

2.2 Competitive Advantage

Competitive advantage is the firm's distinctive capability to dominate the market (Ghadokolaei, Bagheri and Keshavarz, 2013; Zehner, 2000). Firms having competitive advantage have the ability to perform better than their competitors, which may lead to a higher level of profitability among rivals. Technological capability is more prone to creating a long-term competitive advantage and must be considered by the firm (Liao, 2005). Day (1994) alludes that market sensing, channel and customer linking, and technological monitoring capabilities allow a firm to respond swiftly to changing customer needs and to exploit its technological strengths most effectively. Technological competencies represent an important potential source of competitive advantage and superior performance in technologically competitive markets (Tyler, 2001: Nelson and Winter, 1982).

Coyne (1985) states that a firm must not only have a skill or resource that its competitors do not have, but the capability gap must make a difference to the customer as well. Kak and Sushil (2002) state that for a firm to acquire a competitive advantage in any market, it needs to have the capability to provide a set of benefits to the customer at a lesser cost than competitors or offer customers a bundle of benefits that its competitors cannot match. The foundation of a firm's progress,

profitability, and sustained competitive advantage would be reflected through its resources (Meutia and Ismail, 2012). Barney (1991) states that for resources to be a source of sustainable competitive advantage, resources need to be valuable, rare, difficult to perfectly imitate, and non-substitutable. Only then can they form the foundation of sustainable competitive advantage. According to Inmyxai and Takahashi (2010), business finance is an essential factor in financing strategic resources restructuring or expanding the business that is matched with the business objective, i.e. profit maximisation.

2.3 Performance

Business leaders now embrace financial and strategic performance as a valuable tool to measure and control their businesses (Simon *et al.*, 2011).

2.3.1 Financial Performance

A firm's propensity towards breakthrough transactions depends on the availability of financial resources. Conversely, this leads to curtailing a firm's innovating strategies when financial resources are limited (Lee and Pennings, 2001). Finance is an essential factor in attaining strategic resources and restructuring or expanding the business so that it matches with the business objective Takahashi, (Inmyxai and 2010). Conventional measures of profitability are return on investment, return on equity, total return on assets, increased share price, gross profit margin, and net profit margin (Hill, Jones and Galvin, 2007). These indicators are typically measured over the short-term.

Financial stability is represented by a solid cash flow pipeline (Simon, Schoeman and Sohal, 2010). Indicators of growth include increased organisational size (typically determined by sales, the number of employees, or both), expansion to new geographical locations, expanding strategic alliances, and mergers and acquisitions (Kale and Singh, 2007; Simon *et al.*, 2010).

2.3.2 Strategic Performance

Indicators of strategic performance are employee satisfaction, customer and client satisfaction and retention, teamwork, and product and service quality. It is considered an important indicator when a firm decides to pursue the competitive advantage path (Wernerfelt, 1984). Quality measures the defect levels of incoming products or services as perceived by the customer (Prahalad and Ramaswamy, 2004). Quality could also measure on-time delivery, as well as the accuracy of the organisation's delivery forecasts. Changes in the meaning of 'value' are shaping the future of competition. Value is now centred on the experiences of the consumer (Prahalad and Ramaswamy, 2004). High customer satisfaction levels stimulate organisational loyalty, shareholder retention, and repeat business on the part of the customer (Heskett, Jones, Loveman, Sasser and Schlesinger, 1994). This is crucial for the sustainability of the business. Literature has identified teamwork as paramount for the learning processes of an organisation (Kaplan and Norton, 2005; Swift and Hwang, 2008), and specifically for knowledge-sharing. Montes, Moreno and Morales (2005) found that team cohesion had a positive impact on organisational and administrative innovation.

When both teamwork and knowledge sharing are aligned, organisations can improve their performance (Kaplan and Norton, 2005).

2.4 Research Gap

Oil and gas companies understand the importance of core competencies to the organisation (Inkpen and Moffett, 2011). However, there is still a lack of research about core competencies in oil and gas companies. Academic papers suggest that concepts such as core competencies are not clearly defined, and organisations usually confuse core competencies with capabilities (Hamel and Prahalad, 1994). Although supported positive studies have the relationship between core competencies, competitive advantage, financial performance and strategic performance, studies incorporating all these constructs are still rare, especially in the oil and gas industry.

3.0 Research Methodology

The qualitative approach was imperative to gather knowledge in identifying core competencies, competitive advantage, performance financial and strategic performance. Semi-structured interviews were deemed appropriate for exploratory research such as the present one, and in exploring the constructs (Creswell, 2012).

The semi-structured interviews start with a few specific questions and consequently interviewer probes individual's tangents of thoughts (Cooper Schindler. Semi-structured 2008). interviews streamline the scope of the interview with narrower topics and specific questions asked to all respondents (Sullivan, 2001). Though the questions are more specific, their open-ended nature allows the respondents some degree of freedom of expression. The complete set of questions asked is provided in Table 1.

Table 1: Set of questions asked to the

1 40	respondents
No.	Questions
MQ1	What are the core competencies
	that support financial and strategic
	performance of the firm?
1	What is your understanding of the
2	term 'core competencies''?
2	Do you think having core
	competencies is important to an organisation?
3	What are the firm's core
3	competencies?
4	How have these core competencies
	helped firm?
5	How has the firm developed these
	core competencies?
MQ2	What is the competitive advantage
	that supports financial and strategic
	performance of the firm?
6	What is your understanding of the
7	term 'competitive advantage''? What is/are the firm's competitive
/	advantage?
8	How has the firm gained its
Ü	competitive advantage?
9	What are the firm's performance
	indicators?
MQ3	What is the relationship between
	core competencies, competitive
	advantage, financial and strategic
	performance?
10	Could you tell if there is a relationship between core
10	competencies and performance
	indicators?
11	How do you see having
	competitive advantages influences

- your financial and strategic performance?
- Do you see a relationship between core competencies and competitive advantage?
- 13 How would you sum up the relationship between core competencies, competitive advantage, financial performance and strategic performance?
- 14 How would you priorities the firms' core competencies based on its importance to the corporation?
- How would you priorities the firm's financial indicators, strategic indicators, and competitive advantage based on its importance to the corporation?

The main questions asked to the respective respondents, in connection with an oil and gas company in Malaysia, are:

- a) What are the core competencies that support financial and strategic performance of the firm?
- b) What is the competitive advantage that supports financial and strategic performance of the firm?
- c) What is the relationship between core competencies, competitive advantage, financial and strategic performance?

In selecting respondents for qualitative data collection, purposive sampling remained the best technique (Creswell, 2009; Sekaran and Bougie, 2010; Patton, 2002). The reason being that purposive sampling is eminently suited to qualitative research as the technique enables the researcher to obtain information from specific target groups that can provide

the desired information competently. This is the case either because they are privy to such information or conform to some criteria set by the researcher (Sekaran and Bougie, 2010).

The interviewed respondents were selected from the firm's corporate group, which has 250 employees holding managerial positions and above. These are the people who can provide a corporate wide view. Ten respondents from various divisions, namely operations, safety and health, corporate strategy, economics and planning, marketing and trading, and project and technology division were selected for the interviews. These respondents have over ten years of experience and play an essential role in decision-making and charting the direction of the company. They were in a position to provide the information required in the present study. The individual respondent forms unit of analysis for the present study. identified findings were substantiated by a respondent who was involved in a capability development project for the company directly. Each of the respondents holds at least a bachelor's degree, with two of them having a Master's degree. Most of the respondents are senior managers (60%), while 20% are general managers and managers, respectively (See Table 2).

Table 2: Affiliation of the respondents

Portfolio	Frequency	Percent (%)
Downstream	3	30
Upstream	2	20
Safety and Health	1	10
Corporate Strategy	2	20
Project and Technology	2	20
Total	10	100

The respondents came from both the upstream and downstream sectors of the firm. Upstream and downstream sectors are common divisions in an oil and gas company. The upstream sector is broken down into exploration and production (E&P) where exploration includes the finding of potential onshore underground or underwater crude oil and natural gas fields and drilling exploratory wells. Production includes drilling and operating the wells that bring the crude oil or raw natural gas to the surface. The unconventional gas and development of liquid natural gas (LNG) are included as part of the upstream sector (Vactor, 2010).

The downstream sector includes refining crude oil and distributing the products derived from crude oil and natural gas (Vactor, 2010). Products from the downstream is widely used as transportation fuels (gasoline or petrol, jet fuel, diesel, residual fuel, compressed natural gas and propane), heating fuels (kerosene, liquefied petroleum gas, heating oil and natural gas burned to heat building), sources of

electricity (natural gas and residual fuel burned to generate electricity) petrochemicals (plastics, clothing, building materials, vehicle material etc.) and many other usages (Jennings, Feiten and Brock, 2000; Vactor, 2010).

Data from the interview sessions were analysed via Braun and Clarke (2006) six phases of thematic analysis procedure. The thematic analysis allows themes that are related to the construct to be captured, and as they stood for some levels of patterned response or meaning within the data set (Braun and Clarke, 2006). Details of the six phases are as follows:

- 1. **Familiarising with the data:** The interview data were transcribed, read, and re-read to breed familiarity with the data.
- 2. **Generating initial coding:** Initial coding was systematically carried out, which resulted in generating 114 codes from the entire data set.
- 3. **Searching for themes:** Codes were arranged based on the respondents and sorted into potential themes. At this stage, the 114 codes were classified into 44 potential themes (Table 3).
- 4. **Reviewing themes:** These 44 themes were rigorously reviewed, revised, and were discussed with the personnel from the oil company, resulted in a paring down into 18 themes.

Table 3: Themes and number of occurrence for core competencies

The initial 44 themes

The final identified 18 themes

Core competencies

Talent management, Commercial capability, Technical competencies, Knowledge management, Continuous improvement, Digitilisation/automation, Integration of knowledge, Effective cost management, Operational knowledge and skills, Managing an integrated oil and gas company

- Strategic initiative
- Talent management
- Operational knowledge and skills
- Managing an integrated oil and gas company

Competitive advantage

Strong cash, Low labour cost, Project capability, Government-linked, Experience workforce, Good financial ratings, Commercial capability, Technological innovation, Good quality crude reserves, Alliance with top oil and gas players, Integrating upstream and downstream, Operating in unconventional (upstream), Offering an integrated solution to customers

- Resources
- Technological innovation
- Strong cash and good financial ratings
- Experienced workforce and low labour cost

Financial performance

Growth, Revenue, Sales volume, Cutting project cost, Net Present Value (NPV), Oil and gas ratio (upstream), Internal rate of return (IRR), Net Profit After Tax (NPAT), Number of discoveries (upstream), Earnings before interest, tax, depreciation, and amortisation (EBITDA)

- NPAT
- Growth
- EBITDA
- IRR/NPV

Strategic Performance

Teamwork, Service quality, Product quality, Plant reliability, Social responsibility, People development, Delivering project on time, Treating customer well (Trust), Dividend given to shareholders, Health Safety and Environment (HSE), Brand awareness/brand value/reputation

- HSE
- Teamwork
- Service quality
- Product quality
- Plant reliability
- Brand recognition

- 5. **Defining and naming themes**: At this stage, the 18 identified themes were defined and named as presented in Table 4, 6, 8, and 10. The definition and naming of the themes were guided by the themes that were identified in the earlier stage.
- 6. **Producing the report:** The identified themes for core competencies, competitive advantage, and financial and strategic performance are described together with verbatim transcripts of the respondents.

4.0 Data Analysis and Findings

The data analysis identified core competencies, competitive advantage, and financial and strategic performance of the oil company, as discussed in the following subsections.

4.1 Core Competencies

Under the heading of core competencies of the oil and gas company, four themes were identified: *Talent Management, Operational Knowledge and Skills, Strategic Initiative,* and *Managing an Integrated Oil and Gas Company.* The definitions are listed in Table 4.

The results in Table 5 give valuable insight into the role of talent management and operational knowledge and skills. The study analyses the four themes obtained from the interview sessions.

Table 5: Themes and number of occurrences for core competencies

Themes	Number of occurrences
Talent management	8
Operational knowledge and skills	8
Strategic initiative	6
Managing an integrated oil and gas company	4

Table 4: List and definition of themes for the identified core competencies

SUMMARY	DETAIL
Talent management	Talent management refers to the anticipation of required human capital for an organisation, and the planning involved in meeting those needs (Mason, Bauer, & Erdogan, 2012). This may include technical and non-technical capability.
Operational knowledge and skills	Operational knowledge and skills can be defined as the execution of the business strategy more consistently and reliably than the competition. This may include operation capability, commercial capability and effective cost management
Strategic initiative	A strategic initiative is an endeavour intended to achieve three interrelated outcomes: A boundary-spanning vision or "strategic intent", realisation of important benefits to "strategic" stakeholders, and transformation and alignment of the organisation (Githens, 2011). Related to this are knowledge management, continuous improvement, and digitalisation/automation.
Managing an integrated oil and gas company	A company that participates in every aspect of the oil and gas business, which includes the discovering, obtaining, producing, refining, and distribution of oil and gas.

4.1.1 Talent Management

Talent Management was captured across the board by respondents, and the following highlights the rationale:

A general manager responded, "We have been effective in people development. We talked about our HR model for competency development; it is excellent." (R4)

A manager mentioned, "For many years the company has invested in talents; they have scholarships, they develop their scholars, train the engineers, they have institutions that train the technical people, too. So, these are building our talent base that can support the business. This is like enhancing the competencies to perform better." (R7)

4.1.2 Operational Knowledge and Skills

Operational Knowledge and Skills capture sub-themes such as operational capability, effective cost management, and commercial capability. Quoting from the senior managers from the downstream sector, this is what the researcher learned.

A senior manager mentioned, "Our company has very good operations, operational knowledge, and operational skills, and able to operate the unit in a much more efficient way." (R8)

Further supporting this, a downstream senior manager mentioned, "Core competencies would be what we call operational excellence — various types of

efficiencies. We look at efficiencies, we look at cost, and we look at unit utilisation and reliability." (R9)

4.1.3 Strategic Initiative

Strategic Initiative has sub-themes of knowledge management, continuous improvement, and digitalisation/automation.

From the standpoint of knowledge senior management, a manager mentioned, "So, we know that in order to do risk management effectively, you need to have a proper risk management framework and all that, right? Initial stages we never knew how to do it. So, we went out, and we got consultants to come in, experts to come in. So, when they come in, they teach us and all that how to do, what to do, and all. Now that we have gotten that competency and all that, we develop our framework, and we now know how to do it. We teach the newer ones, so technically there is knowledge transfer, and then competency building, which eventually turns to become our core competency." (R6)

An upstream manager discussed continuous improvement, "How you are going to improve your efficiency, how you improve productivity? Say like with this technology you can produce extra x million tonnes, x million barrels a day okay, and also can bring down the cost, how many dollars per barrel?" (R7)

Moreover, to support digitalisation as a company's core competency, a senior manager emphasised, "The digitalisation, it

is core now, because the new generation lives on apps." (R6)

4.1.4 Managing an Integrated Oil and Gas Company

Senior managers agree that *Managing an Integrated Oil and Gas Company* is their core competency. Below are their responses:

"Secondly, our core competency is managing the integrated upstream and downstream." (R1)

"The company's core competency is that we are the integrated oil and gas company." (R3)

4.2 The Competitive Advantage

The four competitive advantage themes generated were *Technological Innovation*, *Experienced Workforce and Low Labour Cost*, *Strong Finance and Good Financial Ratings*, and *Resources*. Table 6 provides the list and definitions of the themes for competitive advantage, and Table 7 shows

the number of occurrences of the themes generated.

Table 7: Themes and number of occurrence for competitive advantage

Themes	Number of occurrences
Technological innovation	6
Experienced workforce and low labour cost	6
Strong cash and good financial ratings	4
Resources	3

4.2.1 Technological Innovation

The respondents weighed in via the subthemes on proprietary technology, building a novel facility, and venturing into the unconventional territories, which all lead to the formation of the technological innovation as the central theme. Below are their comments from the respondents.

Table 6: List and definition of themes for competitive advantage.

SUMMARY	DETAIL
Technological innovation	Technological innovation comprises new products and processes and significant technological changes in products and processes. These include proprietary technology, first in the world facilities and competency in unconventional field.
Experienced workforce and low labour cost	The company has vast experience in the oil and gas industry. The company is capable of running brownfield projects and executing world-scale projects. Furthermore, due to its location, the labour cost is lower compared to other companies operating in the developed region.
Strong cash and good financial ratings	The company has positive cash flow and a triple-A financial rating.
Resources	Resources in this context primarily involve crude reserves. Sub- elements supporting reserves are good quality crude reserves, cheap crude for the company's refineries, and cheaper gas.

An upstream general manager talked about the company's competitive advantage, "We acquired company A, which then led us now to our latest investment in Argentina. So that is our competitive advantage, unconventional. Brownfield is what we have inherited, so we are very good at running Brownfield because we took over from company B, we took over from company C, and we have done better. These are some of the proprietary technologies. I would say that one competitive advantage too." (R4)

An upstream manager then talked about building a new type of facility and investing in technology, "Talking about investment in technology, we have a facility that is first in the world. This shows after years of building our competencies and capabilities on how to develop onshore projects, how we operate an on-shore project, and next, we are going to do something that's outside the norm, going outside the comfort zone." (R7)

4.2.2 Experienced Workforce and Low Labour Cost

The company's capability of running big projects and its location in a developing country resulted in *Experienced Workforce* and Low Labour Cost is their competitive advantage. Respondents' quotes are:

"To me, the deep experience in operations and maintenance are the competitive advantage when you want to sell your product." (R6)

"It is a competitive advantage in the sense that, one your labour cost is low, two you are also able to keep your running time high [unit utilisation]." (R8)

Adding further, a downstream general manager stated that, "I cannot imagine that that is happening in our country, and we are involved. That project itself is a massive project. That is a good example of competitive advantage - able to execute the project is one perfect example." (R10)

4.2.3 Strong Finance and Good Financial Ratings

Taking quotes from a general manager and a senior manager, this is what they have to say about *Strong Finance and Good Financial Ratings* being their competitive advantage:

"Financially we are strong. That is one competitive advantage, so we are able to finance projects and all without any problem, get a very good rating so that you can borrow easily." (R8)

"Maybe not overbearing but sufficient for what is required, being practical, and deliver results to the bottom line. The corporation at the end of the day will always rate triple-A and want to borrow money because we do not hold so much, and we pay on time. That is competitive advantage." (R10)

4.2.4 Resources

Feedback from senior managers yielded the following:

"The advantage the company has today is the crude reserve." (R1)

"The other competitive advantage that some sectors the company has, you could call this advantage feedstock." (R8)

4.3 Financial Performance

Responses from the interviews revealed four themes for Financial Performance. The list and the definition of the themes are in Table 8, and the number of occurrences for each theme for Financial Performance is in Table 9. The themes generated are *EBITDA*, *NPAT*, *IRR/NPV*, and *Growth*.

Table 9: Themes and number of occurrence for financial performance

Themes	Number of occurrences
EBITDA	5
NPAT	5
IRR/NPV	2
Growth	2

4.3.1 EBITDA

Both the senior managers highlighted that *EBITDA* is part of their financial performance indicator, and it can also be found in the company's annual report. Below are some of the extracts from the interviews:

"Next, we have financial excellence, *EBITDA* margin for the company." (R1)

"The second one is finance. Our *EBITDA* margin." (R8)

4.3.2 NPAT

Extracts from a general manager and senior manager's interviews highlight *NPAT* when asked what the company's performance indicators were:

"PIR - Profit Investment Ratio, *NPAT* - Net Profit after Tax, that is normal. Yeah, these are some of the financial indicators." (R4)

"Financial performance is the standard one, your *NPAT*." (R3)

Table 8: List and definition of themes for financial performance

SUMMARY	DETAIL
EBITDA	Earnings before interest, tax, depreciation, and amortisation.
NPAT	Net Profit After Tax (NPAT) shows what the company earned after all its expenses, charge-offs, depreciation, and taxes have been subtracted.
IRR/NPV	The internal rate of return (IRR) is defined as the discount rate that makes NPV = 0. Net Present Value (NPV) is the difference between the present value of cash inflows and the present value of cash outflows over a period.
Growth	Growth includes increased organisational size (typically determined by sales, or the number of employees, or both), expansion to new geographical locations, and expanding strategic alliances and mergers and acquisitions.

4.3.3 IRR/NPV

A low number of respondents mentioned *IRR/NPV* because it is primarily used for projects. Hence, unsurprisingly it came from a manager who looks after projects in the company:

"IRR/NPV both for projects." (R5)

4.3.4 *GROWTH*

Growth is an essential financial indicator, and quotes from two senior managers are shown below:

"Growth is important." (R6)

"Growth KPIs, I am sure at a higher level they may have." (R8)

4.4 Strategic Performance

Six themes were identified for strategic performance. Table 10 provides the list and definitions of the themes for Strategic Performance, while Table 11 provides the themes and number of occurrences.

Table 11: Themes and number of occurrence for strategic performance

Themes	Number of occurrences
HSE	6
Plant reliability	6
Brand recognition	2
Product quality	2
Service quality	2
Teamwork	1

4.4.1 HSE

Below are the statements from upstream and downstream senior managers regarding HSE:

"We use HSE excellence, lost time injury, major fire, Loss of Primary Containment (LOPC), which looks into fire, and toxic gas." (R1)

"The first one is always HSE. Zero fatalities, low Loss Time Injury (LTI) rates; so that is the first performance indicator." (R8)

Table 10: List and definition of themes for strategic performance

SUMMARY	DETAIL
HSE	Health Safety and Environment (HSE) is preventing and eliminating injuries, health hazards and damage to property, and conserving the environment.
Plant reliability	The ability of the plant to perform its intended function.
Brand recognition	Brand recognition is the extent to which a consumer can correctly identify a particular product or service just by viewing the product or service's logo, tagline, packaging, or advertising campaign.
Product quality	Product quality refers to the perception of the degree to which the product meets the customer's expectations.
Service quality Teamwork	Service quality refers to the perception of the degree to which the service meets the customer's expectations. The combined action of a group, especially when effective and efficient.

4.4.2 Plant Reliability

With regards to *Plant Reliability*, below are the quotes from the senior managers:

"For upstream is the production rates, for downstream will be our operating units, plant reliability." (R8)

4.4.3 Brand Recognition

Brand Recognition only sees a small number of occurrences. Below are excerpts from interviews with a senior manager and general manager about brand recognition:

"Brand is crucial in the sense that whatever you do, there is always a risk of reputation that is considered. Doing the risk assessments for projects, there will be one category called 'Reputation Risk', and you have to assess what can cause harm to the brand." (R8)

"Brand value is also intangible." (R10)

4.4.4 Product and Service Quality

Garnering a similar number of occurrences as *Brand Recognition*, *Product and Service Quality* has been identified as one of the strategic performance indicators for the company:

"And the third one is quality. You produce a product, but because you got off spec whatever, so that is quality losses." (R8)

"Being able to produce the materials that I promise to my customer is very important. You have to meet the specs. Quality is the one intangible." (R10)

4.4.5 Teamwork

The results saw teamwork scoring the lowest number of occurrences. Despite not factoring heavily, it is an essential element that needs to be highlighted, as it is part of the performance indicators that were used in the literature. Below is the quote from a general manager:

"Your effectiveness, your efficiency, and then your group work." (R10)

4.5 The Relationship between Core Competencies and Competitive Advantage and Financial and Strategic Performance

Asking the respondents to sum up the relationship between core competencies, competitive advantage, financial and strategic performance, below are their responses:

"Ideal case situation will be your core competencies have a direct linkage to your competitive advantage. Moreover, as the outcome of your competitive advantage, your financial performance and your strategic performance will also technically be shown." (R5)

"I would agree on core competencies, and competitive advantage will come first. Performances are the result, regardless if it is financial or strategic." (R7)

"All have a direct correlation because if you have good core competencies, you can have a better chance of achieving competitive advantage and financial performance. Seriously it is not

straightforward, although it is directly related." (R10)

5.0 Discussion

5.1 The Core Competencies

The capabilities that help the firm drive its operations are usually referred to as operational capabilities. Included within this are process and product design, product operations, development, value chain integration, all aspects of marketing and customer service, and organisational design (Stadler et al., 2013; Miller et al., 2002). When these operational capabilities are performed on an ongoing basis, they develop and become part of the firm's core competencies. Hence, the literature supports the respondents' notions that operational knowledge and skills are a core competency. Supporting the strategic initiative sub-theme, Gilgeous and Parveen (2001) mention that integrity related competencies help a firm deliver products/services faster and with higher quality (e.g. quality management, knowledge management, time management, just-in-time systems, and faster production).

Further, functionality-related competencies help a firm deliver more functional products/services (e.g. innovation management increased and improved features, and exceptional after-sales services beyond what is usually expected). Market access competencies help a firm get closer to its customers (e.g. brand management, sales and marketing, technical customer support, and logistics). The literature supports talent management as a core competency. Bergenhenegouwen, Horn and Mooijman (1996) stated that organisations should pay an equivalent amount of attention to their employees' competencies once they start to pursue the core competencies track. Hafeez and Essmail (2007) feel that organisational core competencies evaluation is incomplete unless the portfolio of underlying personal competencies that make up the essential fabric of core competencies is determined.

Integration is something unique which not all the oil and gas players have, especially in Malaysia; or even globally to some extent. Scholars have supported being unique by saying core competencies are those unique capabilities which usually span over a multitude of products or markets to carry out company activities which outperform their competitors (Hafeez *et al.*, 2002; Thompson, Arthur, Strickland and Gamble, 2010; Pearce II and Robinson, 2013). Özbağ (2013) remarks that having unique resources is the first highly important step to integrate these unique resources and capabilities among all parts of the corporation effectively.

5.2 The Competitive Advantage

The interviews and the literature findings correspond well. Nelson and Winter (1982), as well as Tyler (2001), indicate that technological competencies represent an important potential source of competitive advantage and superior performance in technologically competitive markets. Liao (2005) added, of all the environmental factors that influence the organisation, technological capability is more prone to create a long-term competitive advantage and must be considered by the firms. Day (1994) alludes that market sensing, channel and customer

and technological monitoring capabilities allow a business to respond swiftly to changing customer needs, and to exploit its technological strengths most effectively. In providing backing for Experienced Workforce, Coyne (1985) points out that not only must a firm have a skill or resource that its competitors do not have, but the capability gap must make a difference to the customer as well. Kak and Sushil (2002) cite lower cost where they state that for a firm to acquire competitive advantage in any market, the firm needs to be able to deliver a given set of customer benefits at a lower cost than competitors or provide customers with a bundle of benefits that its rivals cannot match; thereby supporting Low Labour Cost. Inmyxai and Takahashi (2010) render supports to the interview findings that Strong Finance and Good Financial Ratings are the organisation's competitive advantage. They noted that business finance is an essential factor for financial strategic resources and restructuring or expanding the business. Galbreath (2004) and Grant (2002) added that financial resources are mobilised to create a competitive advantage. Scholars have noted that Resources allow a firm to have competitive advantage if resources are valuable, rare, not perfectly imitable, and non-substitutable (Barney, 1991). Resources are the foundation of a firm's progress and profitability (Meutia and Ismail, 2012), and can be mobilised to create competitive advantage (Galbreath, 2004; Grant, 2002).

5.3 Financial performance

EBITDA, NPAT, IRR/NPV and Growth are used as key indicators in the company's annual report and is supported by Hill et al.

(2007) where they mention that common measures of profitability are return on investment, return on equity, total return on assets, increased share price, gross profit margin, and net profit margin. Indicators of growth include increased organisational size (typically determined by sales, the number of employees, or both), expansion to new geographical locations, expanding strategic alliances, and mergers and acquisitions (Kale and Singh, 2007; Simon *et al.*, 2010).

5.4 Strategic Performance

Malgwi and Dahiru's (2014) research directly support the findings inciting *product* and service quality, and teamwork, Hafeez et al. (2002) supporting brand recognition, while Prahalad and Ramaswamy (2004) indirectly supported plant reliability. However, the study could not find support for HSE, and a potential reason could be due to the lack of research about strategic performance in oil and gas companies. However, within the industry, HSE is noted as a critical strategic performance.

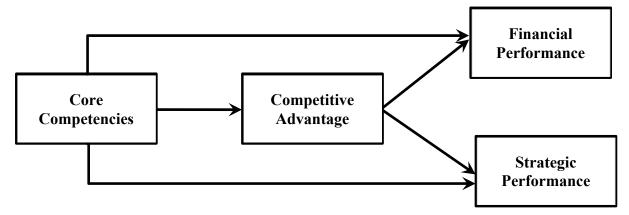
5.5 The Relationship between Core Competencies, Competitive Advantage, Financial and Strategic Performance

The interviews and the literature affirm that there is a relationship between core competencies, competitive advantage, financial and strategic performance. Agha, Alrubaiee and Jamhour (2012) provide empirical evidence for the relationship between core competencies, competitive advantage, and organisational performance. The authors find that there is a significant and

positive relationship between competencies and organisational performance, and the respondents supported this by mentioning that core competencies result in financial and strategic performance. The respondents' views are also consistent with Srivastava (2005), Bogner and Thomas (1992), Javidan (1998) and Bani-Hani and Al-Hawary (2009) in that core competencies are a key component in enhancing the competitive advantage. These findings are summarised in the proposed model, as in Figure 1.

oil and Gas Company are Technological Innovation, Experienced Workforce and Low Labour Cost, Strong Cash and Good Financial Ratings, and Resources. Concurrently, this study also identified indicators for financial strategic and performance. Financial performances recognised are EBITDA, NPAT, IRR/NPV, and *Growth*, while strategic performance is identified through HSE, plant reliability, brand recognition, product quality, service quality, and teamwork. The findings shed light on the understanding of core

Figure 1: Proposed model for an oil and gas company



6.0 Conclusion

The study identified core competencies, competitive advantage and financial and strategic performance of the oil and Gas Company, and the relationships among them. Core competencies are an enabler for firms to have competitive advantage and having competitive advantage results in the firm gaining superior financial and strategic performance. The four core competencies are Talent Management, Operational Knowledge and Skills, Strategic Initiative, and Managing an Integrated Oil and Gas Company. The four competitive advantages of the Malaysian

competencies in the oil and gas industry, as well as emphasises the importance of strategic performance, which is commonly missed out when firms look at performance evaluation. This study can be further refined by testing the theoretical findings via a multiple regression analysis to test its relationship for the oil and gas industry. Additionally, the study could perform prioritisation using Analytic Hierarchy Process so that the oil and gas industry would able to distinguish critical competencies that have the most impact to the organisation and focus its resources optimally.

DOI: https://doi.org/10.29117/sbe.2019.0112

References

- Agha, S., Alrubaiee, L., and Jamhour, M. (2012), "Effect of core competence on competitive advantage and organizational performance", International Journal of Business and Management, Vol. 7, No. 1, pp: 192-204.
- Ashton, C. (1996), "How competencies boost performance", Management Development Review, Vol. 9, No. 3, pp. 14-19.
- Bani-Hani, J. S., and Al-Hawary, F. (2009), "The impact of core competences on competitive advantage: Strategic challenge", International Bulletin of Business Administration, Vol. 6, pp: 93-104.
- Barney, J. B. (1991), "Firm resources and sustained competitive advantage", Journal of Management, Vol. 17, No. 1, pp: 99–120.
- Bergenhenegouwen, G., Horn, H. and Mooijman, E. (1996), "Competence development— a challenge for HRM professionals: Core competences of organisations as guidelines for the development of employees", Journal of European Industrial Training, Vol. 29, No. 9, pp: 29-35.
- Bogner, W. C. and Thomas, H. (1992), Core competence and competitive advantage: A model and illustrative evidence from the pharmaceutical industry. *BEBR faculty working paper; no.* 92-0174.
- Braun, V. and Clarke, V. (2006), "Using thematic analysis in psychology", Qualitative Research in Psychology, Vol. 3, No. 2, pp: 77-101.
- Cooper, D. R. and Schindler, P. S. (2008), "Business methods", Irwin/McGraw-Hill, Boston.
- Coyne, K. P. (1985), "Sustainable competitive advantage: What it is, what it isn't", Business Horizons, Vol. 29, No. 1, pp: 54-61.
- Creswell, J. W. (2009), "Editorial: Mapping the field of mixed methods research", Journal of Mixed Methods Research, Vol. 3, No. 2, pp. 95-108.
- Creswell, J. W. (2012), "Qualitative inquiry and research design: Choosing among five approaches", Sage publications, California.
- Day, G. S. (1994), "The capabilities of market-driven organizations", Journal of Marketing, Vol. 58, No. 4, pp: 37-52.
- Duysters, G. and Hagedoorn, J. (2000), "Core competencies and company performance in the world-wide computer industry", Journal of High Technology Management Research, Vol. 11, No. 1, pp: 75-91.
- Galbreath, J. T. (2004), "Determinants of firm success: A resource-based analysis" Curtin University of Technology, Doctor of Philosophy Thesis. Retrieved from

- https://espace.curtin.edu.au/bitstream/handle/20.500.11937/2311/15533_GalbreathPhDelec.pdf?sequence=2.
- Gallon, M. R., Stillman, H. M. and Coates, D. (1995), "Putting core competency thinking into practice", Research Technology Management, Vol. 38, No. 3, pp. 20-28.
- Ghadokolaei, A. S., Bagheri, S. M. and Keshavarz, E. (2013), "Designing competitive advantage model with technology oriented approach using FAHP technique: A case study in coil industry", Journal of Engineering Science and Technology, Vol. 8, No. 2, pp: 233-252.
- Gilgeous, V. and Parveen, K. (2001), "Core competency requirements for manufacturing effectiveness", Integrated Manufacturing Systems, Vol. 12, No. 3, pp. 217-227.
- Grant, R. M. (2002), "Contemporary strategy analysis; concept, technique, applications", Oxford, Blackwell.
- Gupta, S., Woodside, A., Dubelaar, C. and Bradmore, D. (2009), "Diffusing knowledge-based core competencies for leveraging innovation strategies: Modelling outsourcing to knowledge process organizations in pharmaceutical networks", Industrial Marketing Management, Vol. 38, pp. 219-227.
- Hafeez, K., Zhang, Y., and Malak, N. (2002), "Core competence for sustainable competitive advantage: a structured methodology for identifying core competence", IEEE Transactions on Engineering Management, Vol. 49, No. 1, pp. 28-35.
- Hamel, G. and Prahalad C. K. (1994), Competing for the future. Boston, Massachusetts: Harvard Business School Press.
- Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser, W. E. and Schlesinger, L. A. (1994), "Putting the service profit chain to work", Harvard Business Review, Vol. 72, No. 2, pp. 164-174.
- Hill, C. W. L., Jones, G. R. and Galvin, P. (2007), "Strategic Management: An Integrated Approach (2e)", John Wiley and Sons, Queensland.
- Inkpen, A. C. and Moffett, M. H. (2011), "The global oil and gas industry: management, strategy & finance", PennWell Books, Oklahoma.
- Inmyxai, S. and Takahashi, Y. (2010), "The effect of firm resources on business performance of male and female headed firms in the case of Lao micro, small, and medium sized enterprises (MSMEs)", International Journal of Business and Information, Vol. 5, No. 1, pp: 63-90.
- Javidan, M. (1998), "Core competence: what does it mean in practice?", Long Range Planning, Vol. 31, No. 1, pp: 60-71.
- Jennings, D. R., Feiten, J. B., and Brock, H. R. (2000), "Petroleum Accounting: Principles, procedures and issues, 5th edition", Professional Development Institute, Denton, Texas.

- Kak, A. and Sushil, H. (2002), "Sustainable competitive advantage with core competence: A review", Global Journal of Flexible Systems Management, Vol. 3, No. 4, pp. 23-38.
- Kale, P. and Singh, H. (2007), "Building firm capabilities through learning: the role of the alliance learning process in alliance capability and firm-level alliance success", Strategic Management Journal, Vol. 28, No. 10, pp: 987-1000.
- Kaplan, R. S. and Norton, D. P. (2005), "The balanced scorecard: measures that drive performance", Harvard Business Review, Vol. 83, No. 7, pp. 172-181.
- Lee, C., and Pennings, J. M. K. (2001), "Internal Capabilities, external networks, and performance: a study on technology-based ventures", Strategic Management Journal, Vol. 22, No. 6-7, pp: 615-640.
- Liao, S. H. (2005), "Technology management methodologies and applications: a literature review from 1995 to 2003", Technovation, Vol. 25, No. 4, pp. 381-393.
- Malgwi, A. A., and Dahiru, H. (2014), "Balanced Scorecard financial measurement of organisational performance: A review", IOSR Journal of Economics and Finance, Vol. 4, No. 6, pp. 1-10.
- Meutia and Ismail, T. (2012), "The development of entrepreneurial social competence and business network to improve competitive advantage and business performance of small medium-sized enterprises: A case study of batik industry in Indonesia", Procedia Social and Behavioural Sciences, Vol. 65, pp. 46-51.
- Miller, D. Eisenstat, R. and Foote, N. (2002), "Strategy from the inside out: Building capability-creating organizations", California Management Review, Vol. 44, No. 3, pp. 37-54.
- Montes, J. L. Moreno, A. R., and Morales, V. G. (2005), "Influence of support leadership and teamwork cohesion on organizational learning, innovation and performance: an empirical examination", Technovation, Vol. 25, No. 10, pp: 1159-1172.
- Nelson, R. R. and Winter, S. G. (1982), "An evolutionary theory of economic behaviour and capabilities", Harvard University Press, Cambridge.
- Özbağ, G. K. (2013), "Resource based view, core competence and innovation: A research on Turkish manufacturing industry", Scientific Research Journal, Vol. 1, No. 3, pp. 9-17.
- Patton, M. Q. (2002), "Two decades of developments in qualitative inquiry a personal, experiential perspective", Qualitative Social Work, Vol. 1, No. 3, pp. 261-283.
- Pearce II, J. A., and Robinson, R. B. (2013), "Strategic Management: Planning for Domestic and Global Competition", McGraw Hill, New York.
- Pitt, M. and Clarke, K. (1999), "Competing on competence: A knowledge perspective on the management of strategic innovation", Technology Analysis and Strategic Management, Vol. 11, No. 3, pp: 301-316.

- Prahalad, C. K. and Hamel, G. (1990), "The core competencies of the corporation", The Harvard Business Review, pp. 79-91.
- Prahalad, C. K. and Ramaswamy, V. (2004), "Co-creating unique value with customers", Strategy and Leadership, Vol. 32, No. 3, pp. 4-9.
- Schilling, M. A. (2017), "Strategic management of technological innovation (5th Edition)", McGraw-Hill, New York.
- Sekaran, U. and Bougie, R. (2010), "Theoretical framework in theoretical framework and hypothesis development. Research Methods for Business: A Skill Building Approach", John Wiley and Sons, Hoboken, New Jersey.
- Shuen, A., Feiler P. F. and Teece, T. J. (2014), "Dynamic capabilities in the upstream oil and gas sector: Managing next-generation competition", Energy Strategy Reviews, Vol. 3, pp. 5-13.
- Simon, A., Kumar, V., Schoeman, P., Moffat, P. and Power, D. (2011), "Strategic capabilities and their relationship to organisational success and its measures: some pointers from five Australian studies", Management Decision, Vol. 49, No. 8, pp. 1305-1326.
- Simon, A., Schoeman, P. and Sohal, A. (2010), "Prioritised best practices in a ratified consulting services maturity model for ERP consulting", Journal of Enterprise Information Management, Vol. 23, No. 1, pp: 100-124.
- Srivastava, S. C. (2005), "Managing core competence of the organization", Vikalpa, Vol. 30, No. 4, pp: 49-50.
- Stadler, C., Helfat, C. E., and Verona, G. (2013), "The impact of dynamic capabilities on resource access and development", Organization Science, Vol. 24, No. 6, pp. 1782-1804.
- Sullivan, A. (2001), "Cultural Capital and Educational Attainment", Sage Journals, Vol. 35, No. 4, pp: 293-912.
- Swift, P. E., and Hwang, A. (2008), "Learning, dynamic capabilities and operating routines: A consumer package goods company", The Learning Organization, Vol. 15, No. 1, pp. 75-95.
- Thompson, A. A., Arthur, A., Strickland, A. J., and Gamble, E. J. (2010), "Crafting and Executing Strategy: The Quest for Competitive Advantage: Concept and Cases", the McGraw Hill Company, New York.
- Tyler, B. B. (2001), "The complementarity of cooperative and technological competencies: A resource-based perspective", Journal of Engineering and Technology Management, Vol. 18, No. 1, pp. 1-27.
- Vactor, S. V. (2010), "Introduction to the global oil and gas business", Penwell Books, Tulsa, Oklahoma.

- Wang, Y., Lo, H. and Yang, Y. (2004), "The constituents of core competencies and firm performance: evidence from high-technology firms in China", Journal of Engineering and Technology Management, Vol. 21, pp. 249-280.
- Wernerfelt, B. (1984), "A resource-based view of the firm", Strategic Management Journal, Vol. 5, No. 2, pp: 171-180.
- Whitehill, M. (1997), "Knowledge-based strategy to deliver sustained competitive advantage" Long Range Planning, Vol. 30, No. 4, pp. 621-627.
- Yang, C. C. (2015), "The integrated model of core competence and core capability", Total Quality Management and Business Excellence, Vol. 26, No. 1-2, pp: 173-189.
- Zehner, B. W. (2000), "The management of technology degree: a bridge between technology and strategic management", Technology Analysis and Strategic Management, Vol. 12, No. 2, pp: 283-291.

Deven Krishnan is an Associate Director in the Oil Markit, Midstream and Downstream at IHS Markit. His consulting and oil industry experience includes strategy development, oil market studies, refinery feasibility studies, refinery competitive analysis and economic modelling. Before joining IHS Market, he was employed by Phillips 66 in Malaysia and worked in refinery technical service, operations, economics and planning. Dr. Deven has published two articles in international refereed journals. He holds a Doctor of Business Administration from International Islamic University Malaysia, a master's in process plant management from University Technology Malaysia and a bachelor's in chemical engineering from University Science Malaysia.

Rafikul Islam obtained his PhD in Operations Research from the Indian Institute of Technology, Kharagpur (1996). Presently he is working as a Professor at the Department of Business Administration, International Islamic University Malaysia. He is a recipient of Best Researcher Award at the faculty level and Quality Research Award at the university level. Dr. Islam has published over 75 articles in international referred journals and 18 students completed their PhDs under his supervision. He has also authored nine books. His research areas include Multiple Criteria Decision Making, Operations and Quality Management.