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Performance Measurement Systems and Strategic Management within UK Healthcare

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**Title: “Performance Measurement Systems and Strategic Management within
UK Healthcare”**

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Performance Measurement Systems and Strategic Management within UK

Healthcare

Abstract:

April 2009 was an important period for all National Health Service (NHS) Community Health Services (CHS) organisations as they were formally separated from the commissioning service in the Primary Care Trust (PCT). This had many implications, including the need to establish individual board, develop independent strategy, and set-up autonomous governance. The host organisation was keen to investigate the effectiveness of the current strategy deployment process and subsequently identify areas for improvement.

Our investigation looked into adapting strategy deployment systems such as the Closed-Loop Management Systems (Kaplan and Norton 2008) at NHS CHS organisations which can facilitate organisational needs in the area of strategy deployment. As human capital with the suitable skills is required for any successful implementation of a management system, the researchers expanded the scope by including an assessment of the organisation's readiness for adapting formal strategy deployment systems in terms of management skills levels.

Keywords: capacity measurement, healthcare, UK NHS

Introduction

Since the introduction of the Balanced Scorecard in 1992 by Kaplan and Norton, the Balanced Scorecard has been successfully applied in government and non-profit organisations, including several health care providers. As a performance measurement system, Balanced Scorecard is no longer a new management tool for us. However, the publication by Kaplan and Norton - The Execution Premium (2008) revealed Performance Measurement Systems such as Balanced Scorecard are no longer the only method to measure performance, but part of Closed-Loop Management system that ensure successful strategy execution by linking strategy to performance measurement systems and operations (Kaplan and Norton 2008). This strategy deployment system guided large corporations such as the Bank of Tokyo, HSBC Rail, Lockheed Martin, and Marriott Vacation Club International to effectively translate strategy into specific operational targets, so employees can link their daily inputs to organisation's strategic objectives. (Kaplan and Norton 2008)

In June 2009, the first author of this paper was appointed as a Strategic Project Manager in one UK National Health Service (NHS) Community Health Services (CHS) organisation to evaluate and facilitate strategy deployment within the organisation. April 2009 was an important period for all NHS CHS organisations, as they were formal split from commissioning service in the Primary Care Trust (PCT). This has many implications on CHS organisations, including the need to establish individual board, develop independent strategy, and set up autonomous governance. The research host organisation was keen to investigate the effectiveness of current strategy deployment process and subsequently identify areas for improvements.

This research investigates how adapting strategy deployment systems such as The Closed-Loop Management Systems at NHS CHS organisations can facilitate the organisation's needs in the area of strategy deployment. The necessary human capital is required for successful implementation of any management systems. Therefore, the research scope also included an assessment of the origination's readiness for adapting formal strategy deployment systems in terms of management skills level.

This paper first reviews the available literature then outlines the research methodology used. We then present the findings and engage in discussion before presenting our conclusions and recommendations.

The Literature

Scholars, including Mintzberg, Quinn and Ghoshal recognise that strategy is reviewed differently depending on whether it belongs to the manufacturing sector or the service sector (Mintzberg et al. 1998). Quinn defines strategy as the blueprint to link an organisation's goals, governance and actions together (Quinn 1980). See Diagram 1

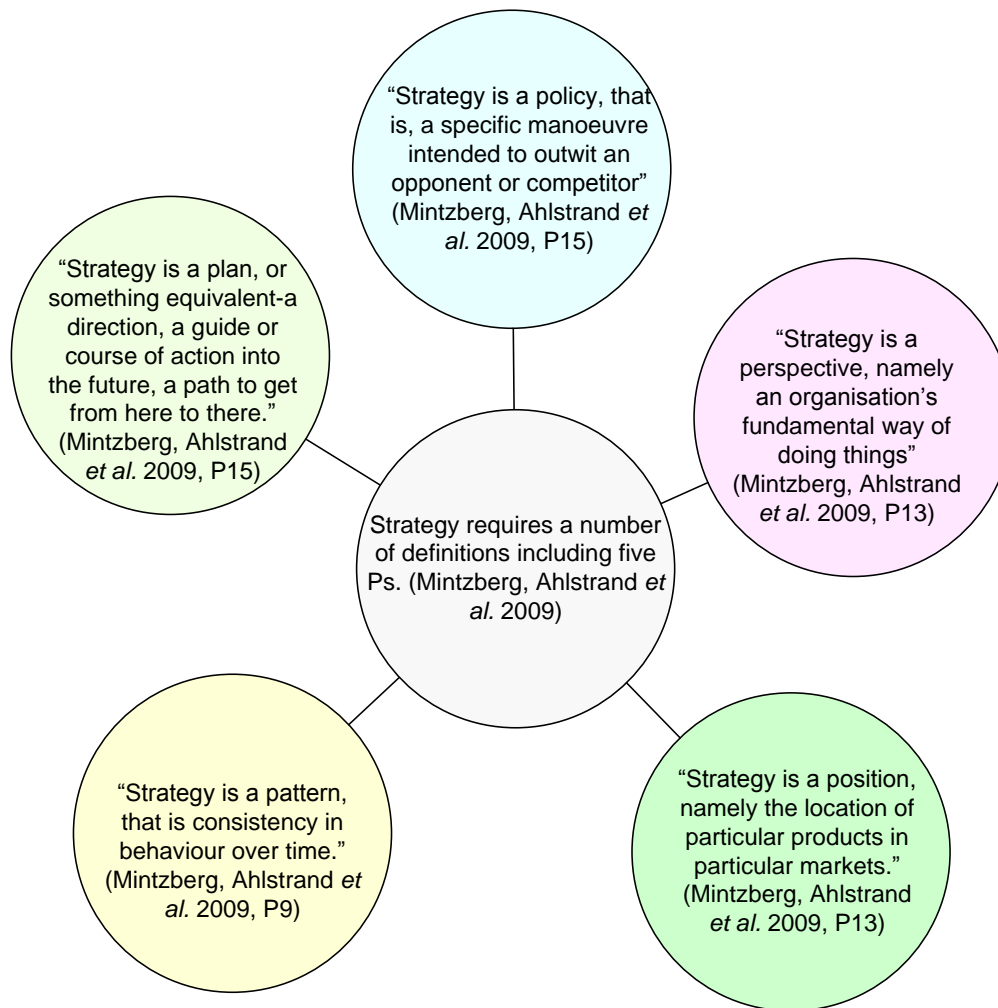


Diagram 1 Strategy as 5Ps – developed by the researcher based on the definition by Mintzberg, Ahlstrand *et al.* (Mintzberg, Ahlstrand *et al.* 2009)

Service organisations have to tackle the fact the services cannot be measured as easily as the outputs from manufacturing organisations. This is mainly because services are variable depending on the customer who receives them or the person who delivers them (Harmon *et al.* 2006). This intangible feature of services makes it even more complicated to measure (Johnson & Scholes. 2008).

Johnson and Scholes emphasise that strategy and strategic management is an important issue in industry as well as in public sectors (Johnson & Scholes. 2008). The difference is that public organisations usually have a large number of direct and indirect external stakeholders to satisfy, particularly from the government (Johnson & Scholes. 2008).

Two unique characteristics of the UK health care sector are near a monopoly of provision and funding sourced from taxation. These impose some restrictions on its strategic options, for example, they might not be able to choose to be specialised as they are obliged to provide a wide range of services (Laing and Shiroyama 1995; Johnson, Scholes *et al.* 2008).

Warnock and Grant remark that the ultimate purpose of an organisation's existence is to create value for its shareholders. The objective of strategy is to transform multiple inputs and options to achieve an organisation's strategic goals and objectives (Warnock 2000; Grant 2008).

Kaplan and Norton reinforce the importance of strategy by stating that process improvement can reduce costs and improve quality by delivering operational excellence. However, the improvement results are unlikely to be retained without a robust strategy to provide the organisation with an inspirational vision and direction (Kaplan and Norton 2008c).

The 2009 Management Tools and Trends Survey conducted by Brain & Company reveals that Strategic Planning remains as one of the most popular management tools even during today's economic downturns when many large organisations focus on cost cutting (See Table 1).

Top 10 management tools 2009		Usage
1	Benchmarking	76%
2	Strategic Planning	67%
3	Mission and Vision Statements	65%
4	Customer Relationship Management	63%
5	Outsourcing	63%
6	Balanced Scorecard	53%
7	Customer Segmentation	53%
8	Business Process Reengineering	50%
9	Core Competencies	48%
10	Mergers & Acquisitions	46%

Table 1: Top 10 management tools 2009 – source: 2009 Management Tools and Trends Survey by Brain & Company (Rigby and Bilodeau 2009, P3)

However, there are some reservations about strategy deployment systems. Kare-Silver remarks that managers are not satisfied with current available tools and always prefer tailored tools for their specific needs (Kare-Silver 1997). Knott continues with this argument by stating that strategy tools can only be used as a direction for management decision making and cannot provide a systematic roadmap (Knott 2008).

The importance of performance measurement has been a key topic in both industry and academic research areas. Eccles correctly states “what gets measured gets attention, particularly when rewards are tied to the measures” (Eccles 1991, P131), while Kaplan reiterates the importance of performance measurement by stating “what you measure is what you get” (Kaplan and Norton 1992, P71). Mintzberg supports these remarks by indicating that performance framework can assist an organisation in translating high level strategies into measurable targets, therefore enabling employees to align their daily activities with corporate strategy (Mintzberg, Quinn et al. 1998) .

As is illustrated in Diagram 2, a survey of 113 worldwide organisations conducted by the conference Board for A.T. Kearney, Inc in 1999 shows that linking formal

performance management systems to strategy can deliver better financial performance (Kaplan and Norton 2001d).

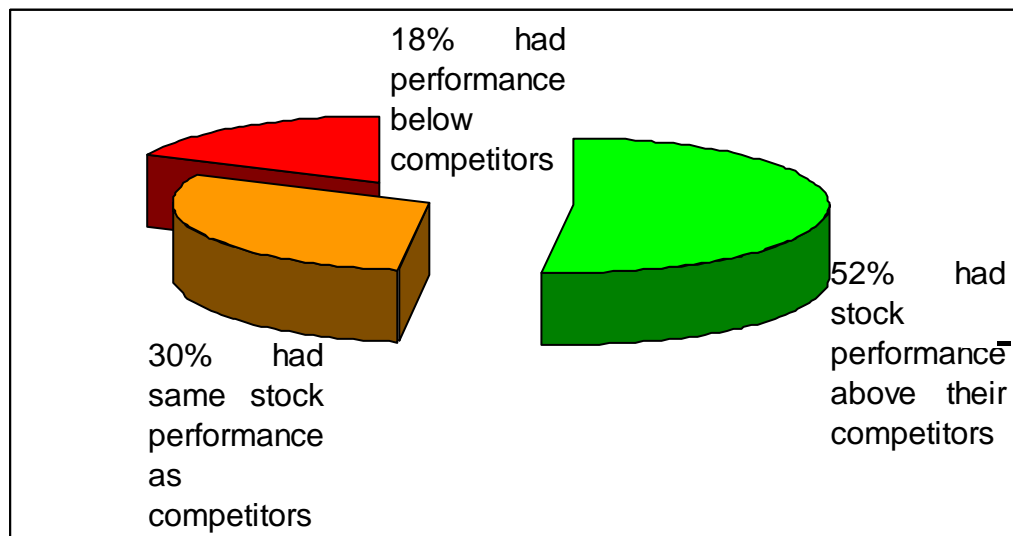


Diagram 2: Stock performances for companies that have a formal system in place to link strategy with their performance measurement systems – produced by the researcher based on survey results presented by Kaplan and Norton (Kaplan and Norton 2001d)

A survey conducted by Cranfield University in 2003 found that 46% of organisations use a formal process of performance measurement. Of these organisations, 25% use some form of total quality management (TQM) as their principle performance management system, whereas 75% use a management system based on the Balanced Scorecard (Kaplan and Norton 2001d).

The Balanced Scorecard was initially developed in 1992 for measuring performance from four different perspectives as a result of multi-organisational action learning community research. Over the years, this framework is now part of Closed-Loop Management Systems to ensure the successful execution of an organisation's strategy (Kaplan and Norton 2008a; Kaplan and Norton 2008c). Kaplan suggests the scorecard can cascade strategy throughout the organisation for successful Balanced Scorecard adaptors (Kaplan 2001a; Kaplan and Norton 2001b; Kaplan and Norton 2001c; Kaplan and Norton 2001d). See Diagram 3.

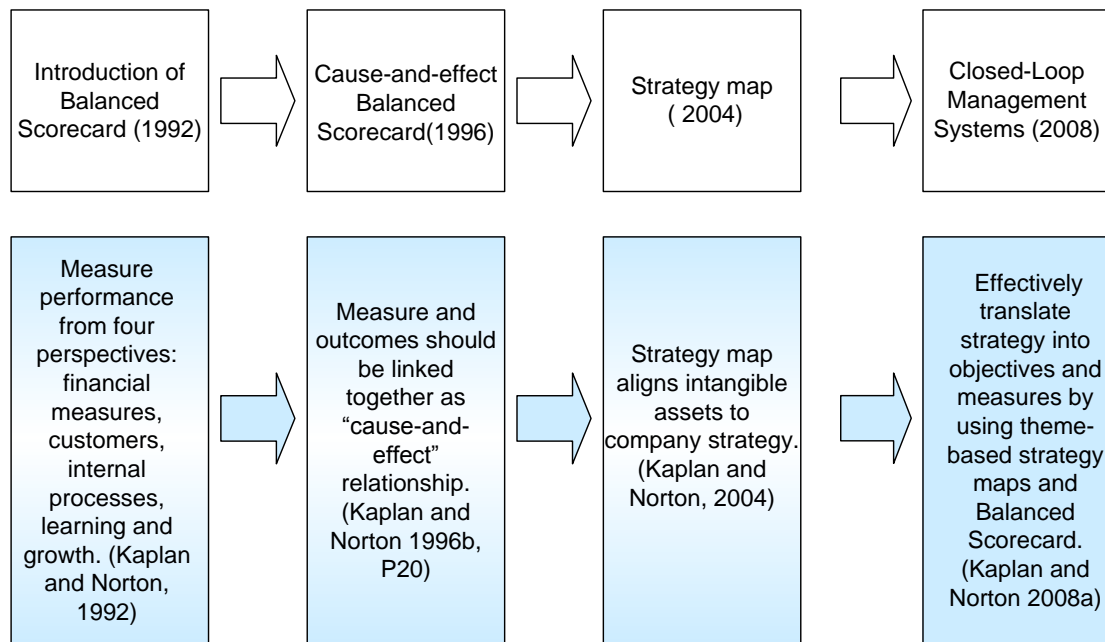


Diagram 3: Development of the Balanced Scorecard (Designed based on data collected from various publications by Kaplan and Norton)

The major supporters of Balanced Scorecard implementation in health care are listed in Table 2.

Year	Scholar	Main Proposition
1995	Baker and Pink	First to discuss the applicability of Balanced Scorecard in hospitals (Baker and Pink 1995).
1998	Chow <i>et al.</i>	Balanced Scorecard can be used by healthcare organisations to meet current challenges (Chow <i>et al.</i> 1998).
2002	Fitzpatrick	"Let's bring balance to health care" (Fitzpatrick 2002, P35)
2002	Inamdar and Kaplan	Balanced Scorecard could be successfully applied in the healthcare sector (Inamdar and Kaplan 2002).
2006	Schmidt <i>et al.</i>	Explain how a mental health trust delivers excellent performance using Balanced Scorecard (Schmidt <i>et al.</i> 2006),
2006	Kenton Laura	Use Balanced Scorecard to delivery health care at reduced cost without loss of quality(Kenton Laura 2006).

Table 2: Scholars supporting Balance Scorecard application in health care context

A number of notable contributors regard the Balanced Scorecard to be relevant to health care, but “modification to reflect industry and organisational realities is necessary” (Zelman, Pink *et al.* 2003). Radnor and Lovell warn that while a full Balanced Scorecard system could be used to “enhance transparency, clarity, and accountability for public/patients,” poor implementation of the Balanced Scorecard without considering important specific factors can result in potential letdown (Radnor and Lovell 2003b, P107). In research carried out by Patel *et al.*, it was discovered that although the Balanced Scorecard is a useful strategic tool that “links various performance indicators to performance management processes to the organisations,” its success is determined by the relevance of indicators (Patel, Chausalet *et al.* 2008, P913).

Neely and Bourne state in their publication that 70% of Balanced Scorecard implementations fail due to poor adaptation and resistance in implementation (Neely and Bourne 2000). Although this 70% failure rate refers to Balanced Scorecard implementation across all industries, not only within health care, organisations which plan to implement Balanced Scorecards should foresee the hardships. A recent study by Gurd and Gao identified the current application of the Balanced Scorecard is more focused towards the financial measures, not the health outcomes (Gurd and Gao 2008).

One of the greatest problems facing managers today is how to implement strategy. Recent developments suggest that the Balanced Scorecard “provides a framework to describe and communicate strategy in a consistent and insightful way.” (Kaplan and Norton 2001d, P76) The Balanced Scorecard “is a multi-dimensional framework that

utilises measurement as a means of describing an organisation’s strategy.” (Radnor and Lovell 2003, P99)

The development of the Balanced Scorecard is now at a stage to “drive performance improvements” by following the stages of the Closed-loop Management systems (Kaplan and Norton 2008c, P84). Diagram 4 illustrates that Closed-Loop Management Systems include the following six stages:

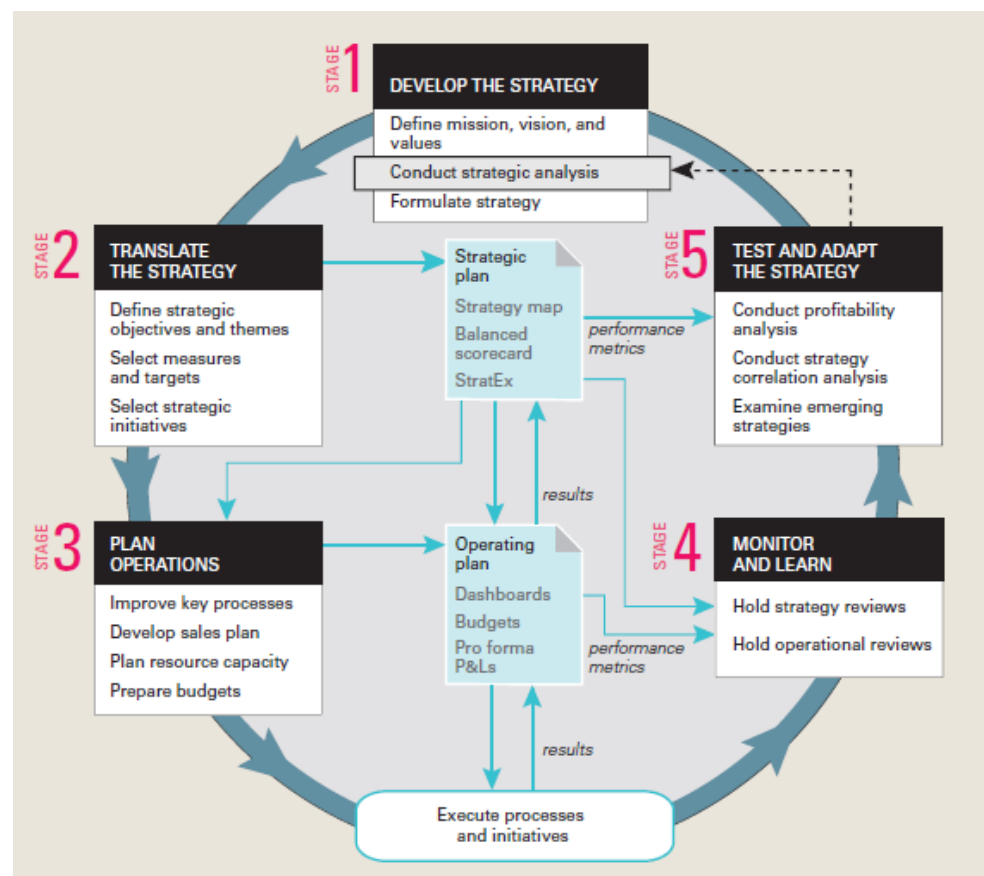


Diagram 4: Closed-Loop Management Systems by Kaplan and Norton (Kaplan and Norton 2008a, P65)

This suggests that senior managers will benefit by implementing this model as periodically monitoring the performance and progress of the current strategy allows some of the assumptions inherent in the strategy to be challenged. In the event where the strategy is not delivering the desired results as forecasted, then senior managers should question the validity of the strategy (Bourne, Mills et al. 2002). The rationale behind this model is to guide senior managers in methodically covering all six stages

during the strategy development, execution stage. A strategy is developed based on a set of assumptions. The Closed-Loop Management System offers a platform for senior managers to validate the assumptions and the strategy.

The old adage “you get what you inspect, not what you expect” is valid in describing the importance of performance measurement and strategy. As discussed earlier, performance measurements can only be used to deliver the strategy if they are aligned with strategy (Bourne, Mills et al. 2002).

As stated by Kaplan, an effective strategy cannot be executed without the support of operational excellence and a governance process. On the other hand, improvement initiatives, performance measures, and key performance indicators may improve quality and reduce process lead times. Organisations cannot achieve sustainable competitive advantages without a strategy.

Research Methodology

This research deploys a single-case (embedded) study approach in order to gather rich data. A case study is defined as a study “involving a detailed description of the setting or individuals, followed by analysis of the data for the themes or issues” (Maylor and Blackmon 2005, P191). By using a case study, the researcher is able to review the changes in performance results and their correlation with performance measurement systems, which is not possible to define by using either quantitative or qualitative research alone (Maylor and Blackmon 2005). There are a few pitfalls of the case study method “when compared to quantitative research methodologies, namely reliability and external validity” (Gay and Bamford 2007, P260). However, it remains as one of the most popular research methods. Some of the important concepts including Lean production have been developed by using a case study approach (Voss, Tsikriktsis et al. 2002).

“The fewer the case studies, the greater the opportunity for in-depth observation.” (Voss, Tsikriktsis *et al.* 2002, P201). Some notable examples of single-case studies are the JIT case study by Karlsson and Ahlstrom in 1995, and Japanese manufacturing practices in the USA by Schonberger in 1982, etc. (Voss, Tsikriktsis et

al. 2002). In certain circumstances single-case study can be the preferred choice. These include representatives of a typical case, unique and rare cases, or where aim of research is to critically test of an existing theory (Yin 2009).

The case study site selected is X CHS – an NHS CHS organisation in England. X CHS employs approximately 2,000 clinical and non-clinical staff, and is a PCT provider of services. There are a number of reasons why X CHS is selected for this case study: i) X CHS delivers 49 services to children and adults including a district nursing service, practice nurse support, a children’s community specialists’ service team, a health visiting service, speech and language therapy services, a sexual health promotion team, and salaried dental services, etc, across some 100 sites (X CHS Board 2009); ii) Its catchment area covers X city and surrounding rural areas representing approximately 500,000 people: it principally serves communities in deprived industrial areas. A significant proportion of its catchment population belongs to disadvantaged ethnic minority groups. Its main funding source is from the Government via the Dept of Health (Bamford 2009); ii) The transformation of relationship between X CHS and the PCT commissioner to a contractual relationship has provided X CHS with a number of opportunities in terms of empowerment – a focus on delivering quality service, flexibility, and brand. Although the above is perceived as an incentive to develop services in a far more responsive manner, it’s necessary to measure whether senior management have the necessary business skills to meet the challenge of contractual relationships with PCT commissioners; iii) The primary researcher is employed by X CHS, therefore has full access to key personnel across the organisation as well as required data. This increases the quality of data collected during the research.

Both qualitative and quantitative research methods were identified to have a multidimensional view to understand the above four points. The methods include archival records, interviews, observations and surveys.

Findings

As Table 3 illustrates, the qualitative research findings cover a total of seventeen issues relating to strategy deployment. This is not intended to present a full list of all

issues related to strategy deployment, however, all key topics are included to the best knowledge of the researcher. The aim of this is to obtain an understanding of the effectiveness of the current strategy deployment process within X CHS. Multiple methods including comprehensive one-to-one interviews, participatory observations and a detailed study of archival records were used to appraise the current application and practice of X CHS in the identified seventeen areas.

No. Issues		Key Qualitative findings
1	Attitudes to mission, vision and value	X CHS has vision and value statement, however, lacks a mission statement.
2	Attitudes to strategic analysis	Models for external environment analysis such as PESTEL are not widely used. SWOT analysis is used in corporate strategy but not functional strategies.
3	Outputs of strategy formulation	X CHS did not address potential threats that can be imposed by competitors. Service categorisation could have been conducted.
4	Approach to strategy map.	The X CHS strategic plan outlined appropriate short-term, medium term, and long term strategic objectives.
5	Attitudes to strategic objectives and themes.	Balanced Scorecard could be used to cascade high level strategies into measures and targets from corporate level to business units and individuals.
6	Use of initiatives.	Short term improvement initiatives are defined after gap analysis.
7	Attitudes to disseminate strategy to Business Units.	Although a total of 8 communication methods are deployed for downstream and upstream communication, X CHS has no communication strategy.
8	Attitudes to disseminate strategy to Supporting Units.	
9	Attitudes to disseminate strategy to Employees.	Toolkit such as Balanced Scorecard could be implemented to cascade strategy to individual employees and among senior managers.
10	Attitudes to align improvement initiative and strategic objectives.	There is no strong correlation between some improvement initiatives and long term strategic objectives.
11	Use of capacity planning.	There is skill shortage in conducting capacity planning.
12	Approach to overcome resistance for strategy execution.	X CHS states risk and mitigation plan in corporate strategy but not in other strategies.
13	Attitudes to strategy review meetings.	In the strategy review meetings, the main focus is to review performance and discussion implications, while less time is allocated to develop actions plans.
14	Attitudes to operational review meetings.	In the operational review meetings, a lot of time is allocated to distribute and comprehend the data for the meeting itself.
15	Attitudes to cost and benefit analysis.	Evidence suggests that economic strategy analysis is not part of strategy deployment process within X CHS.
16	Approach to strategy correlation analysis.	The level of statistical information available to management and staff is not optimised. The overall X CHS performance and progress to date could have been presented by using Balanced Scorecard.
17	Awareness of strategy adaptation.	There is no formal strategy testing and adapting governance and process in place to ensure changes in both internal and external environment are reflected in the strategy.

Table 3: Summary of Key Qualitative Research Findings

Table 4 summarises the key quantitative research findings with the aim to assess whether X CHS senior managers have the required competencies for successful

strategy execution and can identify any possible knowledge gaps. This is the first study to investigate strategy deployment within an NHS CHS organisation. It is also the first occasion to the researcher's knowledge where strategy planning knowledge assessment was conducted in a CHS organisation.

No. Issues		Key quantitative findings
1	Attitudes to strategic analysis	91% of respondents are confident with their expertise level of conducting strategic analysis.
2	Outputs of strategy formulation	82% of respondents are confident with developed strategy based on mission, vision, values and strategic analysis.
3	Approach to strategy map.	82% of respondents are not proficient to draw a strategy map.
4	Attitudes to strategic objectives and themes.	91% of respondents are able to select measures and targets to delivery the strategy.
5	Use of initiatives.	All respondents are confident to define strategic objectives and themes.
6	Attitudes to disseminate strategy to Business Units.	The corporate strategy awareness level among senior managers is 91%, while the awareness level of functional strategy is much lower.
7	Attitudes to disseminate strategy to Supporting Units.	
8	Attitudes to disseminate strategy to Employees.	49% of staff agree / strongly agree to <i>"my trust communicates clearly with staff about what it is trying to achieve"</i> .
9	Attitudes to align improvement initiative and strategic objectives.	All respondents either strongly agree or tend to agree that they are able to identify the need to improve certain processes to deliver the strategy.
10	Use of capacity planning.	91% of respondents either strongly agree or tend to agree that they are able to plan resource capacity to delivery the strategy.
11	Approach to overcome resistance for strategy execution	91% of respondents either strongly agree or tend to agree that they are able to overcome resistance to execution of the strategy.
12	Attitudes to strategy review meetings.	73% of respondents either disagree or are neutral towards effectiveness of strategy review meetings.
13	Attitudes to operational review meetings.	64% of respondents either disagree or are neutral towards effectiveness of operational review meetings.
14	Attitudes to cost and benefit analysis.	Only 36% of respondents either strongly agree or tend to agree that they are able to conduct cost and benefit analysis.
15	Approach to strategy correlation analysis.	Only 9% of respondents either strongly agree or tend to agree that they are able to conduct strategy correlation analysis.
16	Awareness of strategy adaptation.	82% of respondents either strongly agree or tend to agree that they are able to amend the strategy should the current strategy no longer serve its purpose.

Table 4: Summary of key Quantitative Research Findings

Discussion

Based on the literature review, and consultation with line managers of the host company, we developed an NHS Community Health Services Strategy Deployment Conceptual Model based on a Closed-Loop Management System. The Conceptual Model is developed to enable the researcher to verify its applicability and X CHS's organisational readiness in adapting such a model. The Conceptual Model includes the following six stages. See Diagram 5.

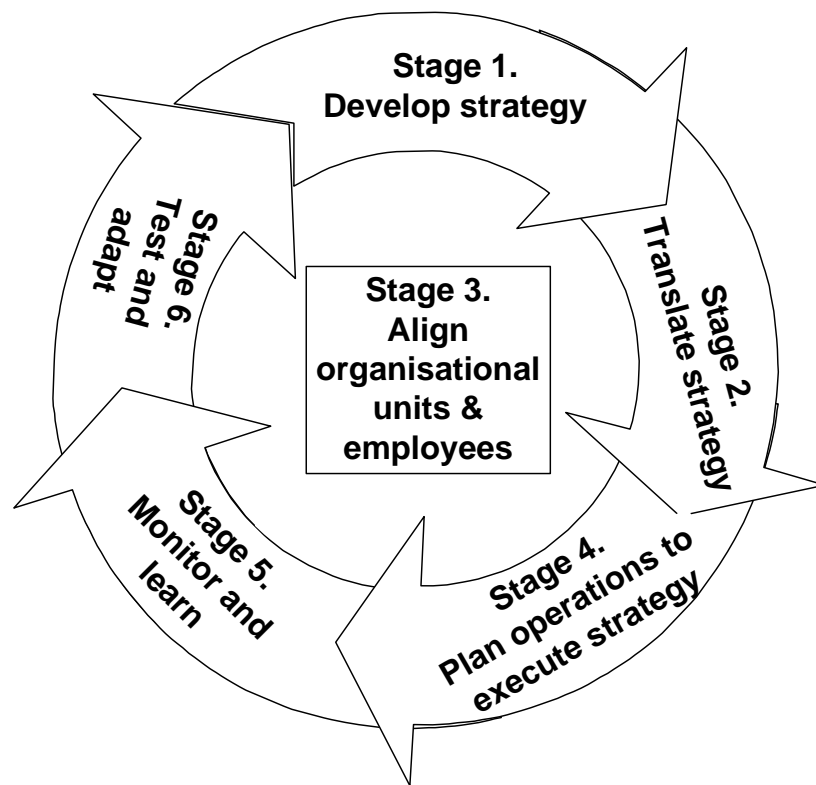


Diagram 5: NHS Community Health Services Strategy Deployment Conceptual Model – developed by the researcher based on literature review and consultation with host company staff (adapted from Kaplan and Norton 2008a)

Stage 1 - Develop Strategy

Developing strategy in most organisations starts with an affirmation of the mission – why the organisation exists, vision – its aspiration for future results, and values – the internal beliefs that guide its actions (Kaplan and Norton 2008a). However,

organisations often mix their statement of values or mission statement with their strategy statement (Collis and Rukstad 2008). The mission statement articulates the fundamental motivation for an organisation's existence while the vision refers to its aspiration for future results and the value represents the internal beliefs that guide its actions. The mission statement spells out the underlying motivation for being in business in the first place – the contribution to society that the firm aspires to make (Collis and Rukstad 2008).

Stage 2 - Translate Strategy

Within this stage, practitioners are reminded that strategy is an empty concept unless it is translated into a set of objectives and measures. The measures are used for measuring the company's performance and progress. It's important to visualise this progress by specifying when, how much and what (Thompson, Strickland et al. 2008).

Stage 3 - Align Organisational Units and Employees

One of the reasons that most companies fail to implement their strategy is due to insufficient involvement of people who actually implement the strategy (Sterling 2003). Scholars Bower and Gilbert reinforce this message as they note that as corporate staff begin to deploy initiatives to deliver strategic objectives midlevel managers might disparage those initiatives (Bower and Gilbert 2007). Typically, the strategy formulation is a top down process where higher level strategies are used as guidance for defining lower level strategies (Thompson, Strickland et al. 2008). Most of the CHS organisations include diversified business units; therefore, the strategy development involves corporate strategy, business strategy, functional strategy and operating strategy.

Stage 4 - Plan Operations to Execute Strategy

A robust execution process can turn a doubtful strategy choice into a successful one (Andrews 1980). Therefore, it is important to prepare programmes, policies, and plans to implement the strategy and allocate resources to develop the supportive organisational structures, decision processes, information and control systems, and hiring and training systems to deliver the strategy.

At this stage, senior managers prioritise strategic goals with consideration of alignment between strategic improvement initiatives – short, medium and long term projects – to strategic objectives (Watkins 2009). Spending on selected strategic initiatives is also calculated here to ensure selective strategy implementation (Kaplan and Norton 2008b). Strategy synthesises actions and intentions to shape a company and influence its performance (Mintzberg, Ahlstrand et al. 2009). Implementing a new strategy requires a number of methods for dealing with resistance to change including education, participation, facilitation, negotiation, manipulation, and explicit and implicit inclination (Kotter and Schlesinger 2008).

Stage 5 - Monitor and Learn

Constant monitoring on effectiveness of strategy, external and internal environments, and progress of strategy implementation is required to ensure successful execution (Sterling 2003). Senior managers advance the strategic plan by keeping implementation on track and adjusting quickly to challenges and obstacles. One way to achieve this is to conduct a structured set of meetings including operational review meetings to assess short-term performance and respond to problems that have arisen recently and need immediate attention and strategy review meetings to ensure that the successful execution of strategy by effectively monitoring and managing strategic initiatives and Key Performance Indicators.

Stage 6 - Test and Adapt

Strategy is formulated based on critical strategic analysis of the current situation, problems and the forces that possibly contribute to the current situation. No matter how robust the strategy formulation process, something unexpected will happen during the execution of strategy. Therefore, it is important to appraise how well the organisation performs, and update the strategy as new realities emerge (Bower and Gilbert 2007; Kotter and Schlesinger 2008). Industry changes present an opportunity to claim if this can be captured timely (Porter 2008).

An organisation can only attain its success by aligning the value proposition, the profit proposition and the people proposition (Kim and Mauborgne 2009). Economic evaluation of current strategy helps organisations to understand whether the current

strategy has achieved the strategic alignment. Statistical analysis in combination with economic evaluation can facilitate senior managers to link strategic initiative to return on investment (Kaplan and Norton 2008b). Where it is applicable, this should trigger senior managers to amend or change the company's strategy by returning to the initial stage of strategy development. Systems for upward communication should be established to enable employee participation in the strategy formulation process. In many situations, upward communication is inadequate as it's considered less value adding (Mintzberg, Quinn *et al.* 1998).

The CHS Strategy Deployment Conceptual Model presents a good guidance of the strategy deployment process. Strategy deployment should not be a ceremonial process where senior managers write the strategy, board approves the strategy, middle managers receive a copy of the strategy, line managers hear rumours about it and staff carry on with their duties obliviously (Oughton 2009). By implementing a model such as the CHS strategy Deployment Conceptual Model, senior managers would periodically monitor the performance and progress of current strategy, allowing some of the assumptions inherent in the strategy to be challenged (Bourne, Mills *et al.* 2002).

Conclusion

From the perspective of academic research, by developing the CHS Strategy Deployment Conceptual Model to link the Balanced Scorecard to strategy for the health care industry, this study will contribute to the body of knowledge for Balanced Scorecard implementation as well as Closed-Loop Management Systems adaptation within health care industry.

Even though we deliberately chose to keep the descriptions simple to avoid any misunderstanding or difficulties in interpreting and completing the questionnaire, there is feedback that some senior managers found difficulties in linking some terms to the strategic activities they perform, e.g. strategy map, cost and benefit analysis, etc. It is important for future research that the researcher should develop a more

comprehensive definition for certain vocabularies which are widely used in the industry but not within NHS organisations.

There are a number of potential areas of further research in order to enrich this study further: Pilot CHS Strategy Deployment Conceptual Model in other CHS organisations as well as other NHS organisations; Conduct Senior Management Strategy Deployment Knowledge Assessment in other CHS organisations as well as other NHS organisations.

The significance of the research is also supported by the enthusiasm of X CHS management. This research was considered valuable as it will bring breakthrough improvement to not only X CHS but also have an impact on other CHS and NHS organisations.

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