

UNDERSTANDING VALUE CREATION IN PPPS: A CASE STUDY IN THE
TURKISH HEALTHCARE SECTOR

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ABSTRACT

UNDERSTANDING VALUE CREATION IN PPPS: A CASE STUDY IN THE TURKISH HEALTHCARE SECTOR

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The motivation behind this thesis is to enhance the success of the healthcare PPPs. Departing from the idea that the success of the projects should be evaluated on the basis of the value created by them, the objective of this study is determined to be “understanding value creation in healthcare PPPs”. In order to satisfy this objective, a conceptual framework is constructed with relevant concepts from the project value creation and business model literature together with semi-structured surveys with Turkish healthcare PPP practitioners. Recommendations are given for both practitioners and researchers.

Keywords: Value, Value Creation, PPP, Healthcare, Turkey

ÖZ

KÖÖ'LARINDA DEĞER YARATIMINI ANLAMAK: TÜRK SAĞLIK SEKTÖRÜNDEN BİR VAKA ANALİZİ

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Bu tezin arkasında yatan motivasyon, sağlık alanındaki KÖÖ projelerinin başarısını geliştirmektir. KÖÖ'lerinin başarısını anlamak için değer yaratımını temel alan yaklaşımdan hareketle, bu tezin amacı "sağlık sektöründeki KÖÖ'ların nasıl değer yarattığını anlamak" olarak belirlenmiştir. Bu amacı gerçekleştirmek için, "proje değer yaratımı" literatürü ve "iş modeli" literatüründen elde edilen kavramlar, Türk sağlık KÖÖ'lerinde görev almış çalışanlarla yapılmış yarı yapılandırılmış görüşmeler ile birlikte kullanılarak bir kavramsal çerçeve oluşturulmuştur. Araştırmacılara ve bu alanda çalışanlara önerilerde bulunulmuştur.

Anahtar Kelimeler: Değer, Değer Oluşturma, KÖÖ, Sağlık, Türkiye

dedicated to my beloved mother

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TABLE OF CONTENTS

ABSTRACT	v
ÖZ	vi
ACKNOWLEDGEMENTS	viii
TABLE OF CONTENTS	ix
LIST OF TABLES	xii
LIST OF FIGURES	xiii
LIST OF ABBREVIATIONS	xiv
CHAPTERS	
1. INTRODUCTION	1
1.1. Definitions of PPP	1
1.2. PPP Models	4
2. LITERATURE REVIEW: PROJECT SUCCESS	9
2.1. Shortcomings of the Traditional Test of Project Success.....	9
2.2. Criticisms on Project Definitions and Lifecycles.....	11
2.3. Evolution of Project Success	15
3. LITERATURE REVIEW: PROJECT VALUE.....	23
3.1. Value	27
3.2. Value Creation.....	30
3.3. Previous Studies on Project Value Creation.....	36
4. LITERATURE REVIEW: SUCCESS AND VALUE CREATION IN PPPS ...	39
5. RESEARCH SETTING AND METHODOLOGY	45
5.1. Research Setting	45

5.2. Methodology	48
5.2.1. Preliminary Survey	49
5.2.2. Preliminary Framework.....	49
5.2.3. Semi-Structured Survey	50
6. FINDINGS: VALUE CREATION FRAMEWORK	53
6.1. Assets	54
6.1.1. Complementary Skills and Resources (A1)	54
6.1.2. Long-Term Commitment (A2).....	57
6.1.3. Stable Governmental Unit (A3)	58
6.1.4. Attitude (A4)	58
6.1.5. Government Support (A5).....	59
6.2. Processes	60
6.2.1. Sound Project Financing (P1).....	60
6.2.2. Effective Design Development (P2).....	66
6.2.3. Externally Oriented Early Phase Execution (P3)	69
6.2.4. Internally Oriented Implementation Phase Execution (P4).....	72
6.2.5. Exploiting the Business Opportunities (P5)	74
6.2.6. Complying with Environmental and Social Requirements (P6)	76
6.2.7. Organizational Learning (P7)	76
6.2.8. Elaborative Partner Selection (P8)	78
6.2.9. Early Establishment of the Operational Body (P9)	78
6.2.10. Continuous Innovation (P10)	79
6.2.11. Gauging Stakeholder Satisfaction (P11)	80
6.2.12. Optimum Compromise (P12)	81

6.2.13. Effective Tendering (P13)	82
6.2.14. Collaborative Operation (P14).....	83
6.3. Governance.....	83
6.3.1. Well-Balanced Legal Framework (G1)	84
6.3.2. Sound Revenue Stream (G2)	85
6.3.3. Allocation of Risks and Responsibilities (G3)	87
6.3.4. Integration Between Project and Service Delivery Units (G4).....	88
6.3.5. Incentives (G5)	88
6.4. The Value Creation Framework	90
7. DISCUSSION OF FINDINGS	93
7.1. Discussion on Findings of the Semi-Structured Survey	93
7.2. Discussion on the Preliminary Framework	104
8. CONCLUSION.....	107
8.1. Practical Contributions	107
8.2. Theoretical Contributions.....	111
8.3. Limitations and Recommendations for Future Research	112
REFERENCES.....	115

LIST OF TABLES

TABLES

Table 1.1. Definitions of PPP: Adopted from (Kwak Et Al. 2009) and Extended	2
Table 2.1. Project Definitions Focused on Outputs and Their Production (Zwikael and Smyrk 2012)	12
Table 5.1. Demographics	50
Table 7.1. The Comparison Matrix.....	93

LIST OF FIGURES

FIGURES

Figure 1.1. Continuum of Public Service Provision (Kwak et al. 2009)	4
Figure 2.1. PMBOK’s Overview of The Project and Product Lifecycles (Project Management Institute 2004)	13
Figure 2.2. Measuring Success Across the Project and Product Lifecycles (Judgev And Müller 2005)	15
Figure 3.1. Distributions of Publications on Project Value Creation (Laursen And Svejvig 2016)	24
Figure 3.2. Dimensions of Value Creation (Lepak et al. 2007)	28
Figure 4.1. A Conceptual Classification Framework of PPP Research (Kwak et al. 2009)	40
Figure 5.1. Organizational Schema	47
Figure 5.2. Services	48
Figure 5.3. Research Methodology Flowchart	49
Figure 6.1. <i>The Preliminary Framework (zoomed out view)</i>	54
Figure 6.2. Key Investment Highlights	65
Figure 6.3. Hospital Design	67
Figure 6.4. Revenue Stream Diagram 1	86
Figure 6.5. Revenue Stream Diagram 2	86
Figure 6.6. Risk Matrix	87
Figure 6.7. Multi-Level Guarantee Mechanism	90
Figure 6.8. The Value Creation Framework (zoomed in view)	91

LIST OF ABBREVIATIONS

ABBREVIATIONS

BIM: Building Information Modelling

BOO: Build Own Operate

BOT: Build Operate Transfer

CSF: Critical Success Factor

DBFO: Design Build Finance Operate

DBO: Design Build Operate

EPC: Engineering Procurement Construction

ESIA: Environmental and Social Impact Assessment

FX: Foreign Exchange

HTP: Health Transformation Program

HVAC: Heating, Ventilating and Air Conditioning

KÖO: Kamu Özel Ortaklığı

LTA: Lenders Technical Advisor

MDB: Multilateral Development Bank

MoH: Ministry of Health

NPV: Net Present Value

O&M: Operation and Maintenance

PFI: Private Finance Initiative

PPP: Public-Private Partnership

SPV: Special Purpose Vehicle

VCF: Value Creation Framework

VfM: Value for Money

VM: Value Management

CHAPTER 1

INTRODUCTION

The public sector is believed to be responsible for the delivery of public services through construction of infrastructures (Akbiyikli and Eaton 2005). However, both national and local governments in most countries suffer from budgetary constraints and capacity deficits while providing services and infrastructure through the traditional procurement systems (Abdel Aziz 2007; Rondinelli 2003). Traditional procurement routes oblige governments to allocate considerable portions of their capacity and resources for infrastructure projects. To minimize the use of limited public resources, governments turned to the involvement of the private sector (Gurgun and Touran 2014; Roehrich et al. 2014).

The interplay between public and private interests for infrastructure development has a long history (Villani et al. 2017), dating back to 1854, the first concession in the modern era, awarded to the private sector for constructing and operating the Suez Canal (El-Gohary et al. 2006). In 19th and early 20th century, the prominent providers of infrastructures and services were public institutions. However, in the late 20th century that trend was broken. As governments sought additional strategic roles, that of the private sector in public services grew, the outlook of the infrastructures and services changed to a more commercial one (Roehrich et al. 2014; Veeneman et al. 2009). Through this time course, the cooperation between public and private parties, namely the public-private partnerships (PPP), got more institutionalized, complex, and widespread. For the time being, PPP is a well-accepted procurement route across many countries and a wide variety of sectors.

1.1. Definitions of PPP

Despite the wide adoption of it, the term “PPP” lacks a commonly accepted definition.

At broadest, a PPP is defined as “a cooperative arrangement between the public and private sectors that involves the sharing of resources, risks, responsibilities, and rewards with others for the achievement of joint objectives” (Kwak et al. 2009).

A set of definitions and descriptions of PPP can be found in Table 1.1. Although the definitions are diverse and emphasize different aspects of PPP, some key characteristics can be observed, such as collaborative structure, shared resources, allocation of risks between parties, shared responsibilities and rewards, long term nature, and output-based contracts which contrast the input-based ones of traditional procurement (Allen 2001; Engel et al. 2008; Forrer et al. 2010; Kivleniece and Quelin 2012; Umar et al. 2011).

Table 1.1. *Definitions of PPP: Adopted from (Kwak Et Al. 2009) and Extended*

Source	<i>Definition</i>
HM Treasury (1998)	An arrangement between two or more entities that enables them to work cooperatively towards shared or compatible objectives and in which there is some degree of shared authority and responsibility, joint investment of resources, shared risk taking, and mutual benefit.
The World Bank (2003)	The term “public-private partnerships” has taken on a very broad meaning. The key elements, however, are the existence of a “partnership” style approach to the provision of infrastructure as opposed to an arm’s-length “supplier” relationship...Either each party takes responsibilities for an element of the total enterprise and they work together, or both parties take joint responsibility for each element...A PPP involves a sharing of risk, responsibility, and reward, and it is undertaken in those circumstances when there is a value-for-money benefit to the taxpayers.

Table 1.1 *Continued*

European Commission (2003)	A partnership is an arrangement between two or more parties who have agreed to work cooperatively toward shared and/or compatible objectives and in which there is shared authority and responsibility; joint investment of resources; shared liability or risk-taking; and ideally mutual benefit.
Ürel (2015)	A cooperative arrangement for the public and private sectors that covers the sharing of risks, responsibilities, resources and rewards for reaching to objectives of both sides that may be in different countries around the world.
The World Bank (2015)	A long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance.
Canadian Council for Public-Private Partnerships (2001)	A cooperative venture between the public and private sectors, built on the expertise of each partner, that best meets clearly defined public needs through the appropriate allocation of resources, risks and rewards.
Gerrard (2001)	A combination of the deployment of private sector capital and, sometimes, public sector capital to improve public services or the management of public sector assets. By focusing on public service outputs, they offer a more sophisticated and cost-effective approach to the management of risk by the public sector than what is achieved by traditional input-based public-sector procurement.
Roehrich et al. (2014)	Business models for linked infrastructure and services.
United States General Accounting Office (1999)	Contracting with a private partner to renovate, construct, operate, maintain, and/or manage a facility or system, in whole or in part, that provides a public service.

Table 1.1 *Continued*

Kivleniece and Quelin (2012)	“Long-term collaborative relationships between one or more firms and public bodies that combine public sector management or oversight with private partners’ resources and competencies for the direct provision of a public good or service.”
---------------------------------	--

1.2. PPP Models

PPPs have different characteristics and requirements reflecting the specific conditions of the country, sector, and projects. A variety of partnership structures are used to address these specific conditions. These variations usually are in terms of the degree of involvement of the private party (Kwak et al. 2009). While an exhaustive set of different models can be found in the literature (Delmon 2010), the most common ones are depicted in the continuum given in Figure 1. The left extreme represents the purely public provision. On the other extreme, private sector is responsible for all aspects of the delivery. Between those extremes are the different contractual structures. “PPP” is usually used as a collective term comprising all these different structures. In most cases, governments use the models that fall in the middle of the spectrum: the private party bears the up-front cost, designs, constructs, and maintains the facility, and the capital investment is reimbursed by operating the facility for a long term (20-30 years).

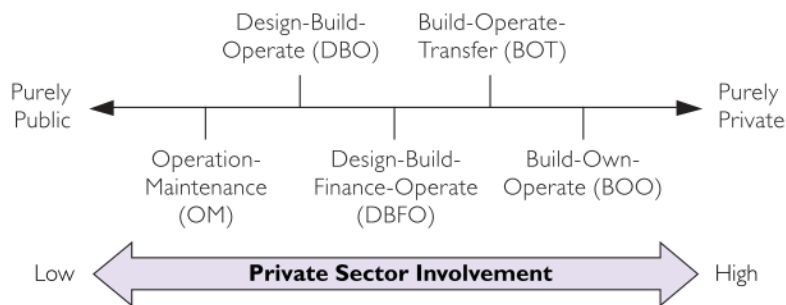


Figure 1.1. Continuum of Public Service Provision (Kwak et al. 2009)

PPPs can provide various benefits to the governments such as avoiding initial capital investments, keeping budget deficiencies down, allowing for pipeline delivery, and faster implementation (European Commission 2003; Kwak et al. 2009; Rondinelli 2003; Zhang 2006). Additionally, private parties can benefit from the stable long-term returns and the monopolies offered by the PPPs (Power et al. 2016). Despite the numerous advantages, PPPs also have their stumbling blocks. Long duration, broad uncertainties and complex nature of these contracts make a PPP scheme hard to adopt. The worldwide experience also did not prove positive. Many PPP projects are terminated or held up, and success of the PPP projects is debated. However, many governments still view PPP as one of the major routes for procurement regardless of the negative experiences. Therefore, investigating the success of PPP projects is a matter of importance (Kwak et al. 2009).

Traditionally, the success of the projects is assessed based on the scope, time, and budget criteria, otherwise known as the iron-triangle. However, such approach is problematic because reaching these goals at the project completion does not necessarily mean that benefits and value is created for the organizations in the project settings (Martinsuo et al. 2019). Accordingly, there has been a shift from the sole focus of the delivery of a tangible asset within the time and budget constraints, to a wider view of generation of benefits and value creation (Laursen and Svejvig 2016). This shift to a value-centric view, rather than a product-centric one is also indicative of a broader quest to position project management evermore strategically.

Green and Sergeeva (2019) suggest that the value-centric view of projects is established on the corporate culture where value creation is the corner stone of a firm's success. The value creation is complex within a firm, and can be even more so in inter-organizational projects involving both public and private actors – the PPP projects (Bowman and Ambrosini 2000; Klakegg et al. 2016; Martinsuo et al. 2019). The process of creating value in PPPs is plagued by the broad uncertainties and complexities caused by the involvement of multiple stakeholders with different orientations and divergent expectations. From a strategic point of view, this highlights

that the strategy need to be understood and implemented by diverse stakeholders (Hjelmbrekke et al. 2017) with different multiple logics (Villani et al. 2017). However, the success of PPPs from a strategic aspect have been given a relatively little attention.

Driver maintains that strategic initiatives suffers from a lack of cause and effect evidence that a project really will create the intended result, that this result will be used as intended and that the use really will create the desired benefit (2014 quoted from Hjelmbrekke et al. 2017). Expressed another way, project outputs (i.e. the product, or tangible asset), if technically feasible, can be guaranteed (although their delivery may violate time and cost constraints). Benefits or value creation, in contrast, cannot be guaranteed for a variety of reasons that they may or may not be realized in particular situations (Zwikael and Smyrk 2012). This is especially true for the case of the PPPs, which points out a need to develop a structure and description of how the PPPs create value for stakeholders and society as a whole. The use of business models is identified as a key to achieving this (Hjelmbrekke et al. 2017). This view is also supported by the project management literature with a recurring tendency to link the project value creation with the business models (Artto et al. 2016; Hjelmbrekke et al. 2017; Hjelmbrekke and Klakegg 2013; Kujala et al. 2010; Martinsuo et al. 2019; Villani et al. 2017).

Contrasting the emphasis on bridging between the project value creation and business models, this link remains largely unexplored in the PPPs (Keen and Qureshi 2006). The survival and growth of the PPPs is largely dependent on the value that they are able to generate for stakeholders and for society as a whole (Kivleniece and Quelin, 2012). Thus, business model design is recognized as important, especially considering that PPPs integrate multiple logics in order to take advantage of new ways of organizing and combining resources and competences to produce social goods and create value. In other words, success of the PPPs is dependent on the business models they adopt and how successful those business models are at creating value (Villani et al. 2017).

The motivation behind this thesis is to enhance the success of the healthcare PPPs. Departing from the idea that the success of the projects should be evaluated on the basis of the value created by them, the objective of this study is determined to be “understanding value creation in healthcare PPPs”. In order to satisfy this objective, a conceptual framework is constructed with relevant concepts from the value creation and business model literature together with semi-structured surveys with Turkish healthcare PPP practitioners.

The thesis is organized as follows: Chapter 2 discusses project success, specifically how the understanding of success evolved from the basic measure of iron-triangle to the much more complex view of value creation. Chapter 3 elaborates on the concept of value. It discusses what value and value creation means, how these should be conceptualized, and how the concept of value is mobilized in the project related research. Chapter 4 discusses the literature on success and value creation in PPP projects. Chapter 5 is of research context and methodology. The findings of the semi-structured interview and the value creation framework is proposed in Chapter 6. Findings are discussed in comparison with those of the literature in the Chapter 7. Chapter 8 is of conclusions.

CHAPTER 2

LITERATURE REVIEW: PROJECT SUCCESS

Success is a rarely reconciled construct. It is assessed both subjectively and objectively, has different connotations for different people and is vastly context-dependent (Jugdev and Müller 2005). Recent project management literature has re-conceptualized success in terms of value creation. Contrasting the conventional test of project success, adopting the notion of value enables a more holistic perspective on the success of the projects. Such approach is especially useful for measuring success of the PPP projects which have a bundled nature and diverse objectives stemming from the multiple stakeholders involved in these projects.

2.1. Shortcomings of the Traditional Test of Project Success

General view of projects is that they more often fail than they succeed. This high rate of failure is prominent in both public and private projects, in diverse sectors spanning across infrastructure and ICT and does not seem to improve over geography or time (Flyvbjerg 2017; Zwikael and Smyrk 2012). Most of the studies suggesting this high rate of failure appreciates the success and failure of the projects over the realized output (i.e. scope, cost, duration) by comparing them with the estimations in the project plan. This tri-partite metric of success, otherwise known as the iron-triangle, is cemented to the project management theory (Zwikael and Smyrk 2012).

Through the time many researchers and practitioners have tried to find out the reasons for failure. Some researchers suggested that the reason for failures dwells in the estimations. Flyvbjerg (2017) asserted that, in most projects, the forecasts which provides the basis for the business cases are erroneous and biased. Similarly, HM Treasury (2004) advised adding a contingency to cope for the optimism bias on the project plans (Klakegg et al. 2016). Contrasting the idea that suggests the failures rest

in the estimations, other researchers pin the reason for failures to the project management theory itself. More specifically, these researchers claim that the iron-triangle is short of capturing the true essence of success and actual failures might be lower than it is believed (Zwikael and Smyrk 2012). Therefore, they claim that, a more diversified understanding of success is needed for the project management context (Jugdev and Müller 2005).

Jugdev and Müller (2005) stated, “project management is applied on projects to optimize efficiency and effectiveness” while defining efficiency as the acquired output for a given input, and effectiveness by means of the achieved goals or objectives. Colloquially, efficiency is doing things right, and effectiveness is doing the right things. Therefore, they suggest, the right projects should be done right to achieve success. However, project management both as in literature and a profession, chiefly uses the iron-triangle as the primary test of success. This practice over-emphasizes the efficiency, entrenching the effectiveness of the projects to a secondary area of focus. Zwikael and Smyrk (2012) similarly criticized iron-triangle for primarily concerning the efficiency of the output delivery, while overlooking the effectiveness of the projects or the intended benefits of them. They highlighted that such an approach could be misleading for assessing the success of the projects and suggested three distinct gauges for success. These are “*project management success*”, represented by managerial performance of the project, compared with the project plan; “*project ownership success*”, that is performance of the owner while realizing the business case and, lastly, “*project investment success*”, represented by the actual value generated by the project overall. In the same vein, Cooke-Davies (2002) distinguished between the “*project management success*” which is measured against the traditional gauges of performance, and “*project success*” that is measured against the overall objectives of the project.

There are couple of well-known examples to support their idea, one of which is the Sydney Opera House. The project was completed with a 10 years’ delay and has 1400% cost overrun, yet recognized as an architectural and engineering masterpiece,

created tremendous value for Sydney and Australian nation, and considered as a success (Chang et al. 2013). Another example is the Suez Canal, which was 19 times over budget (Flyvbjerg 2017). Efficiency-wise, it was a disaster. However, being the shortest link between the east and the west, it is of crucial importance for the whole world trade. Additionally, it decreased ship accidents to an almost nil. These render this project a triumph by means of effectiveness (Suez Canal Authority 2019). In other words, both of these projects, according to Cooke-Davies' (2002) conception, are "project management failures" while being "successful projects". The literature on the trade-offs between the elements of the iron-triangle indicates that the scope is the most important determinant of the three (Jugdev and Müller 2005). However, even with a failure in scope, projects can still be regarded as successful. The Hubble Space Telescope is a good example of that. Despite being delivered with a faulty mirror, it still generated significant scientific value to the astronomy community and considered a successful project (Dunar and Waring 1999).

There are also some projects which went well from the project management perspective but regarded unsuccessful. A Norwegian torpedo battery project well-exemplifies that situation. The project was completed both on time and budget, yet shut down immediately after the completion and never used (Klakegg et al. 2016). This illustrates the gap between the benefits of a project and its defined scope, indicating that the projects have more far-reaching implications than the immediate deliverables of them (Jugdev and Müller 2005; Zwikael and Smyrk 2012). To summarize, *"the old success criteria of meeting outcome, cost and schedule constraints are no longer adequate"* and there is a need for a shift in the thinking (Cohen and Graham 2001).

2.2. Criticisms on Project Definitions and Lifecycles

Given the criticisms on the success test, some researchers went further to argue that the problems on success measurement are just the symptoms and claim that the real problem rests in the project definitions (Zwikael and Smyrk 2012). Jugdev and Müller

(2005) criticized the early definitions for focusing solely on the outputs. Turner and Muller (2003) claimed that the classical definitions of projects are incomplete. They suggest that, the rationale of any project is that they seek for target benefits. However, the conventional view and the definitions of projects (see Table 3.1) describes them as a specific form of work finalizing with a unique artefact or service, restricting the judgement of success to how efficient that specific work was executed. Zwikael and Smyrk (2012) argued that such practice detaches the rationale of a project (which is presumably benefits based) with the result of it, causing a gap between the drivers of a project and frameworks for assessing their success. They claim that such understanding of projects is limiting.

Table 2.1. *Project Definitions Focused on Outputs and Their Production (Zwikael and Smyrk 2012)*

Source	<i>Project Definition</i>	<i>Output/process-oriented terms included in the definition</i>
Project Management Institute (2004)	Temporary endeavour undertaken to create a unique product or service	Product, Service
Meredith and Mantel (2012)	A specific, finite task to be accomplished	Task
Lewis (2000)	A project is a one-time, multitask job that has clearly defined starting and ending dates, a specific scope of work to be performed, a budget, and a specific level of performance to be achieved	Scope of work
International Project Management Association (2006)	Time and cost constrained operation to realize a set of defined deliverables up to quality standards and requirements	Deliverables

Further criticisms also abound in the project life cycle department where the problems associated with the definitions are reflected. Project Management Institute (2004) defines the project lifecycle as a subset of the product lifecycle which also contains operations and decommissioning phases on top of the project lifecycle. Similar project

lifecycles can also be found in other publications that typically do not address the phases beyond the termination, such as the product/service use phases (Jugdev and Müller 2005).

PHASES		CONSTRUCTION	PHARMACEUTICAL	DEFENSE ACQUISITION	SOFTWARE DEVELOPMENT
Product Life Cycle	Initial Phase: Conceptualization, Planning	Feasibility	Discovery & Screening	Concept Exploration & Definition	Proof of Concept Cycle
	Intermediate Phase: Production / Implementation	Planning and Design	Pre-Clinical Development	Demonstration & Validation	First Build Cycle
		Production	Registration(s) Workup	Engineering & Manufacturing Development	Second Build Cycle
	Final Phase: Handover	Turnover and Start Up	Post-Submission Activity	Production & Deployment	Final Cycle Including Testing, Final Build
	Operations: Utilization			Operations & support	Deployment
	Decommissioning: Closedown				

Figure 2.1. PMBOK’s Overview of The Project and Product Lifecycles (Project Management Institute 2004)

PMBOK’s table of the project and product lifecycles is given above to portray the typical understanding of the project and product lifecycles (Figure 2.1). Four specific life cycles are also covered in the table for the construction, pharmaceutical, defense, and software development industries. The variations in industry-specific terminologies are reflected in the table. For instance, the final phase is named “turnover and start-up”, “post-submission activity”, “production & deployment” and “final cycle” in construction, pharmaceutical, defense and software development respectively. This inconsistency and lack of standardization are criticized by Jugdev and Müller (2005).

The table also places the initial, intermediate and final project phases under the project lifecycle whereas the product life cycle includes the operations and decommissioning phases in addition to the project lifecycle. That makes the project lifecycle a subset of

the product life cycle. The gray shades in the lower section represents the phases that are not covered by the industry-specific project lifecycles, where the hatched line distinguishes between the alleged endings of the projects in these sectors (Project Management Institute 2004).

The success of the projects is often erroneously assessed at the end of the project lifecycle. For example, for the case of the construction sector, it is at the handover time, immediately when the outputs are available. This practice limits the assessment as it only covers the implementation phase without the operations or decommissioning phases. Considering the implementation phase is typically the longest and the most resource-consuming it might seem to be convenient at first glance. However, it is just taking the “easy way out”, which consequently confines the judgements on success to the efficiency metrics rather than effectiveness measures which are, albeit less tangible and harder to grasp, more important (Jugdev and Müller 2005).

Such narrowly defined lifecycles, which do not measure success beyond the final phase of the projects also affect the practice as it detaches stakeholders (e.g. end-users etc.) from the evaluation of the success. Without involving input from the stakeholders, problems regarding stakeholder satisfaction may arise. Previous researches also show that such lifecycles limit the responsibilities of the project manager, detract the project team from working more cohesively with the business team, cause an attitude of “that is not my problem” and consequently, contribute to client dissatisfaction (Jugdev and Müller 2005). Additionally, the lifecycles which are limited to the implementation phases are of doubtful value while evaluating PPP projects which have a long-term operation component following the implementation phase and diverse objectives stemming from the multiple stakeholders involved in these projects.

Contrasting the construction and pharmaceutical sectors, in software and defense industries, the operations phase is also covered by the project lifecycles which portray a clearer connection between the product, its “use value” and “business value”. More

accurate measurement of success can be achieved by assessing the project during operations and decommissioning, accounting with the effectiveness of the project while involving the stakeholders (Jugdev and Müller 2005).

2.3. Evolution of Project Success

The above-given discussions perpetuating around the conventional definitions, lifecycles and test of success are widely acknowledged. In addition to these, some wider and harsher criticisms on project management discipline also exist. These criticisms argue that the project management theory is “stuck in a 1960s-time warp” and “obsolete” (Winter and Szczepanek 2008) and the literature is “scanty” and short of adequate concepts (Zwikael and Smyrk 2012). Same issues were also concerned by Cohen and Graham (2001), who also points out the need for a fundamental shift:

- from meeting fixed specifications to satisfying customers
- from meeting a fixed budget to increasing shareholder value
- from delivering before a deadline to selecting the best time to market
- from just getting the project done to implement business strategy

PROJECT LIFE CYCLE					
PROJECT LIFE CYCLE					
Conception	Planning	Production / Implementation	Handover	Utilization	Close Down
		Period 1: Project Implementation and Handover (1960s - 1980s)			
Period 2: CSF Lists (1980s - 1990s)					
Period 3: CSF Frameworks (1990s - 2000s)					
Period 4: Strategic Project Management (21st century)					

Figure 2.2. Measuring Success Across the Project and Product Lifecycles (Jugdev And Müller 2005)

Against this background, Jugdev and Müller (2005) suggest that there is a slow but gradual shift in the literature. They inspect the literature on project management through a retrospective lens which encapsulates how our understanding of success has evolved throughout the time. Figure 3.2, which is adapted from their study, portrays the trends in the literature over the success of the projects. In their research, they mark 3 periods in the literature, then draw conclusions and make further suggestions for the 4th:

Period 1: Project Implementation and Handover (1960s-1980s)

During Period 1, the emphasis was on the iron-triangle. Success was assessed based on the time, cost, and specifications as they are convenient in the realm of the project organization. The project team's sole purpose was to get the project done: coming in on a fixed budget, reaching target dates, and an end product. Customer contact and long-term follow-up were at the minimum. Similar to the practice, literature was dominated by theoretical works focusing on the implementation phase and supporting the iron-triangle. Empirical studies were lacking. The literature on this period predominantly investigates the schedules to understand the project failures. Interpersonal or behavioral issues (i.e. soft skills) were overlooked and a more mechanistic approach, which concerns the efficiency measures or technical systems (i.e. hard skills), were given importance (Jugdev and Müller 2005).

Period 2: Critical Success Factor Lists (1980s-1990s)

Well into this period, works on the iron-triangle maintained its place. However, in this period the emphasis is shifted to defining critical success factors (CSF). CSFs are the specific important elements that are required for the project to go right. These CSFs are primarily based on single case studies and anecdotal data. Even though some of the factors were useful, they were still in a preliminary stage with low coherence as they are represented as lists without a categorization or a framework format. In this period, a consensus could not be built on the concept of success and split on the ambiguities of that construct. Despite that, stakeholder satisfaction was broadly

accepted as a fundamental element of project success. Clients also became more conscious. They started to focus on satisfaction criteria rather than the completion criteria which is represented with a shift of an understanding in profession from “are we done?” to “are we happy?”. Consequently, the marketplace was changed in terms of competition. A binary understanding was yet prevalent that judges a project as either a success or failure, instead of multiple measures over the lifecycle. Some organizational effectiveness, and strategic management concepts emerged in the project management context (Jugdev and Müller 2005).

Period 3: Critical Success Factor Frameworks (1990s-2000s)

During period 3, the emergence of integrated CSF frameworks made significant contributions to the literature on the success of the projects. These comprehensive and organized frameworks categorized the factors under the groups such as functionality, management, commercial performance and termination of the projects. Furthermore, span of the CSFs was broadened by referring to some rather unaddressed “soft” elements of the projects such as attitudes, communication, leadership, team work, human qualities, commitment, external factors, organization and contract strategy, along with the “hard” elements such as resources management and finance. The CSFs were also applied to the senior management and a corporate understanding of projects was developed together with a rather strategical viewpoint. Importance of top management became concrete. “Preparing for the future” is also concerned besides the immediate success. Notion of “value”, albeit narrowly defined (consisting more of business-value i.e. improved organizational effectiveness, merit), started to have coverage in the body of literature. Environmental, political, legal and social concerns were highlighted. For the first time, stakeholder satisfaction was addressed as the primary gauge of success, leaving the iron-triangle secondary. Additionally, early CSF literature was criticized for lacking the information of how to apply them (Jugdev and Müller 2005).

Concept of project success is also discussed and addressed as a stakeholder dependent construct which involves the recipient and internal organizations interaction. It is also asserted that success can vary over the lifecycle and can be assessed both objectively and subjectively. An interesting highlight is that the Scandinavian literature defined the projects as a “myriad of side effects that project work brings with and in itself”. This approach was in sharp contrast to the fundamental practice of project management of “planning and controlling”. For example, a project against drug abuse would be considered a success even without meeting its predetermined objective. The learning and interaction with other institutions, which is started by the project initiation, said to out-weigh the predetermined objectives. The use of ambiguous objectives was also suggested to allow for learning. The interaction of the project and its external environment is considered important as it allows for emergent opportunities which could not be obtained in projects in isolation (Jugdev and Müller 2005).

Additionally, project success was inspected from different vantage points. For example, (Lim and Mohamed 1999) differentiated between micro (i.e. success upon completion) and macro (far-reaching implications relating to product use and stakeholder satisfaction) viewpoints of projects. They used an analogy of “trees and forest” to express that success in a macro viewpoint is an aggregate of micro accomplishments. They argue that, if the expectations were defined at the outset, then the project could be guided accordingly, hence, the deliverables and the expectations would be aligned. They further added that the assessment should be made after the handover, at the operational stage to ensure that the original project concept is achieved. Their research was important as it linked the planning stage at the front and stakeholder satisfaction at the end.

Similar two-fold gauges of success are also present in 2000s, such as Cleland and Ireland's (2002) work which distinguishes between the technical project performance and project's strategic contribution to the firm or Cooke-Davies' (2002) conception of “project management success” which is measured against the traditional gauges of

performance, and “project success” that is measured against the overall objectives of the project. Zwikael and Smyrk (2012) also dealt with the same issue, however, their gauge of success was three-fold rather than two – “project management success”, represented by managerial performance of the project, compared with the project plan; “project ownership success”, that is performance of the owner while realizing the business case and, lastly, “project investment success” represented by the actual value generated by the project overall.

The understanding of project success, then, shifted from a solely technical concept on the views of the providing organization to an interaction among the stakeholders, and internal and external factors. However, the ambiguities of success were not resolved yet. Project success was still a hardly agreed-on construct. The misaligned perspectives caused some problems regarding the project objectives. For example, while the project managers worked towards specific targets, line managers were viewing the projects more strategically, as building blocks to achieve an overall business objective that arises from the productive use of the project outcomes. Assigning this wider responsibility to the project manager was desirable. However, the temporary nature of the project team and the lag between the project delivery and business results meant that accounting on project managers for business results was not possible in most cases. Such problems reflect the disconnection between the line managers and project managers (Jugdev and Müller 2005). This gap between the corporate strategy and management of the projects portends that strategic aspects of the project management were still deficient. That brings us to the 4th period which is the Strategic Project Management.

Period 4: Strategic Project Management (2000s):

There had been considerable progress over the past 40 years on the topics of projects and their success. At the 2000 mark, the literature on success was more holistic, viewing project success as a multidimensional concept which is obtained through interaction with external environment and stakeholders. A projects’ implications that

reach further than its immediate deliverables were acknowledged, such as benefits to the organization, developing core competencies, preparing for the future, and innovation. A corporate understanding of projects was also available. The project managers were no longer believed to be solely accountable for the projects, but the senior management also was. Despite that, developments in strategic aspect of project management were not impressive. Links between project management and corporate management were still deficient (Jugdev and Müller 2005).

In the 4th period, the literature on project success narrowed down the number of the CSFs, outlining the factors which are only of crucial importance. These factors were consisting of “stakeholders’ agreement on success criteria”, “collaborative relationship”, “flexibility for project manager on the unforeseen events”, “owners’ guidance and interest” and were obligatory for a project to be successful, but not guarantee that it would. Such understanding shifted considerable responsibilities to the project owner regarding success. Despite the shift of the responsibilities, some suggested that projects managers could no longer deliver whatever was contracted and their responsibilities were increased to a wider set of objectives which are more far-reaching than the immediate outputs of projects (Jugdev and Müller 2005). Zwikael and Smyrk (2012), however, stressed same issue and suggested that accountabilities on primary and secondary objectives of the projects should be assigned distinctly, drawing from the principal-agent theory (accountabilities on outputs and outcomes should split to separate stakeholders).

Additionally, considerations regarding the project owner’s predisposition on the project success were also increased. It is shown that in successful projects, owners were more willing to communicate with the project managers. In unsuccessful projects, it’s the opposite. Strategic management of the projects was given emphasis. The understanding of project management as a strategic asset was further developed and regarded imperative. Projects are increasingly treated as a way to achieve organizational success. Programs and project portfolios were also discussed, which considers allocation of resources among the neighboring projects. These discussions

among portfolios paved the way for future researches on project-based companies (Jugdev and Müller 2005). Furthermore, intangible assets were given emphasis, together with the tangible ones. However, return on investment is difficult to capture from such approaches. Therefore, Jugdev and Müller (2005) predicted that an increasing attention would be given on value of the intangible assets within the project management context. Additionally, advancements on the strategic aspects of projects were also anticipated by them, based on the increased focus on the connections between project management and corporate strategy.

Jugdev and Müller's (2005) research is an excellent source for capturing the developments between the 1960s and early 2000s. Additionally, their future forecasts are accurate. The longstanding debate of assessing project success emerged an emphasis on the notion of "value", and recently, there has been a considerable debate about judging projects' success on the basis of the value created by them (Green and Sergeeva 2019). In a wider view, there is an evident conceptual shift across different sectors and industries from the traditional, product-centric engineering view of projects, towards a more value-centric one (Winter and Szczepanek 2008). In this view, primary concern is no longer the creation of a product (capital asset, system or facility etc.), but increasingly is the challenge of creating value and benefit for multiple stakeholder groups. This shift is also indicative of a broader quest to position project management evermore strategically (Green and Sergeeva 2019).

Pinto and Prescott, as early as 1990, addressed "value" as one of their three groups of success factors. First, group was "*budget and schedule*". Second one was "*value*" covering the positive impacts, merits and improved organizational effectiveness, and the last is the "*client satisfaction*" in terms of the benefits through the use of the product. Similarly, (Munns and Bjeirmi 1996) suggested a three-dimensional success framework which includes "*implementation phase*", "*perceived values*", and "*client satisfaction*". "*Implementation phase*" deals with the project management, "*perceived values*" deals with the views of end-users using the product, and "*client satisfaction*" refers to measuring success after closedown.

The fact remains that, today's understanding of value is much broader than what Pinto and Prescott (1990) and Munns and Bjeirmi (1996) suggested. It is concerned both with the immediate deliverables of projects, and the further reaching ones. Arto et al. (2016) supported the long-term values and highlighted the need to manage the projects for through-life value creation. Martinsuo and Killen emphasized the strategic value which comprises health and safety, knowledge development, environmental, social, and long-term business value (2014). Non-commercial, moral or social aspects of value are also well-acknowledged, treating values as abstract ideals and beliefs of what is good and right (Martinsuo et al. 2019). In short, project management subscribed to the strategic thinking of value creation, in which value is a complex, multifaceted and multilevel concept. Additionally, from the collection of discussions above, it can be understood that achieving project success by and large have to do with the through-life value creation (Laursen and Svejvig 2016).

Contrasting the earlier mentioned distinct gauges of success which were applied to different stakeholders such as "project management team", "owners" and "investors" of the projects (Zwikael and Smyrk 2012), or the different aspects of them, Green and Sergeeva (2019) argued that project success is a matter of negotiated agreement. (Wateridge 1998) noted that, on successful projects, there were greater agreement on success criteria between stakeholders than there were on unsuccessful projects. Therefore, the difficulty with project success or project value is that, any definitive judgement depends upon a negotiated reconciliation of differing perspectives amongst project stakeholders, and any such reconciliation is unlikely to remain stable over time (Green and Sergeeva 2019). This highlights the need of a medium which can capture project stakeholders' different perspectives about the project regarding their expectations of value and success. That is where the value creation literature come into effect. Next chapter discusses project value.

CHAPTER 3

LITERATURE REVIEW: PROJECT VALUE

As noted in the previous chapter, project-related research has been shying away from the traditional output focused methodology, in favor of creation of value (Martinsuo et al. 2019) and realization of benefits in project settings (Laursen and Svejvig 2016). Devoted efforts of researchers ended up in a reconceptualization of projects, defining them as: “...*value creation process for disparate stakeholders*” (Chang et al. 2013), or “...*a temporary organization that enables value creation*” (Laursen and Svejvig 2016). In some cases, despite not directly using the term “value”, some value-emphasizing descriptions are suggested. Examples include that “*a project is undertaken to generate benefits*” (Zwikael and Smyrk 2012). The terms “value” and “benefits” are sometimes used inter-changeably, and there appear to be many overlapping and ambiguous concepts such as “value”, “benefits”, “result”, “outcomes” and “change”, all highlighting a distinct “non-outputs” focus (Laursen and Svejvig 2016). Given that the narrow output-centric definitions of projects have led to flawed performance tests, these new definitions enable a more holistic understanding of project success based on the value created by them.

Referring to the notion of value in the project context is not totally new. Project management has dealt with value, albeit at a more operational level, under the topics of Value Engineering, Benefits Management, Value Chain and Value Management. The intention with the Value Engineering was to reduce costs while maintaining the same function. Benefits Management was emerged to understand the return on investment from IT projects, and later diffused into the mainstream project management, aiming towards the delivery of the benefits. Accordingly, the benefits and disbenefits were planned at the outset and realized at the end. However, the simplistic and linear account of benefits realization downplayed the managerial

challenges and the extant complexities of value creation in organizations (Laursen and Svejvig 2016). Value Chain is a thinking of the industrial economy, where a party conducts their value-adding activities before passing the product downstream. This unilateral understanding of value creation is unfit with today’s project environments as it does not recognize disparate stakeholders. Value is rather subjective and perceived differently by different stakeholders (Laursen and Svejvig 2016). Value Management (VM) is enacted as a more generic term, focusing on the overall achievement of value and is intended to optimize both benefits and costs in the projects. Yet, the literature treated it in a very limited way and it is predominantly characterized by a recurring tendency to abolish the future uncertainty or collapsing it into a numerical value such as Net Present Value (NPV), where the future income streams are discounted to the present as far as possible (Green and Sergeeva 2019). Consequently, very often the sole focus was to cut the costs rather than increasing the benefits (Laursen and Svejvig 2016). The streams of literature discussed above are “historically and intellectually” aligned with a product creation perspective (Green and Sergeeva 2019), therefore, does not necessarily represent the subscribed value-centric thinking of project management.

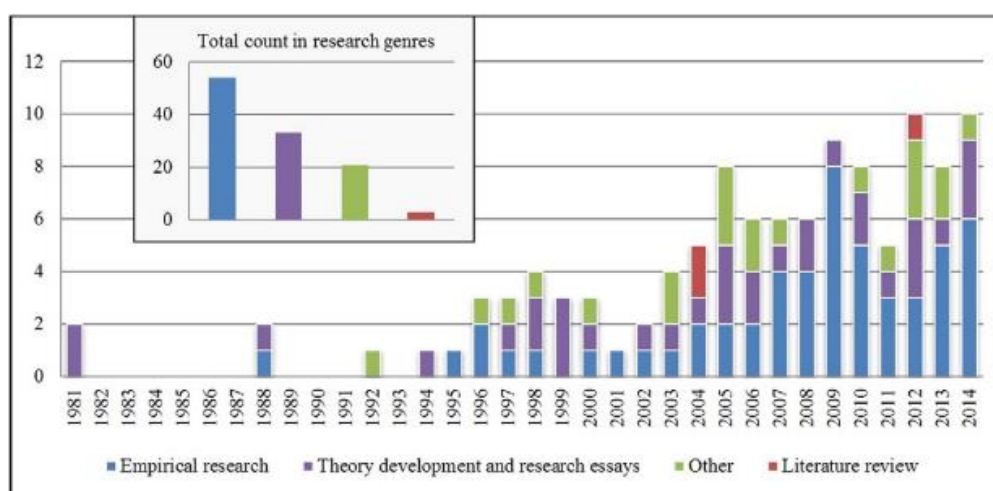


Figure 3.1. Distributions of Publications on Project Value Creation (Laursen And Svejvig 2016)

Laursen and Svejvig (2016) highlights “project value creation”, a field which started to emerge after the mid-1990s and gained prominence in mid-2000s and forward (see Figure 4.1), promoting the projects as value-creating systems. Green and Sergeeva (2019) addressed the same literature and distinguished between the “Hard VM” and “Soft VM”. Accordingly, Hard VM is the collection of earlier discussed approaches which are primarily directed towards the cost reduction, and the latter, Soft VM is directed towards the achievement of a shared understanding of value on an individual project. Embracing the “Value Management” for the terminology (Soft VM) is in line with Thiry's interpretation of Value Management as a means of “sensemaking” as they share the similar social constructivist epistemology (2001, quoted from Green and Sergeeva 2019). The main aim of the studies in the Soft VM is to enact a collective process of learning whereby stakeholders can negotiate the expectations and converge on an emergent understanding. Therefore, it is inherently a social process, contrasting the dominant instrumentalism of Hard VM (Green and Sergeeva 2019). The terms of “value creation” and “Soft VM” would be used interchangeably from this point on to refer to the same literature which studies the qualitative aspects of the projects.

Green and Sergeeva (2019) suggests that Soft VM is originated from a decision conferencing approach, where a “multi-attribute decision model” is used as the basis for negotiating a “shared social reality”. In sharp contrast with Hard VM, neither modelling of an “external reality”, such as an NPV analysis which discounts the future uncertainty, nor a continuous effort to reduce the uncertainty exist in Soft VM. It is rather more concerned with “*building and maintaining a stable political constituency within which the project is delivered*” (Green and Sergeeva 2019). Gillier et al. (2015) argue that traditional practices of project control inhibit learning, innovation and creativity. The aspiration of “playing with uncertainty” is shared by the Soft VM literature to allow for the different stakeholders to learn from each other.

Given that the practice is shaped by theory (Green and Sergeeva 2019), the value creation literature has implications for the practitioners’ roles. While the main emphasis of hard methodologies is on the role of practitioners to achieve the specified

function at minimum costs, Soft VM puts emphasis on engaging with stakeholders for developing strategic interpretations of value, which can justify more expensive solutions for longer term value creation. This, then sets new expectations regarding what the project managers are supposed to do. Laursen and Svejvig (2016) stressed that the practitioners may be blinded to social and political aspects of projects. Green and Sergeeva (2019) argues that project success depends on managing these specific aspects, and it is this agenda where most of the Soft VM is aimed at. Hence, the value-centric view may provide for a domain to further the practitioners to comprehend the social and political aspects of projects.

Despite the strong consensus on moving beyond the traditional hard methodologies of product creation, there is a little agreement on how to meaningfully operationalize soft methodologies in practice. A usual tenet in the literature is to enact episodic workshops starting from the front-end of the projects. Participation, here, is a key concern. A related criticism argues that Soft VM practices serves to reinforce the vested interest of who are allowed to participate, or the key stakeholders - to the detriment of others. Even with the represented stakeholders, it is argued that the process may be manipulated to the interest of the dominant group. The more critical observer might also question why the achievement of value is seemingly confined to episodic workshops rather than being a more mainstream concern (Green and Sergeeva 2019).

One of the most pointed criticism of the Soft VM literature is that it tends to de-emphasize the importance of facts and logic. The agenda of reconciliation possess a clear danger of achieving an early and easy consensus without any engagement with the facts or evidence. Hence, Both Hard VM and Soft VM are subject to criticism, despite both have a degree of validity in different circumstances. When primary concern is the long-term benefits for multiple stakeholders, the Soft VM storyline may seem to be attractive. The ones who are worried about overspending would likely be attracted by the narrative of Hard VM. Different stakeholders are attracted by different storylines, and different storylines may well seem more attractive at different stages

of the projects. There are aspects of reality which are not subject to interpretations and there are other aspects that are not subject to quantification. This is also true for the case of the projects, which has interpretable sides alongside with the ones that lie beyond individual interpretations (Green and Sergeeva 2019). Winter et al. (2006) argues that projects incorporate both hard and soft aspects. Therefore, neither the Hard VM, nor the Soft VM is a panacea. An idealistic pluralist approach to value creation would derive from both Hard VM and Soft VM.

3.1. Value

Value is a central concept of both management and organization literature. However, what value is or how it is created is not well understood. Lepak et al. (2007) stressed the ambiguities of “value” and the surrounding concepts and highlighted the three most important reasons for them. First, they suggest that the management’s interdisciplinary nature causes variances in the source and target of value creation. Different scholars in different disciplines may emphasize different targets such as business owners, stakeholders, customers, individuals, societies or nations. This plurality causes challenges for the literature, including the development of a common definition. Secondly, “value creation” has two facets which are the “content” and “process” of value creation. The “content” deals with “*what is value/valuable, who values what, and where value resides*”. However, value creation is usually used to refer to the process of value creation/how it is generated or the management’s role in this process, again causing lack of certainty. Lastly, value creation is often discussed in combination with value capture. However, the value creation and capture should be discussed distinctly, as the source of value creation may not be able to capture the value – otherwise known as “value slippage”. To some extent, this tendency to combine creation and capture contributed to the disagreements surrounding value (Lepak et al. 2007).

Level of Analysis or Source of Value Creation	Academic Lens	Target or User of Value	Creation Process	Value Capture Process	Article
Society	<ul style="list-style-type: none"> • Sociologists • Economists • Ecologists 	<ul style="list-style-type: none"> • Individuals • Organizations • Government 	<ul style="list-style-type: none"> • Innovation and new firm creation • Competition • Capital investment • Incentives • Laws and regulations 	<ul style="list-style-type: none"> • Factor conditions • Demand conditions • Supporting industry infrastructure • Firm strategy and rivalry 	Lee, Peng, & Barney
Organizations	<ul style="list-style-type: none"> • Strategic management • Organization theory • Strategic HRM 	<ul style="list-style-type: none"> • Consumer • Society 	<ul style="list-style-type: none"> • Invention • Innovation • R&D • Knowledge creation • Structure and social conditions • Incentives, selection, and training 	<ul style="list-style-type: none"> • Rare, inimitable, nonsubstitutable resources • Intangible resources 	<ul style="list-style-type: none"> • Sirmon, Hitt, & Ireland • Kang, Morris, & Snell • Priem
Individuals	<ul style="list-style-type: none"> • Psychology • Organizational behavior • HRM 	<ul style="list-style-type: none"> • Consumers • Client • Organization 	<ul style="list-style-type: none"> • Knowledge creation • Search • Ability • Motivation • Training 	<ul style="list-style-type: none"> • Network position • Unique experience • Tacit knowledge 	Teppo & Hesterly

Note: Dashed arrow (----->) indicates value slippage; solid arrow (————>) indicates value capture.

Figure 3.2. Dimensions of Value Creation (Lepak et al. 2007)

Figure 3.2 above portrays different aspects of value creation, including the levels of analysis regarding the source of value creation and different academic lenses focusing on this concept. Additionally, the targets commonly associated with the sources of value creation are also given. Besides, process of value capture is also depicted together with the value slippage. Dashed lines represent the value slippage which can also occur between different levels of analysis.

In the value creation literature, many studies cite Bowman and Ambrosini (2000) and Lepak et al. (2007). Bowman and Ambrosini's (2000) research is mainly concerned with "resource-based theory of the firm (RBT)" which applies to the organizations in the competitive market. They suggest that, in order to progress RBT, a precise underpinning theory of value is needed. In this sense, they firstly distinguished between "value creation" and "value capture". Second, they defined and explained "value" from a classical economist's point of view by referring to utility theory. Theory states that, consumers spend their income to maximize the satisfaction they get from the products. Therefore, potential customers have to judge the extent to which the

product will satisfy their needs in advance of the purchase and these judgements are based on their needs, expectations, unique experiences and beliefs about the goods. In short, a customer's assessment of overall value would be based on what is given and what is received (Bowman and Ambrosini 2000).

At this point, they differentiated between “use value” and “exchange value”. Use value pertains to the individual consumer per se. It refers to the qualities of the products as perceived by customers in relation to their needs, and applies to all purchases (e.g. procuring inputs such as machines), not just those of the final consumers. Exchange value is the price of a product. It is realized at the point of exchange (Bowman and Ambrosini 2000). Lepak et al. (2007) broadened the use value definition of Bowman and Ambrosini's (2000) to be applicable on a multi-level analysis. Accordingly, use value refers to the specific quality of a new job, task, product, or service as perceived by the users in relation to their needs. These judgements are subjective and individual specific. The definition of exchange value remained same as the price. Viewing both definitions together, they suggest that “*value creation depends on the relative amount of value that is subjectively realized by a target user (or buyer) who is the focus of value creation—whether individual, organization, or society—and that this subjective value realization must at least translate into the user's willingness to exchange a monetary amount for the value received*” (Lepak et al. 2007). After explaining the concepts, they went on to state two important conditions for value creation to endure. First, “*the monetary amount exchanged must exceed the producer's costs*”. Second, “*the monetary amount that a user will exchange is a function of the perceived performance difference between the new value that is created and the target user's closest alternative*”. Without these two, neither the creator of value nor the user would be repeatedly engaging in the exchange over a long term (Lepak et al. 2007).

The overall tone in the project management literature is an expansion in definitions of value to become ever more inclusive of a variety of issues to be concerned in an over-extending timeframe which echoes benefits realization, especially from a “through-life” perspective. However, acknowledging multiple stakeholders and focusing on

balancing their needs rather than solely focusing on the sponsoring organizations(s) is where the literature on value creation is delineated from the benefits realization (Green and Sergeeva 2019). The definitions in the projects' context usually suggest a relationship between value and benefits (Zwikael and Smyrk 2012). Laursen and Svejvig (2016) define value as the fraction of benefits/cost and add that it is relative and subjective to different stakeholders. However, defining value as a cost constrained concept reverts the focus back to the Hard VM. Kelly similarly criticized the pseudo-formulaic expressions of value (2007). Therefore, the definition suggested by Kivleniece and Quelin (2012) is adopted in this study. Accordingly, value is *“the sum or entirety of benefits obtainable from the exchange”*.

3.2. Value Creation

To explain value creation, Lepak et al. (2007) derived from Amabile's (1996) study on evaluating creative acts. Amabile (1996) notes that, *“a product or response will be judged as creative to the extent that it is both a novel and appropriate, useful, correct response to the task at hand”*. Therefore, the amount of the value created would be dependent to the subjective assessment on “novelty” and “appropriateness” of the focal task, product or service. Greater the perceived novelty and appropriateness, potential value would increase (Lepak et al. 2007). One further note is that, for the users to assess the novelty and appropriateness, hence value, there are three prerequisites. Firstly, users must possess information regarding both the focal entity and the existing alternatives in order to make a comparison. Secondly, the evaluation cannot be held without an understanding of the new product, task or service in a specific context. Lastly, the cultural and social surrounding, in which the new task or product would be introduced, should be understood before the evaluation (Amabile 1996; Lepak et al. 2007).

Tapping into to information above, it is no longer controversial to conclude that value creation has a subjective and context-dependent nature. Different targets of value creation may have different perceptions based on the individual knowledge and the

specific context. An important consequence of such definition is that there can be competing views regarding the value among different targets or users. Hence, the source of value creation must have an understanding of the potential users' relevant knowledge and the context of evaluation. While the given definition of value creation and its evaluation would be consistent across different levels of analysis, the content of value, and the process which value is created through would vary significantly, depending on the level of analysis/source of value creation and the theoretical lens adopted on the discipline (Lepak et al. 2007).

Based on the information above, Lepak et al. (2007) suggest that there are at least two possible ways to conceptualize the process of value creation, first of which is a single universal conceptualization, and second is a contingency perspective of a focal source. In their study, they endorsed the latter which explores how value is created from the vantage point of a particular source. In this view, one should define the source and targets of value creation, thus, the level of analysis. Given the three different levels of analysis in Figure 3.3, they argue that, at the individual level of analysis, individual attributes, such as motivation, skills, and intelligence and the displayed creative acts gain prominence. When the organization is the unit of analysis, management, knowledge creation, and innovation is of importance. When the societal value is concerned, attributes of the society or come into play (Lepak et al. 2007). These three levels are explained further below.

Individual as a Source of Value Creation

Individuals create value by developing novel and appropriate tasks, services, jobs, products, processes, or other contributions perceived to be of value by a target user (e.g., employer, client, customer) relative to the target's needs and when the monetary amount realized for this service is greater than what might be derived from an alternative source producing the same task, service, job, and so forth. The value created may be from any new task, service, or job that provides greater utility or lower unit costs for the user over the closest alternative. For example, an employee working

for a manufacturer may develop a faster or more consistent method to produce fabricated parts, thus lowering unit costs, or may create a higher-quality part, which subsequently yields a higher unit price. At this level of analysis, initial knowledge possessed by the individuals is an important aspect of value creation, together with the motivation. Amabile (1996) suggests that, individuals' enjoyment of the work itself is of greater importance for value creation when compared to the external sources of motivation such as money, recognition or status. She states, "*The intrinsically motivated state is conducive to creativity, whereas the extrinsically motivated state is detrimental*".

Organization as a Source of Value Creation

At the organizational level of analysis, innovation and invention activities (e.g. new methods, invent new technologies, discover new materials, etc.) are central to value creation. The new products or services which were developed by these activities consist of an intentional effort involving technical, organizational and market-related ambiguities. Additionally, these activities are of a collective effort which requires commitment over an extended period and more resources than that are currently held by the parties involved. One further note is that, organizations are more likely to innovate when they face uncertain environments and scarce resources, and have entrepreneurial managers, large social networks and have the institutional capacity to combine the existing knowledge into new knowledge. Similar to the previous arguments, the focus on organizational level of analysis is on how the target of value creation benefits from the new product or service. The innovation or invention activities are likely to increase the consumers' benefits of consumption, therefore creates value (Lepak et al. 2007).

There are some other literature streams inspecting value creation at the organizational level, such as *dynamic capabilities*, which inspects how organizations create new advantages as the existing ones are worn away by the external changes. Product and process development, organizational evolution, and managerial capabilities are some

of the key factors for creating new advantage. However, as its focus is internal to the organization, it neglects the factors external to the organization such as users, alternatives and the environment. Another organizational-level body of literature, *social networks*, inspect the process through which the organizational knowledge is created. It concentrates on the interaction and social connection of individuals in the firm which would presumably lead to exchanging and combining existing information into new knowledge. Lastly, *strategic HRM*, similarly is at organizational level and inspects the role of management in the process of value creation. Motivation, and organizational commitment are some of its key concerns.

Kang et al. (2007) suggests that a firm's success is dependent to its ability to create new and superior value to the customers, which is based on exploiting the knowledge of the employees that can lead to innovations, which are valuable by the select set of customers. They further argue that, leveraging the employee knowledge requires a HR system which supports creative acts and cooperation to extend the existing knowledge. To this end, all bodies of literature explained above represent an important facet of organizational-level value creation, thus, a firm's success in a competitive environment.

Up until this point, the given discussions were mainly on competition, therefore the focus was on the interests of the firms and customer as if it was the sole target of value creation. However, at the organizational level there are many other potential targets, such as the society. An organization is expected to further the society, contributing beyond the interests of it and requirements of the laws. That matter of corporate social responsibility is also stressed by Post et al. (2002), who notes "*the organization cannot—and should not—survive if it does not take responsibility for the welfare of all of its constituents and for the well-being of the larger society within which it operates*" (quoted from Lepak et al. 2007).

Society as a Source of Value Creation

When society is the source of value creation, the process can be devised by means of incentives and programs which are structured to encourage entrepreneurial activities and support the existing organizations for the benefit of the society and its members. Considering that society's well-being is an essential concern of the governments, Lepak et al. (2007) paid specific attention to the acts of governments at the societal level of value creation. The government creates value through laws and regulations and through services that provide structure and stability and assurances of quality, lawful behavior, and national support. Contrasting the individual and organizational levels, Lepak et al. (2007) suggested that at the societal level, value can be created intentionally or unintentionally. Porter explained the role of a government on societal value creation through innovation and entrepreneurship with the example of the medical product industry of the United States. The U.S. government provided the medical products market with a large, progressive and demanding population, supportive infrastructure of hospitals, financial supports for medical product developments, which made it the most favorable place to start medical product businesses. Consequently, the acts displayed by the U.S. government, created much value for the society, not only in health sector, but as a whole by providing jobs and taxes (1990, quoted from Lepak et al. 2007).

An important note is that, the societal value creation in Lepak et al.'s (2007) study is somewhat inconsistent in itself and with the rest of their paper. In their research they organized the levels of value creation according to the source. As the topic suggests ("*society as the source of value creation*"), the society should be the source of value creation – not the government. By definition, government is an organization (Merriam-Webster 2019), and not fully-representative of society in terms of value creation. Therefore acts of it should be discussed under the organizational-level. Discussing governments and private organizations under the same topic is of better use in today's circumstance of blurred boundaries between the government-led and private-led socioeconomic activity (Kivleniece and Quelin 2012). When society is

assigned as the source of value creation, discussing culture, customs, traditions would be more appropriate as these are rather-well attributed to the society and are more fit to the “unintentional” value creation, as they are value-adding themselves and not purposefully created.

The discussion of three distinct levels of value creation shows that it is a multi-faceted and complex concept. Additionally, the context-dependent nature of value can cause divergence on views of different stakeholders on what is valuable as different knowledge and context conditions affect the evaluation appropriateness and novelty. Besides, stakeholders may have competing interests. For example, an investor may support activities that create short-term profits, while an environmentalist may find the activities that preserve the environment of value. Therefore, “*one must recognize the existence of multiple targets—whether intended as such or not—who exist in concert, not in isolation*” (Lepak et al. 2007). Accordingly, it is essential to acknowledge that different stakeholders may have different or competing perceptions on what is valuable and devote the necessary efforts to understand and reconcile on these differences (Lepak et al. 2007).

This agenda of reconciliation of stakeholders for value creation is where most of the value creation is aimed at (Green and Sergeeva 2019). Project stakeholders and their managers espouse what is important to them, attempting to influence the actions of other stakeholders. Adopting a value-centric perspective, therefore, in one hand draws attention to the sense-making and framing processes together with the power and politics in project settings. On the other hand, the versatility of the concept of value lends itself to a broad range of applications in the project related research (Martinsuo et al. 2019). Different researchers mobilized the notion of value while inspecting project-based businesses (Hjelmbrekke and Klakegg 2013; Kujala et al. 2010) and their portfolios (Bos-de Vos et al. 2019), and different phases or aspects of projects and programs (Winter and Szczepanek 2008).

3.3. Previous Studies on Project Value Creation

A dominant trend in the literature is to treat project value as something to be defined at the front-end and eventually achieved (Martinsuo et al. 2019), even if in a distant future. Therefore, many researchers focused on the front-end of the projects where these values are defined and negotiated. Morris, notably makes specific reference to 'value management' as an area of interest for those interested in the front-end of projects (2005 quoted from Green and Sergeeva 2019).

Kolltveit and Grønhaug (2004) argue that project stakeholders are usually less qualified to deal with strategic conceptual issues which may significantly impact the project result than they are to control the execution processes. Departing from this point, they further argue that there is a potential for increased value generation by more effective execution of the early phases. In a similar fashion, Liu et al. (2019) investigated what stakeholders do in co-creation sessions (workshops) and how this contributes to the co-creation of value at the front end of programs. Ahola et al. (2008) inspected the tendering stage, with a specific focus on how the purchasing strategy of the client affects value creation.

Vuorinen and Martinsuo's (2018) study covers the implementation phase of infrastructure projects from the investment decision to the completion of the project. They highlighted how ignoring the needs and expectations of the local community or the general public (external stakeholders) can generate social unrest, collective action and community resistance against infrastructure or construction projects. Accordingly, their study focuses on how the stakeholders' expectations, perceptions, and demands for project value drive their influence. Their findings link project value with stakeholder influence strategies and reveal four influence strategies in transport infrastructure projects, differentiated according to their different value priorities. Kivilä et al. (2017) concerned the sustainability of projects and how project control may help to achieve the sustainability objectives of stakeholders during the project delivery. They argue that, with the updated information, material choices and process

steps, value creation is continued during the execution phase. Pargar et al. (2019) went in the same vein and investigated the value creation in the implementation phase of projects. They used a “system dynamics” approach for modeling the complex and dynamic value creation process in a project alliance. Willumsen et al. (2019) explained how risk management creates value with a step by step building of a framework. Hjelmbrekke et al. (2017) and Artto et al. (2016) studied the link between the project execution phase and the operations phase. Departing from the contemporary understanding that the projects should be intended to deliver value from which operations can derive benefits, they inspected what it takes to grant value creation even after the project is completed. Svejvig et al. (2019) analyzed how some projects achieve the intended value faster than the others and the acceleration of projects.

While the vast majority of the literature focuses on the part of the lifecycle up to handover, with most others focusing on the operations, little attention has been paid to the end-of-life of a project, when decommissioning begins. The decommissioning phase have common characteristics that differentiate them from more traditional endeavors. Colette Invernizzi et al. (2019) addressed this gap and studied decommissioning of infrastructure projects, and how to manage the values on this phase.

Contrasting the researches with a specific focus on a project phase, Eskerod and Ang (2017) and Chang et al. (2013) adopted a through-life perspective of value creation. They acknowledge that megaprojects can impact a society years and decades after project completion and state that the key to megaproject success is found in the value created and captured during and post projects, both for the funding organization and the stakeholders. Rather than inspecting the process of value creation, they studied what organizations may emphasize – the content of value.

Many different types of projects also found use in the literature per the research context. These include defense projects delivered through alliances (Chang et al. 2013), turn-key marine vessel projects (Ahola et al. 2008), a shopping center project (Artto et al. 2016), and even a merging of two food companies (Winter and

Szczepanek 2008). Yet, a large majority of the literature used PPP infrastructure projects for the research setting, mainly due to the broad impact reaching beyond the traditional outputs and various stakeholders involved in these projects (Vuorinen and Martinsuo 2018).

CHAPTER 4

LITERATURE REVIEW: SUCCESS AND VALUE CREATION IN PPPS

The complexity in contractual relationships between participants and the long concession periods make PPPs distinct from a traditional infrastructure development routes in that: there is a broad range of uncertainties and risks associated with the PPP, the concessionaire assumes far more responsibilities and much more and deeper risks than a traditional contractor, the financial issues in a PPP project are much more complicated, and the allocation of risks and rewards among participants is more difficult (Kwak et al. 2009). Due to these attributes of them, and the wide international adoption as a major route of public procurement, PPPs attracted attention of researchers from different disciplines such as public administration, finance, economy, law, management, and project management. Accordingly, Kwak et al. (2009) identified five main aspects of PPPs: the government roles and responsibilities, the concession selection, PPP risks, PPP finance, and the critical success factors and/or barriers for PPP projects (see Fig.5.1).

As depicted in the figure, the CSF lists are central to the literature on the PPPs and draws from the studies in different disciplines. Researchers have proposed various lists of critical success factors for PPP projects through literature reviews, case studies, and interviews with industrial practitioners and experts. The most common findings include appropriate risk allocation, transparency in the procurement process, good governance, sound economic policy, well-defined contracts, appropriate roles (Abdel Aziz 2007). Even though some of the factors were useful, a large portion of the literature have low coherence as they are represented as lists without a categorization or a framework format. Moreover, a considerable part does not discuss what they mean by success. Finally, and most importantly, most of the CSF literature is highly prescriptive and lacks the information of how to apply them – they do not provide

insights to how these critical factors come into effect in the multi-organizational setting of the PPP projects. Therefore, the CSF literature is short of providing the necessary comprehension to these projects. A value-centric approach would be more convenient to understand the underlying mechanism of these particular projects and their success, especially from a more strategical point of view.

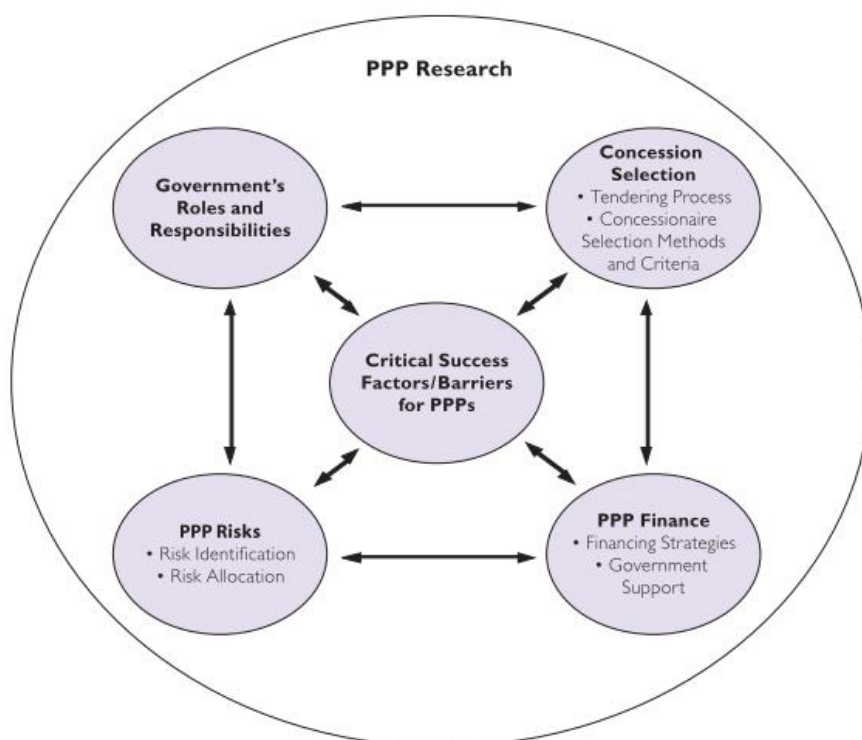


Figure 4.1. A Conceptual Classification Framework of PPP Research (Kwak et al. 2009)

The value-centric view of projects, is established on the corporate culture (Green and Sergeeva 2019) where value creation is the corner stone of a firm’s success (Kang et al. 2007). In this sense, to argue that the success of a project should be judged on the basis of value creation is to derive legitimacy from the discourse of market-based economy and business research (Green and Sergeeva 2019). This process of deriving legitimacy from the business research is especially evident in the way that Winter and

Szczepanek (2008) drew from Normann's (2001) argument that *“the crucial competence of business in the 21st century is that of value creation”* (Green and Sergeeva 2019), and how Chang et al. (2013) mobilized the notions of “value-in-use” and “value co-creation” from (Vargo et al. 2008).

The value creation is complex within a firm, and can be even more so in inter-organizational projects involving both public and private actors – the PPP projects (Bowman and Ambrosini 2000; Klakegg et al. 2016; Martinsuo et al. 2019). Building on the notion of value creation as “the sum or entirety of benefits obtainable from the exchange for stakeholders and society as a whole” (Kivleniece and Quelin 2012; Villani et al. 2017), the process of creating value in PPPs is of uncertainties and complexities. The involvement of multiple stakeholders with wide-ranging skills, experience and institutional logics adds a new level of complexity to the delivery which is the “institutional complexity”. From a strategic point of view, this highlights that the strategy need to be understood and implemented by diverse stakeholders (Hjelmbrekke et al. 2017) with different multiple logics (Villani et al. 2017). However, the success of PPPs from a strategic aspect have been given a relatively little attention.

Hjelmbrekke et al. (2017) maintain that strategic initiatives suffers from a lack of cause and effect evidence that a project really will create the intended result, that this result will be used as intended and that the use really will create the desired benefit. Expressed another way, project outputs (i.e. the product, or tangible asset), if technically feasible, can be guaranteed (although their delivery may violate time and cost constraints). Benefits or value creation, in contrast, cannot be guaranteed for a variety of reasons that they may or may not be realized in particular situations (Zwikael and Smyrk 2012). This is especially true for the case of the PPPs, which points out a need to develop a structure and description of how the PPPs create value for stakeholders and society as a whole. The use of business models is identified as a key to achieving this (Hjelmbrekke et al. 2017).

Strategy scholars have used the notion of the business model to refer to the ‘logic of the firm’ – how it operates and creates value for its stakeholders (Casadesus-Masanell and Ricart 2010). Magretta (2002) suggest that a good business model is essential to every successful organization, whether it’s a new venture or an established player. She describes business models as stories that explain how enterprises work. Elsewhere more formally, as a system, consisting of the pieces of a business that fit together to provide the underlying economic logic for a firm to deliver value to customers at an appropriate cost. (Baden-Fuller and Morgan 2010) discuss the use of business models as a recipe, built to demonstrate or advice the ways to organize and integrate techniques so that the result will come out right. This understanding is followed by (Watson 2005) who states that the business model describes a company’s operations, including all its components, functions and processes, which result in costs for itself and value for the customer (Hjelmbrekke et al. 2017). Zott and Amit (2010) suggest that a business model is geared toward total value creation for all parties involved (e.g., the focal firms, customers, partners, etc.). They defined the business model as depicting the content, structure, and governance of transactions designed so as to create value. Afuah and Tucci (2000) argues that business model is a ‘system that is made up of components, linkages between the components, and dynamics. Zott and Amit (2010) emphasize that the business model addresses the ‘how’ of providing customers and end-users with products and services which refers to the nature of the services that firms provide to customers, and the activities that they perform to deliver those services. That describes the business model as a construct that mediates between inputs and outputs. (Seelons and Mair 2007) defined business models as a ‘set of capabilities that is configured to enable value creation consistent with either economic or social strategic objectives. Based on the discussion above, it can be understood that using the business model characteristics is appropriate for conceptualizing the value creation process. Even though the use of business models as a research tool has raised some criticism, many still consider business models as useful tools for analyzing how an organization operates and creates value (Magretta 2002; Kujala et al. 2010).

In general, the discussion of business models usually takes place on the firm-level. However, some scholars propose that the analysis of business models should not be restricted to a firm- or a business unit-level only (Kujala et al. 2010). In the same vein, Casadesus-Masanell and Ricart (2010) and Magretta (2002) argued that every organization has a business model. Building on this argument, Kujala et al. (2010) endorsed the analysis of business models on the project-level, instead of the firm-level as is largely assumed by business model research. This view is also supported by the project management literature with a recurring suggestion to link the project value creation with the business models (Artto et al. 2016; Hjelmbrekke et al. 2017; Hjelmbrekke and Klakegg 2013; Kujala et al. 2010; Martinsuo et al. 2019; Villani et al. 2017).

Contrasting the suggestions on bridging between the project value creation and business models, this link remains largely unexplored in the PPPs (Keen and Qureshi, 2006 quoted from Villani et al. 2017). The survival and growth of the PPPs is largely dependent on the value that they are able to generate for stakeholders and for society as a whole (Kivleniece and Quelin, 2012). Thus, business model design is recognized as important, especially considering that PPPs integrate multiple logics in order to take advantage of new ways of organizing and combining resources and competences to produce social goods and create value. In other words, success of the PPPs is dependent on the business models they adopt and how successful those business models are at creating value (Villani et al. 2017). Casadesus-Masanell and Ricart (2010) used an analogy of an automobile to explain how to assess a business model. Accordingly, “to assess how well a particular automobile works - or to create a new one - one must consider its components and how they relate to one another, just as, to better understand business models, one needs to understand their component parts and their relationships.” Following these ideas, this study will refer to business model design to conceptualize the value creation in the healthcare PPPs, particularly that of the Villani et al.’s (2017), where a business model consists of “processes”, “assets”

and “governance”. The details regarding the methodology are provided in the next chapter.

CHAPTER 5

RESEARCH SETTING AND METHODOLOGY

5.1. Research Setting

Turkish healthcare PPPs served as per the research setting. Healthcare PPPs in Turkey is part of a wider program to overhaul the health system which is called Health Transformation Program (HTP). The program was initiated by the current government in 2003, soon after they had been elected in 2002. Along with making regulatory and policy reforms, the HTP identified the need to upgrade the healthcare infrastructure. In this context, the old healthcare facilities which offers different services in different locations were planned to be replaced with the new integrated health campuses (colloquially referred as city hospitals) which offer a multitude of services within the same healthcare complex. These integrated health campuses were believed to be easier to access and to provide a more user-friendly experience to the patients. This approach replaced one in which different types of healthcare facilities were provided at different locations (Sarica 2016; World Bank Group 2017)

Even though upgrading the health infrastructure was not a driving factor for the HTP, it was identified as a crucial aspect of supporting broader health care reforms. Accordingly, Ministry of Health launched the pipeline of healthcare PPPs which consists of 35 integrated health campus projects in 22 cities providing for more than 50,000 hospital beds with an estimated value of 20 billion euros in investment – by far one of the largest in emerging economies (World Bank Group 2017). The PPP model is DBFO which is adopted from UK's PFI. Several amendments were made on the model to make a better fit to Turkish healthcare system (Özcan 2015). The law which lays the foundation for the PPP hospital is enacted in 2005 and followed by several laws (Türk Tabipler Birliği 2019). First tender is announced in 2009 and took

place in 2010. All healthcare PPP projects are implemented under the same framework without any major deviations across the projects regarding the delivery. A multi-stage tendering is used which consists of 4 phases:

- *Pre-Qualification Stage* consists of requirements to be met by the participants regarding the financial, professional and technical criteria. These requirements can be met by the members of a joint venture. Tender specifications are given to the pre-qualified participants at the end of this phase.
- *First Stage* is of evaluation of bidding dossier which is prepared in accordance with the tender specifications and consists documents related to the partners, project company, facility, equipment and the bid prices. The PPP unit evaluates the offers, develops, and proposes a fixed-project to the participants for them to offer the final-bid.
- *Final Bid* is where the participants share their financial model with the costs allocated to the relevant service, procurement and construction components.
- *Dutch Auction* is the last stage of the tendering process where the participants underbid (decrease the prices) to win. The concessionaire is determined at the end of this stage with an additional short negotiation.

The organizational schema is given in Fig. 5.1 below. The project sponsors form the “Project Company” otherwise known as “Special Purpose Vehicle (SPV)” – a project-dedicated company which would not carry out any business other than the particular project. The sponsors included in the SPV are usually consist of an internationally reputable infrastructure investor, a large construction company, and healthcare companies. The SPV contracts with the Ministry of Health (MoH) and designs, builds, finances, operates, and maintains the facility. The construction works and the operation works are passed down to the EPC contractor and the O&M contractor. The project is financed through 20% from the equity of the sponsors, and the other 80% is loans

from the lenders. Lenders make distinct agreements with the MoH, SPV, EPC contractor and O&M contractor. The most important item of these agreements is the “step-in” rights, which gives the lenders to intervene to the project and change the SPV or the contractors if necessary.

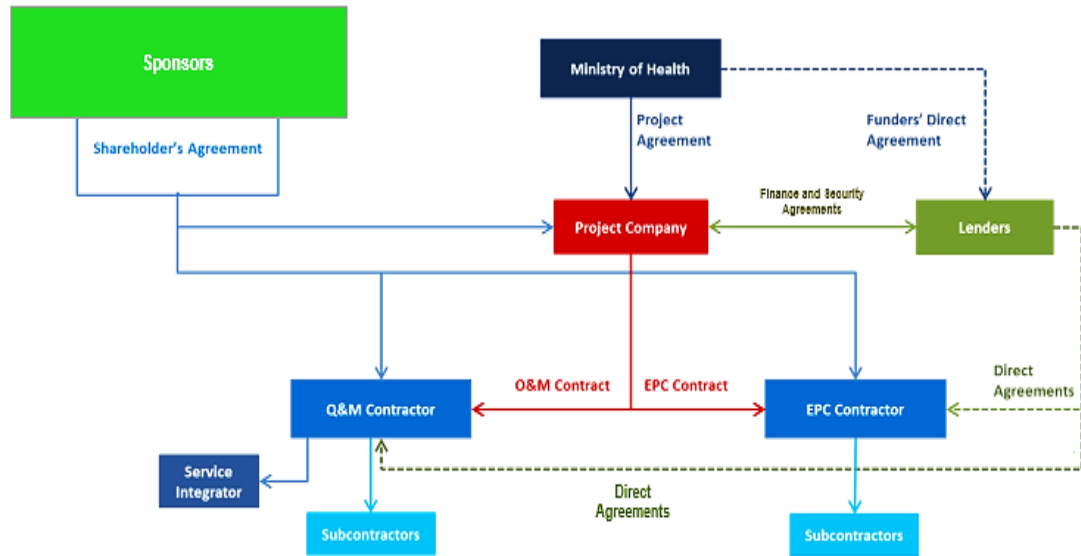


Figure 5.1. Organizational Schema

There are two important periods in the project timeline, one of which is the investment period and the other is the operational period. Investment period starts after the project agreement, takes around 3 years and involves design, construction, and financing activities. That period is followed by the operational period where the services given in Fig 5.2 is carried out.

Services	Category
P1 Services	
Building and Land Services	Non-volume
Extraordinary Maintenance and Repair Services (Variation of the Utility Terms)	Non-volume
Common Services Management Service	Non-volume
Furnishing Services	Non-volume
Grounds and Garden Maintenance Services	Non-volume
Clinical Equipment Support Services	Non-volume
P2 Services	
Imaging Services	Volume Clinical Support
Laboratory Services	Volume Clinical Support
Sterilisation and Disinfection Services	Volume Clinical Support
Rehabilitation Services	Volume Clinical Support
Waste Management	Volume Support
Linen and Laundry Services	Volume Support
Catering Services	Volume Support
Cleaning Services	Non-volume
HIMS	Non-volume
Security Services	Non-volume
Patient Orientation and Accompaniment/ Reception/Help Desk/Portering Services	Non-volume
Pest Control Services	Non-volume
Car Parking Services	Non-volume

Figure 5.2. Services

5.2. Methodology

To systematically conceptualize the process of value creation in the Turkish healthcare PPPs, contingency perspective of Lepak et al. (2007) is adopted. The contingency theory suggest that there is no best way, but the solution depends on the situation (Laursen and Svejvig 2016). For this study's objective, it means that, each different level of analysis (society, organization, and individual) would have different characteristics for conceptualizing the process of value creation. Accordingly, answering the question of how value is created requires one to initially define the level of analysis (Lepak et al. 2007).

This study is identified to be at the organizational level of analysis (Arto et al. 2016; Hjelmbrække and Klakegg 2013; Villani et al. 2017). This means that, the source of the value creation are the organizations involved and the usual targets are society and stakeholders (Lepak et al. 2007; Martinsuo 2018). When the organizations are the source of the value creation, the process of value creation should be inspected from the organizations' points-of-view.

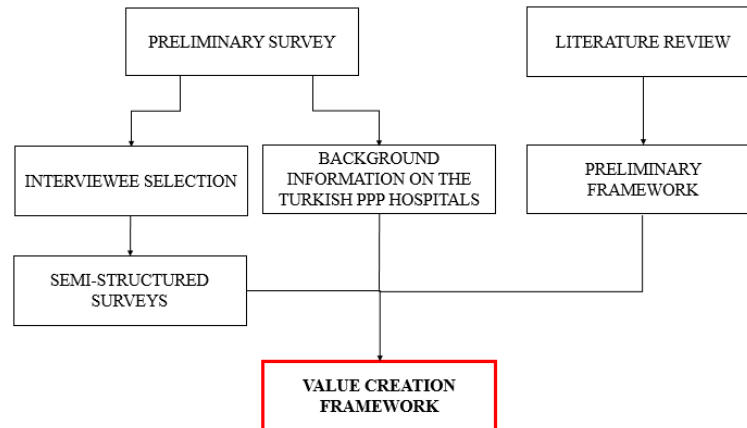


Figure 5.3. Research Methodology Flowchart

5.2.1. Preliminary Survey

A flowchart of the research methodology is given in Fig 5.3. A preliminary unstructured survey was conducted with 2 interviewees from the private sector to develop a more detailed understanding of the research context regarding the project definitions and scopes, involved stakeholders, the delivery model, etc. Minutes were taken during these interviews and approved by the participants at the end. Additionally, the interviewees shared presentations, reports, figures, and tables related to the projects. The most important finding of the preliminary survey was both interviewees have already had an understanding success that reaches beyond the traditional iron-triangle. Both interviewees shared similar aspirations of stakeholder satisfaction, creating value, and serving for the public. This provided the necessary motivation to continue to the research. Participants of this survey also recommended interviewees for the further semi-structured interview.

5.2.2. Preliminary Framework

Additionally, a preliminary framework is constructed based on the literature review, which is representative of the value creation process in the project settings. To keep the framework as simple as possible, Villani et al.'s (2017) notion of a business model

is adopted, where a business model consists of “processes”, “assets” and “governance”. It is built on the three business model components and additional concepts from the project value creation literature. It provides for a background to discuss the value creation more systematically.

5.2.3. Semi-Structured Survey

Semi-structured interviews are used to further the preliminary framework. Semi-structured interviews were chosen as the method of data collection to keep the focus on interview questions while leaving some flexibility to discuss additional relevant issues (Chang et al. 2013). 12 interviewees participated in the survey which also includes 2 interviewees of the preliminary survey.

Table 5.1. *Demographics*

Interviewees	Organization	Experience (years)
I1	SPV	>15
I2	SPV	10-15
I3	SPV	<10
I4	O&M	<10
I5	O&M	10-15
I6	EPC	>15
I7	EPC	>15
I8	EPC	<10
I9	EPC	<10
I10	EPC	10-15
I11	MDB	>15
I12	MDB	>15

The process of selecting interviewees was iterative, “snowballing technique” (Villani et al. 2017) is used which was initiated with the preliminary survey. In each interview it is asked for suggestions for other individuals which might have complementary information (Artto et al. 2016). 10 of the 12 participants were practitioners from the SPV, EPC and O&M contractors. Additionally, the preliminary survey revealed that

a multi-lateral development bank is also an important stakeholder to the Turkish healthcare PPPs, which is not seen on the organizational schema. 2 interviewees participated from that organization. 2 potential interviewees from the public sector (the PPP unit of the MoH) refused to participate. All interviewees were granted anonymity. Demographics are given in Table 5.1.

The semi-structured interview outline was developed based on the preliminary survey's results and the literature review. The focus was on the following topics: the constituents of success, the value of the project, the expected benefits, necessary assets/or resources, the managerial processes in different phases, risks and responsibilities, supplier/subcontractor selection, relationships between stakeholders, legal and regulatory framework, past experience of what was "good" and "bad", encountered problems, and lessons learned. The interviews lasted approximately 1.5 hours, audio-recorded with permission and transcribed verbatim. Only the quotes to be given place were translated from Turkish to English. The analysis of the interviews followed an ordinary thematic analysis and proceeded from re-reading the transcripts to content-based coding. Interview data is validated with additional documents shared by the participants. Findings and discussions are presented in the next chapter with the proposed framework. The figures and schemas were also provided by the interviewees.

CHAPTER 6

FINDINGS: VALUE CREATION FRAMEWORK

Fig. 6.1 represents the project value creation in terms of the business model characteristics. It is built based on business model and project value creation literature and gives background theory to discuss value creation in PPP projects. The “processes”, “assets” and “governance” represents the business model system. The conical infiltration shape represents the uncertainties caused by the complexities and the ever-changing environment of project settings (Hjelmbrekke and Klakegg 2013; Martinsuo et al. 2019). A conical shape is chosen to depict the decreasing uncertainty as the projects progress. Little is known about the project at the beginning, therefore the uncertainty is at its highest during the early stages (Kolltveit and Grønhaug 2004) and low at the end. The dashed arrows represent the low causality of the value generation process. Projects are full of uncertainty, thus, it is difficult to precisely determine what value will be delivered at the end based on the initial phases (Chang et al. 2013). In other words it is difficult to demonstrate a clear cause-effect relationship between a project (an/or a particular approach) and its potential long-term consequences (Artto et al. 2016). The arrows are placed throughout the project life-cycle to represent the through-life value creation (Chang et al. 2013). While many studies suggest that value is created by utilizing the tangible output of the project, this framework also considers the value-creation process which is initiated by the starting of the project and creates value in terms of developing know-how, relationships. Otherwise said, the value that the project work brings in with itself. The subcomponents of the assets, processes, and governance are explained below. The resultant value creation framework is further below, at the end of this section. It is the less aggregated (zoomed in) version of the preliminary framework which shows the interdependencies between these subcomponents (see Fig 6.7).

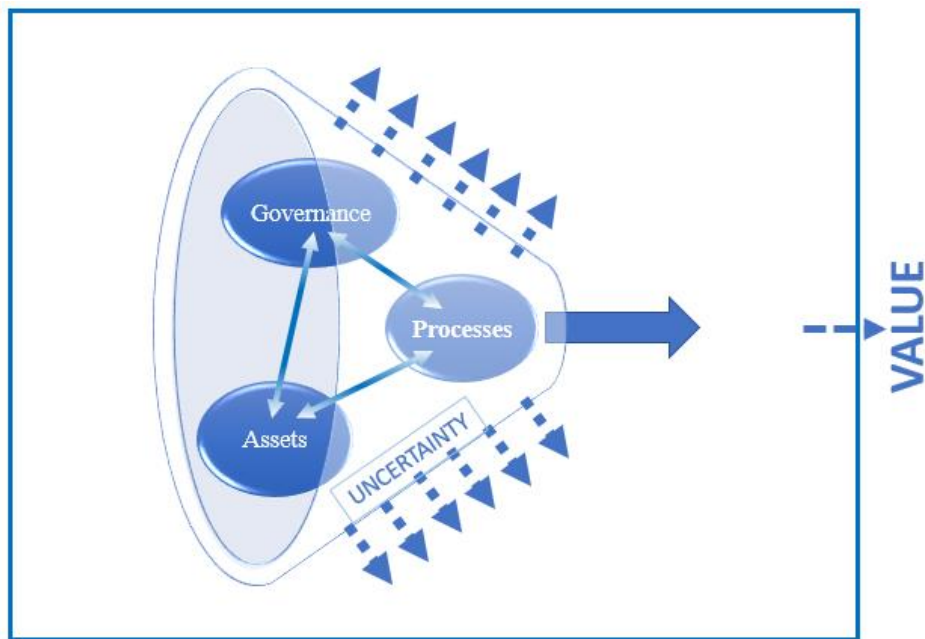


Figure 6.1. The Preliminary Framework (zoomed out view)

6.1. Assets

Assets relate to goods or information exchanged, and the resources and capabilities required for the exchange (Casadesus-Masanell and Ricart, 2010; Zott and Amit, 2010; Villani et al. 2017). The tangible inputs to the value creation process are inert – they are incapable of transforming themselves into new values. The intervention of organizational members is needed to get them mobilized in order to create value. The same argument applies to less tangible resources such as information etc. (Bowman and Ambrosini 2000; Hjelmbrække and Klakegg 2013).

6.1.1. Complementary Skills and Resources (A1)

All of the interviewees were conscious of the fact that every party should bring in specific skills and resources relevant to their roles and responsibilities. Along with the tangible resources (e.g. labor, land) and the intangible resources (e.g. information),

“reputation”, “past-experience”, and “networks” are also revealed to be important competencies. This also implied that selection of the right partners is important. Some quotes are provided below regarding the importance of the resource and skill complementarities. The public party’s will and support was important here when the government deployed its resources, such as its lands, and legal and contractual skills to resolve the problems regarding the finance. There were also some instants where the competencies of the public party fell short, which hindered the value creation process. These were chiefly related to knowledge and capacity deficits of the public party and were compensated by the efforts of the other stakeholders. The involvement of an MDB was also seen to be important for the finance and providing the government with grants and loans for the analyses. The SPVs are mostly formed by a reputable investor and a strong construction company. These two different companies complemented each other by one providing for the finance and the other providing for the construction. A failure was seen where the SPV was formed by two large construction companies. Together with having the necessary resources and skills, timely deployment of them was seen to be imperative. This observation is based on the anecdote of an O&M contractor’s employee regarding the late arrival of the doctors. Relevant quotes are provided below:

“This model (PPP) is established on the power of the public party and skills of the private counterpart, where a proper allocation of responsibilities is required to achieve success.”

“We have a strong investor as a partner. And a locally experienced construction company. This is the usual setup in these projects – a combination of a reputable investor and a strong construction company.”

“I have a strong investment background. If we carry out a feasibility study, the land would be the most important cost. As we don’t spend money to land in these projects, the 25-year operational period is more than enough to reimburse the investment. When

you put a “0” for the land costs in the feasibility study, the investment becomes a “roaring trade”.”

“The construction was actually the easiest part. Even though the projects are very large and complex, the know-how and experience of the Turkish construction companies enabled to easily cope with that. No major problem was encountered during the construction.”

“The resources that the ministry allocated to the planning was adequate, additionally we have provided the ministry for additional grants and loans. In 2015 grants were given to the ministry for the VfM analysis. The problems in the planning phase was caused by different problems.”

“The project is financed without much difficulty. Two large and internationally-reputable companies in the SPV is reassuring for the lenders.”

“We are working together with one of the world’s largest investors in the SPV. They have high reputation. The actual factor which brings in the finance is that company. They arrange it.”

“The public lands in the city centers are not big enough for these projects and don’t satisfy the needs. Usually, the construction takes place in forestry lands or mountainous and stony areas. In two projects, earthmoving was done with dynamites due to that. It was 3 million cubic meters each and quite costly. Proper planning is critical for reducing costs in these projects.”

“The capacity deficit of the government caused them to not fulfill their responsibilities. Planning of the transportation infrastructure, displacement of the power lines and some other works were done by us despite these were not our responsibility.”

“The problem is that, the model is new and the knowledge of the government personnel is still in need for improvement.”

“In these projects we usually have similar resources with the ministry – by means of personnel. For one particular project, we both have around 2500 employees. Ministry is responsible for medical services and administration. They provide for the doctors and nurses. A problem we encountered is that, the doctors didn’t arrive on time. The hospital was opened with 600 doctors, which was supposed to be 1200. Without the doctors fully arrived, we couldn’t give all of them the IT training. Untrained doctors couldn’t use the IT system to write medical reports, therefore they did not accept patients. For these hospitals to succeed, the health personnel should be available in them. The full-fledged surgery rooms were rendered useless by the non-availability of the doctors who would do the surgeries. Due to the lack of health personnel, the turnovers decrease. The low turnovers affect the revolving fund where the doctors get most of their salaries from. The services that are given by the doctors with decreased salaries would be of doubtful quality. These projects are initiated to increase the quality of the healthcare services. The turnover decreases would be detrimental. For that reason, the ministry should fulfill their responsibilities, keep the hospital fully operational, and increase the turnover. Only that way, these investments would be feasible. Otherwise, the budget deficits would become a current issue.”

6.1.2. Long-Term Commitment (A2)

A long-term commitment was found to be important. The surveys revealed that the private party was motivated by an ownership feeling which made them to make decisions considering the whole life-cycle of the projects. The design development process, innovations, partner selection and compromises were found to be guided by a long-term thinking which was made possible by the long-term commitment of the parties.

“There is a payment called “contractor fee”. The ministry can employ the subcontractor that they want and pays the “contractor fee” to us. But we don’t want to work with low quality subcontractors, despite we can get such a payment.”

“As we were supposed to operate the facility for a long period, we tried to solve all problems that could be encountered in the future. We found “master planners” and spent significant money for the designs.”

“We brought the best firms in, all first-tier companies as these projects are done for the first time. We wanted to minimize the risks. Now it pays dividends. Our setup works as it was supposed to be.”

6.1.3. Stable Governmental Unit (A3)

The unstable government unit was found to be the most important factor to hinder the value creation process. Every single interviewee complained about the frequent changes in the government personnel. The frequent changes in the government unit affected the planning stage as it prevented the ministry from carrying out the necessary analyses, the implementation phase with the frequent change orders and slow approvals, the organizational learning process as the institutional memory could not be established.

“Government personnel were frequently replaced.”

“The changes were made considering the requests of the ministers at the time. Multiple replacements of ministers were challenging.”

“The frequent replacements in the ministry inhibits a systematic learning in the public side. That was compelling.”

“The frequent changes in the high levels of administration including the ministers inhibited the planning stage. Some of the necessary analyses couldn’t be done due to that. It is the 3rd minister since 2015. The organizational schema in the ministry was also changed. The continuity and organizational memory cannot be built due to these changes. We provided or offered all help that we could provide for removing these problems. We are hoping that these problems will be resolved.”

6.1.4. Attitude (A4)

The data revealed that attitude is an important factor for the value creation process. While there was an apparent government support, especially seen while financing agreements took place, most of the interviewees still complained about the attitude of their public counterpart. Despite the private party was doing nearly the whole task, the government personnel's manner was as such if the private firms were not important. This situation portend that a common conceptual understanding is needed where at least a "sufficient language" is shared. Trust and attitude related problems were resolved throughout the time as the counterparts learned from/of each other. An ownership feeling was seemed to be existent in the private party.

"Ministry personnel treated us like if we were one of their cleaning subcontractors in their other hospitals when they first came. This problem of us was resolved throughout the time as they learned the actual case."

"The biggest problem we have in these projects is the lack of a conceptual understanding in the public side. The concept of "partnership" was not understood by the ministry. The highest representative of the ministry in the hospitals' management is the head physician. Due to the head physician at the top, the ministry thought that they were our master. However, this is a partnership."

"The transparency of our company eases the lack of trust of the public party in the approvals."

6.1.5. Government Support (A5)

The government support was observed to be important for resolution of the encountered problems. Their support complemented to their skills while resolving the financial problems.

"Initially, the framework was not sound enough for the lenders to finance these projects. The public party devoted critical efforts to overcome this situation. The government enacted a new law, and when it also fell short, they amended some

contractual clauses and added some protocols to increase the bankability of these project. Power and will of the government were important here.”

“The government interest is high. They want to do these projects. Their support was seen when the financing agreements was taking place. Legal and contractual changes during that time made getting finance easier.”

6.2. Processes

Processes are about the way exchanges take place, how the activities are linked, and the exchange mechanisms adopted by the parties (Casadesus-Masanell and Ricart, 2010; Zott and Amit, 2010; Villani et al. 2017). These are results of human activities and must have causality to the strategic goal of the project. The value creation is cultivated in different internal processes (Hjelmbrekke and Klakegg 2013).

6.2.1. Sound Project Financing (P1)

Turkish PPP hospital are widely known to be financed through 20% equity of the sponsors and 80% from the loans approved by the lenders. Therefore, the bankability of these projects is of crucial importance. The lenders’ loan follows a classical non-recourse approach where the project itself is the only collateral. In the non-recourse loans, if the borrower fails, the lenders can only seize the collateral but cannot seek out the borrower for any further compensation, even if the collateral does not cover the full value of the loan. This means that the project should have a sound revenue stream, together with additional factors to minimize the risks of the lenders. The data revealed that complementarities of the government, multi-lateral bank and sponsors are important together with a proper allocation of risks and responsibilities, environmental and social compliance, and government support for finding the necessary finance. Additionally, the experience of a 6 months’ delay in the financial close caused by the coup attempt, pointed-out the vulnerability of these projects to the uncertainties, especially to the black swan events. The negative consequences were overcome by some innovative solutions from the private party and additional guarantees from the public party. Some compromises were also made for that

particular case. Last but not least, the interview with the MDB showed that these projects have created a broad financial value for Turkey with “an increased investor interest in Turkey with many first-time investors”. This is an important implication as it shows that the PPP projects, especially when pipelined as in the case of Turkey, can provide much broader benefits than their immediate, first-order deliverables. Quotes from the interviews and “key investment highlights” (see Fig 6.2) are provided below.

“The course of the project starts with land acquisition. Following that, an investment is made which consist of a 20% equity and 80% loan finance. The capital investment is determined according to the feasibility studies of the government. The investment period takes 3 years, no payments are done during this stage. Neither the government pays us, nor we pay to the lenders. Only the lenders’ financing is effective during that periods which are done by means of monthly advance payments. For example, if there is a work done which costs 100 liras, the lenders expect the company to pay the 20 liras of it. When they see the payment, they pay the remaining 80 liras. Lenders technical advisors (LTA) control the progress. The investment is reimbursed by availability payments, volume- and non-volume-based payments throughout the 25-year operation phase. Project sponsors only consider the minimum revenue guarantees (MRG). 70% of the planned capacity is guaranteed by the government.”

“The incentives are adequate to get the loans from the lenders”

“The downgrade of the credit scores of Turkey and the coup attempt coincided with the financial close of two projects. Actually, the last agreements were to be made effective at 18th of July, 3 days after the coup attempt. The credit score downgrades did not cause much trouble, but the coup attempt caused a delay of 6 months in the financial close. The interest rates didn’t increase but some additional guarantees were provided to the lenders. Another consequence was that, a foreign operations partner of us left the partnership. These negative events emerged some reflexes in the private sector. After that point, we started to include some additional foreign companies into the SPV, rather than directly seeking for loans. These foreign companies, which

include medical instrumentation suppliers and funds, helped us to find cheaper loans from their origin countries. This, of course, requires a broad network. There is also a win-win situation here, these companies, when included in the SPV, can dictate the SPV to buy products or services from them. This is a compromise we have to make. Foreign contribution in these projects made the financing from multiple countries easier. The government's relationship with these countries is also an important factor.”

“In some cases, a new entity is formed specifically for the commercial areas. The reason for separating the commercial areas is the loans. The commercial areas that are in the hospitals' main building are usually financed within the main loan package. In particular cases, where the commercial area is large and separate from the main hospital building, a distinct feasibility study is prepared for a finance that is separated from the main loan.”

“Lenders dictate the use of the SPVs – a vehicle which is specifically established to carry out the business related to the hospital. SPV can be owned by a single entity, it can be based on a partnership, additional funds can be included to it. There is an advantage of the SPV being a subsidiary of the EPC contractor.”

“A back-to-back schema is important for the lenders. MoH passes down the whole project to the SPV, and the SPV allocates the responsibilities, risks and guarantees. The downward transfer of the risks is important here, even if the SPV is a subsidiary of the EPC, or owned by it, there is no upwards risk transfer. Due to the direct and indirect agreements and the protocols between the lenders, government, SPV, EPC contractor and O&M contractor, the lenders can step-in the projects and change the setup.”

“There are some obligations regarding the social and environmental compliance. Lenders want a due diligence according to the regulations of their origin country. While these projects are not liable to the environment impact assessment of the Turkish government, these have to comply with the ESIA (environmental and social impact assessment) of the lenders, which requires a broader scrutiny than that of the

Turkish government. Together with the environmental issues the social issues are also deeply concerned in these assessments. Labor audits are carried out. Other than that, audits are carried out with local interest groups. Despite this is way more comprehensive than the government's, the investors also apply for the government's assessment to mitigate any risks regarding the prospective changes in the laws."

"We presented our projects to the international creditors. The credit rating of our projects obtained a score which is higher than the Turkey's. The project is financed without much difficulty. Two large and internationally-reputable companies in the SPV is reassuring for the lenders."

"We are working together with one of the world's largest investors in the SPV. They have high reputation. The actual factor which brings in the finance is that company. They arrange it."

"The previous efforts of one particular affiliate of the MDB helped the government lay the foundation for PPPS to take off, but it was not part of the work around the legal framework and bankability of such projects. Another affiliate, on the other hand, played a strategic role by directly influencing the agreements as a potential financier when the first projects were designed. In August 2015, a US\$134 million loan was approved to Turkey in which one component provided technical support to the MoH in the management of PPP projects. Concurrent to this loan were downstream investments provided with political risk guarantees by two different affiliates. There was a significant involvement by development finance institutions which are connected to the MDB. First tenders were responded by an investment with maximizing mobilization. The purpose was to influence the bankability of concession agreements and catalyze long-term commercial financing that was not available at that level in Turkey at the time. US\$241 million is directly financed and \$540 million is mobilized. Through the treasury solutions and mobilization products, some financiers became first-time investors in Turkey. The projects transformed the financial landscape in Turkey. MDB's early involvement gave a strong signal to the market,

which has witnessed a considerable increase in international investor appetite for such projects given the successful reforms that had taken place under the broader health transformation program. This increase in international interest was evidenced by a large number of megaprojects been financed by international lenders during a period when Turkey was struggling to attract foreign capital. An engaged project achieved an investment grade rating two notches above the Turkish sovereign.”

Robust Investment Framework	<ul style="list-style-type: none"> - Significant progress in comparison with previous infrastructure projects in Turkey - International experience of successful PPP implementation - Introduction of a new PPP legislation package specifically to target needs of healthcare PPP program
Strong Government Support	<ul style="list-style-type: none"> - Programme of new Healthcare PPP projects enjoys full government backing at all levels - Various incentives and favourable conditions at sovereign and regional levels were put in place to support the development of healthcare projects
Socially Important Project	<ul style="list-style-type: none"> - World-class healthcare facilities will improve socio-economic conditions in the region, high level of social community acceptance
Stable Guaranteed Cash Flow Stream	<ul style="list-style-type: none"> - Availability-based revenue stream secured by the Ministry of Health guarantee - No volume risk - Inflation and FX Protection available for the revenues
Committed Sponsors	<ul style="list-style-type: none"> - Strong combination of international expertise and local knowledge - Reputable investors with long term view - Established construction, facilities management and healthcare PPP expertise
Limited Construction Risk	<ul style="list-style-type: none"> - Low complexity construction to be completed under a reasonable construction schedule - The Project constructed under a fixed-price, date-certain Design-Build Contract with all of Project Company's design and construction risks and obligations passed down to the Contractor - Experienced Contractor - Protection from Delay and Cost Overrun by a robust security package
Limited Maintenance and Operations Risk	<ul style="list-style-type: none"> - Low Complexity of Services - Well understood performance regime - Favorable payment mechanism with limitations on deductions - Protection from Cost Overruns and poor performance with a robust security package, full back-to-back Service Contract and 5 year Market Testing regime included in the Implementation Agreement
Robust Financial Structure	<ul style="list-style-type: none"> - Strong base case resistant to downside scenarios as demonstrated by sensitivity analyses
Favourable Termination Clause	<ul style="list-style-type: none"> - Strong termination clause in the implementation agreement in favour of senior lenders - Full loan repayment guarantee in case of termination of project agreement - The project agreement includes a direct agreement, tripartite agreement between the project company, the MoH and the senior lenders ensuring various lender rights (i.e. step-in rights in case of the Company's EoD, direct payment of termination compensation, etc.)

Figure 6.2. Key Investment Highlights

6.2.2. Effective Design Development (P2)

It is found to be that, the responsibilities related to the long-term service component necessitated a long-term commitment. An aspiration of ownership was created which yielded an attention that is in some cases reaching beyond the expressed needs of the ministry. An externally oriented early phase is seen to be important with necessary stakeholder engagements in order to build knowledge and avoid future changes or dissatisfaction. Innovative solutions were also needed during this time course. One particular EPC company established the O&M contractor itself, which eased the integration of the normally distinct contractors and created positive results. Coherence between the project and operation units is also found to be important in both the public and private parties, along with the attitude and trust of the governmental units to their private counterparts. The findings also showed that the value is not solely created by the utilization of the project output, but value is also created even before the completion of the project in forms of new knowledge and relationships. Details are provided below with an example of a hospital design (Fig. 6.3).

“Design is crucially important for these projects. Huge resources are deployed to do these projects. Design faults are unacceptable.”

“There are two distinct units to oversee the implementation phase and to operate the facility. They want different things from us.”

“The hospitals were not constructed as per the tendering plans. As we were supposed to operate the facility for a long period, we tried to solve all problems that could be encountered in the future. We found “master planners” and spent significant money for the designs. However, the ministry personnel acted skeptical regarding the design changes, as if we were trying to reduce the scope and costs of the project. They treat us as if we were a simple subcontractor to them.”

“We don’t know what the technology will bring in the future. There may not be a need for such big hospitals in the future. These investments may become inert. If this happens, it is not a problem for the investor. The facility would not wear off, but we

will continue to get paid. Anyways, we also thought for our public counterpart and incorporated a “flexible design”. If the need for the hospital decreases in the future, the blocks can be separated from the rest of the hospital – both technically and physically. In such case, the separate block can be used as for a completely different thing. There is a main hospital building in the middle which will serve to the outpatients. Inside the main building, we developed a “medical avenue” – a half-open and half-closed social space. This consists of some commercial areas. We separated the inpatient blocks from the main hospital building. These blocks can be turned into a hotel, dorm etc. in case of a need. Another advantage of designing these buildings separately is that it allows for manageable small parts. This is important to avoid problems on the transfer of the patients to the surgery rooms. However, no one cared for these efforts. They may understand what we have done in the future.”



Figure 6.3. Hospital Design

“Our foreign partners are astonished by the size of these projects. They wondered why we were building hospitals with thousands of beds. Similar, large hospitals were also

made in their countries at past, however, when they see it was wrong, they turned to building smaller, more manageable hospitals. The hospitals are actually too big that, even the healthy people could not find their way. This has important implications for the design.”

“We worked with a German architectural firm. They developed a technical conceptual design for us which was quite expensive. We allocated that cost across 3 different projects. The technical concept and the interiors will be the same for these 3 hospitals, but the facades will be different. They won’t look alike from the exterior. While working with them, we initially determined the places for different units. For example, we put the high- forensic psychiatric hospital out of sight. We also investigated the ground conditions. We made additional soil surveys where we would construct the main buildings. The buildings and the basement floors are designed to have the same foot-print. If we want to build an extension building, there won’t be anything to be demolished below the ground. We stuck to this conceptual design in the construction.”

“There was a shocking design fault in the front facade one project. The project was in a very hot city and on the south front, they designed a 385 meters by 16 meters, 3 story box shaped structure. I asked the mechanical works subcontractor for the size of the climate control unit to cool this are. The size was incredible. I cannot understand such things – both as an investor and a citizen of this country. It is not a shopping mall or an office building. It is a hospital. One should firstly acknowledge that. This is not only related to the up-front costs, but also the operational costs. It is not acceptable for lack of attention to cause a huge economic burden.”

“We are exhausted by the design changes.”

“We want involvement of every stakeholder before the final design is finished, but this doesn’t happen. Due to that, there occurs a dissatisfaction in the operations phase. In the project that we are doing now, we engaged with a broad range of external stakeholders such as ministry of family and social policy, gendarmerie general

command (for the imprisoned patients), general secretariat of public hospitals, local health authorities, pharmacies. We try to include everyone in the design.”

“We are sure that the design would fulfill our needs because we continuously control and support the design and construction works with our experienced partners. The operational period is 25 years. That makes even the smallest details very important. We have been involved since the preliminary conceptual designs.”

“I think that the ideal capacity is 700 beds. Managerial problems arise when it gets more than that. Due to the size of these hospitals, it takes a long time to transfer the patients. While transporting a patient, there is no personnel to replace the absent one.”

“We have backups in some critical areas. For example, the surgery rooms have to HVAC system. If one fails, the other becomes effective. It is important for both breakdown scenarios and for the maintenance works.”

“A service floor was added to the design for the laundry, cleaning and food services as requested by the O&M contractor”

“We have encountered some problems in the design phase. The core clinical services are given by the ministry personnel. They should have involved in the design process.”

6.2.3. Externally Oriented Early Phase Execution (P3)

In most cases the interviewees complained of inadequate front-end planning of the government party. The deficient planning caused continuous changes in the projects. Additionally, frequent changes in the ministry personnel slowed down the project, increased costs and obstructed learning in the government front. Size of these facilities is also determined to be an important aspect of planning, as there were problems associated with the size of these projects. The findings revealed the need of cooperation between different governmental units in the early phase such as municipalities and other ministries. The interviewees suggested that the planning should be done as quickly as possible because the distribution of the health problems,

which is the basis for the planning of the clinical services, may vary with the time. The unsolved problems in the early phase affected the implementation phase.

“The main problem is the scanty planning. This has many components such as contractual and legal framework, the communication between the public institutions. For example, the laws do not require an environmental impact assessment report from the ministry of environment and urbanization. However, when we faced with that ministry, we saw that they have a different consideration related to that. The municipalities were also not informed properly. These are very large projects and are built far from the city center. It requires a comprehensive transportation planning. The transportation planning should have been done before the tenders.”

“An important problem is related to the planning of the healthcare services. The tenders of the projects we are doing now were announced in 2009 and 2010. The clinical departments and the capacities were planned according to the circumstances of these days. Through the time course, some of these circumstances were subject to changes. At that point, the MoH wants some revisions regarding the capacity and the clinical departments. These changes cause additional costs. Additionally, the approval of these changes causes significant delays. In some cases, the changes override the ministry’s authority and are submitted to the approval of High Planning Council causing further delays and costs. The increase in the costs and delays sometimes raise the public opposition. To avoid such problems, the early planning should be done properly, and when the investment periods starts, the project should be executed without major deviations from the initial plan.”

“Right planning is imperative for decreasing the costs in these projects. At the end of the day, these are invested with the public money. Reducing the costs is important to decrease the public opposition. A problem was related to the seismic isolators. In a business trip of his to Japan, the minister saw that they use seismic isolators in their hospitals and brought this idea to these projects. But not all hospitals require seismic isolators in Turkey. After long-lasting debates, the isolators were removed from some

of the hospitals where not necessary. This was at the tendering stage. Costs of the isolators were deducted from the investment value. Yes, these isolators are important innovations, but these are also the hardest ones to procure. Testing takes a very long time as there are limited test-facilities for them. The weak planning complicates every aspect of these project.”

“The planning should be comprehensive. The uncertainties should be minimized until the tendering stage. All of the uncertainties in the project plan are priced by the investors.”

“If you can resolve training of the personnel, preparing the documents, legal and contractual issues early, these projects can provide great benefits. Everyone should express their needs clearly and early”

“Most of the government personnel don’t think of tomorrow, they think of today. These are no projects to be made as you go along.”

“It took 6 months for us to optimize the seismic isolators. In my next company, they had put these in the wrong place in two projects. We changed the projects again to relocate the isolators. Cost of such small change was \$20 million to us. If you are going for a new technology, you must do it properly. Otherwise you would over-egg the pudding.”

“The investor cannot carry out their own feasibilities due to the uncertainties. In some cases, the lands to build these hospitals were determined after the tenders. In such broad uncertainties we cannot show the courage to do our feasibility works, we take the ministry’s guarantees as a baseline. The uncertainties here decreased the probability of a more competitive pricing and caused increased cost to the public.”

“The transportation was a major problem. It wasn’t planned properly.”

“As these projects are too large, building these in the city center is not possible. Due to that, the local authorities must plan the transportation properly.”

6.2.4. Internally Oriented Implementation Phase Execution (P4)

The surveys showed that, frequent changes in the design, which was related to the early phase planning was a major problem. The delays caused by the ministry's approvals were also addressed as an important factor to hinder the implementation phase. Approvals were slow due to the frequent changes in the government personnel. Some minor problems also occurred regarding the environmental, social, and transparency concerns of the public. The implementation phase is observed to be the part where the complementary core skills came into effect as the participants deployed their skills most prominently at this stage. In one particular project, the vast size of the project complicated the construction phase, in others, the construction phase is said to be the easiest phase due to the know-how and large resources of the Turkish construction companies. Surveys also revealed that, keeping the implementation phase as short as possible is favored considering that the fast technological developments in the healthcare sector may render these hospitals obsolete from the technological perspective. Cost- and time-wise efficiency of the implementation is emphasized. The private party compromised from the costs by employing more labor and incorporated new technologies such as BIM to overcome the difficulties in the implementation phase.

“After a proper planning, the project should be executed as quickly as possible without major changes. There is nothing worse than discussing the same things over and over in the implementation phase. Everyone should do their own business at the implementation stage.”

“When the construction takes too long, the approved medical devices become obsolete. We don't want to deliver a new hospital with old technology.”

“When the process gets too long, the planning becomes meaningless. The capacity, bed numbers, and the design of the clinical units change in those cases – requiring for additional alteration works. In one project, the ministry requested a 25% increase in the number of surgery rooms. Such changes vastly increase the costs.”

“Finishing the construction 6 months early means, operating 6 months more.”

“The government side is problematic. Their personnel frequently change. New personnel do changes when they come. The changes in the public party is also causes delays in the approvals.”

“There are frequent changes. The approval mechanism is also weak.”

“Initially, the government was interested in large hospitals. As the hospitals started get delivered and the ministry payments were started, the payments caused burden in their budget. They realized this at that point, after multiple hospitals were opened. When this is heard by the public, it caused some additional problems. Now the ministry does additional changes to make the hospitals as small as possible. Their interests in the big hospitals has changed.”

“As these hospitals should be up-to-date in terms of technology, the quality, time and cost trade-off is crucial.”

“Lenders technical advisors make comprehensive monitoring. This includes environmental control for contamination, safety etc. Having our own HSE unit is very useful here. ESIA obligates meetings for increasing the public awareness. We inform everyone.”

“Our first project was a small one. We delivered it real-quick. Overall construction period for a similar project is around 4 years in other countries. We delivered it in 16 months. As it was really quick, the ministry couldn’t ask for many changes.”

“We submit to approval in every phase. Actually, we “strive” for approval. The approval mechanism of the ministry is incredibly slow. It causes considerable delays.”

“There are frequent changes. This is a huge problem. We cannot set a constant design and move on. The ministry still wants for major changes despite we are at the end of the 3rd year in this project. These include, additional clinical units, changes in specialty structures, changes in the physical structure. They don’t provide us with time extension for these works. We are also not sure that if they will fully compensate for

the additional costs. The medical equipment list is also not finalized yet. The approvals are also slow.”

“The changes and the approvals are the most important bottlenecks. We can’t get quick returns from them.”

“By means of construction, the size of the hospital is our greatest problem. Multiple sub-contractors are used for the sub-contracted works. Coordinating them is really hard, we had big troubles with that. We tried to use BIM, but because of the size of the project, the BIM also didn’t go well. We haven’t resolved that problem yet. It seems like we will have troubles in the future regarding the coordination.”

“The groundbreaking ceremonies were held before the contractual issues were fully resolved due to political reasons. Firms were forced to start construction before the financial close. Along with the problems it brought in, it also provided some advantages. The firms could operate the facility for a longer period when they finish the construction earlier. There were many early starters due to that. Getting paid before the financial close was another advantage.”

6.2.5. Exploiting the Business Opportunities (P5)

The surveys revealed that the commercial areas were crucial components of the project value due to the important revenues obtained by exploiting business opportunities from them. Additionally, it is found out that the uncertainties are not always associated to the downside risks, but also can work in favor of the project participants – the upside risks. Interviewees suggested that putting in too strict rules would be negative for these projects. Some uncertain conditions related to the commercial areas worked in favor of the investors. Surveys showed that the incentives are initially important for creating business opportunities. Some trust-based issues arose on the subject of commercial areas.

“The government grants incentives to the private sector to operate commercial facilities in these campuses.”

“The logic is that, you can do anything related to healthcare in here with things to support it such as cafés and restaurants. Some issues arise due to the size here. In small hospitals of the old, one café and one restaurant was adequate. Here you need tens of them. The scale becomes similar to that of a shopping mall’s food court.”

“Based on the studies we have made, there can be a hotel. Actually, two types of hotels. One for over-night accommodations and one for long-term stays. For example, an apart hotel. There are inpatients who stay for months in the hospital. The apart hotel is important for their companions. In the case of organ donations, the receiver and the donor are sometimes required to stay together for 3 to 4 months. These hotels would also be useful for them. These are training and research hospitals. Student will be educated here, therefore, building a dorm is also important here. Government provides additional guarantees in the case of dorms. Some small specialized hospitals are also allowed here for the private party to operate. But it should not compete or intervene with the government hospital. It may be a special cancer treatment facility, or offices for private practitioners, or a dental clinic. Alternative medicine facilities are also discussed. These healthcare facilities are subject to MoH’s approval. Other than that, the logistic areas are allowed, such as pharmaceutical warehouses. Medical equipment shops can be here. The necessary freedom to the private party is important here.”

“We divide the commercial areas into two. First, the ones which should be in the main hospital building. Second, the ones that should be outside of the hospital building, but inside the campus. For a large hospital project, the commercial facilities to be in the main hospital building adds up to a number of 50. When the size gets big, it does require putting in a car rental kiosk. A clothing shop, a jeweler to the maternity hospital – these are all needs. But these areas not being planned properly, arises conflicts. They are asking if we are trying to build a shopping mall here.”

“Developments in the technology requires innovative solutions. For example, we planned vehicle charging points, in the case of an increase in the number of electric

cars in the future. Most of the investors in these projects already have their own energy companies. They already sell electricity.”

“There is a needs analysis provided to us. The departments, areas and quantities are defined in this analysis. There is an allowed margin of 20% increase from the defined specs. We use these margins, try to build as big as we can.”

“These hospitals provide numerous offering to the patients and their companions. They can find everything that they can need here. In small cities especially, these facilities are crucial as these hospitals are in suburban areas. We have post offices, hairdressers, literally everything. These are important for these hospitals to attract customers.”

“We export health in Turkey. People come from abroad to be treated or to have a hair transplant. These things are cheap here.”

“There are some international criteria to become accredited for health tourism.”

6.2.6. Complying with Environmental and Social Requirements (P6)

Environmental and social compliance was determined to be important for the value creation process as it was both required by the lenders and the general public. Public opposition was an important consequence to be avoided by the project participants.

“Cutting down even a single tree causes problems in ESIA.”

“We encountered public opposition, but it was not too severe. We are worried about one particular project, there is a lot of trees.”

“Lenders technical advisors make comprehensive monitoring. This includes environmental control for contamination, safety etc. Having our own HSE unit is very useful here. ESIA obligates meetings for increasing the public awareness. We inform everyone.”

6.2.7. Organizational Learning (P7)

The surveys revealed that organizational learning was an important process for value creation both by of creating value itself (i.e. creating knowledge) and preparing for the future phases of the project. The design development phase was said to yield important know-how. Additionally, the pipelined setup of the hospital projects enabled the private party to use their experience from the previous projects in the current ones. Their public counterpart couldn't benefit from that due to the replacements in the ministry personnel.

“Rather than revising the regulatory framework, the government party needs to train their personnel. Educative brochures or handbooks should be provided by the government to their employees to increase the resource and time efficiencies.”

“This model should be well-explained to all practitioners both from the public and private sector.”

“We chose the structural design company based on their specific expertise on earthquakes as these projects have seismic isolators. A considerable structural know-how is generated by these projects. “

“A lessons learned database is created, albeit by individual efforts.”

“The ministry is doing a revision now to produce a schema that accumulates all the captured knowledge and lessons learned. They don't want to sacrifice from time and spend money to the consultants. There is a vast number of consultants which causes delays and increases costs.”

“Transferring the generated knowledge and experience from the previous hospitals to the following ones was imperative for resolving the problems.”

“Our greatest luck was to get experienced with a small hospital. The companies that directly built large hospitals for their first PPPs had many problems.”

“There is a problem reporting system. For example, the doctors report if the room temperature is too high. Initially, there were 4000 reports a day. Now it is decreased to a thousand. These technical problems are overcome by learning.”

“We learned much in the design phase – this includes “building physics” – a field that we previously weren’t aware of.”

6.2.8. Elaborative Partner Selection (P8)

Elaborative partner selection was suggested to be important by the interviewees as the competencies of the partners would be employed on the value creation process. The private companies evaluated and selected their partners and suppliers based on multiple criteria such as financial position, experience, and health and safety records. Working with competent partners was suggested to decrease the risks.

“Financial position, local and international experience, and any other criteria that could come into mind are considered for the selection. The upper stage subcontractors are selected based on if their abilities to cope with the size of these projects. The tasks are smaller in the lower stages of the pyramid, this allows us to make more arbitrary decisions at these stages.”

“We brought the best firms in, all first-tier companies as these are projects are done for the first time. We wanted to minimize the risks. Now it pays dividends. Our setup works as it was supposed to be. We also have consultants – both local and international.”

“The market-testing should be comprehensively planned. Otherwise, the city hospitals will fail. Ministry should be more sensitive in market-testing. The ministry must determine competitive quality requirements for these hospitals to succeed.”

“The work safety records were important to us.”

6.2.9. Early Establishment of the Operational Body (P9)

The interviews revealed that the operation phase was of major concern. The private party would be operating the facility together with the public party. It was a first in Turkey. Therefore, they were worrying about the uncertainties in the operations phase. A problem which was seen in the already operating hospitals was the late mobilization of the ministry. To achieve a successful hospital, early establishment of an operational

body which would minimize the uncertainties and provide a smooth transition from the implementation phase to the operations phase was found to be necessary.

“The biggest difference from the PPPs in other sectors and the hardest part are on the operations phase. BOT model is used in the other sectors (private party operates the facilities by itself – government is not involved in the operations phase). In the hospitals, the operations will be conducted with the government. In a sector like health, where the number of constituents and complexities are high, operation with ministry can be problematic. The operation is already too complex due to the size of these hospitals, a double-headed management can cause severe problems. The contracts may fall short of providing the necessary order. There is the appendix-14 related to the operations phase which also involves the deduction mechanism. It is 450 pages and too complicated.”

“Turkey is using such a PPP model for the first time. The operation of PPPs in Turkey until now were carried out with unilateral management. However, the public party is also in operations in these projects and they are not ready. We did everything that we can and prepared ourselves for the opening. Ministry should also have resolved the problems regarding the operations early.”

“The mobilization of the ministry for the operations phase was late. The head physicians came a couple of months late.”

6.2.10. Continuous Innovation (P10)

The data revealed that the complex and novel nature of these projects required innovations through the time course. These innovations were in terms of adopting new technologies (e.g. using seismic isolators and developing a software to report the failures), new methods (e.g. using BIM, building the hospitals as a “green building”, incorporating flexibility into the design), and new organizational setups (e.g. using foreign companies in the SPVs to obtain loans from different countries, establishing a facility management company to increase the coherence between the design and operations). The innovations that took place significantly contributed to the know-

how of the firms. The innovative activities were seemed to be enabled by the competencies of the parties and mostly guided by a long-term thinking.

“Building these hospitals as a “green building” may have an indirect benefit by means of marketing the finance. It can increase the investors’ attention for these projects.”

“Currently, you can get an online appointment from MoH’s system. There are some mobile applications designed for navigation in the hospitals. Additionally, you can report failures from these applications. This was my idea. Now many hospitals have similar applications. At the operational phase our most important expenditure is on labor. With these applications, use make the users report the failures instead of your own personnel. It is also important for noticing the problems early to avoid deductions.”

“These foreign companies, which include medical instrumentation suppliers and funds, helped us to find cheaper loans from their origin countries. This, of course, requires a broad network.”

6.2.11. Gauging Stakeholder Satisfaction (P11)

Gauging stakeholder satisfaction – both the internal and external stakeholders were considered to be important in both implementation and operations phase. The public nature of the projects meant that these projects are in the oversight of the general public. Therefore, the external stakeholders such as the general society, interest groups should be gauged by means of environmental and social compliance to minimize public opposition. Additionally, surveys were made with patients and the hospital personnel from both public and private parties to ensure that they were satisfied.

“We encountered public opposition, but it was not too severe. We are worried about one particular project, there is a lot of trees.”

“Lenders technical advisors make comprehensive monitoring. This includes environmental control for contamination, safety etc. Having our own HSE unit is very

useful here. ESIA obligates meetings for increasing the public awareness. We inform everyone.”

“The ministry surveys their employees for once a while. We also make surveys with patients and our own employees with 3 months intervals and report them to the ministry. The lenders attach importance to the employees. We also care the patients and our employees. The expectations were fulfilled until now. We achieved 75-85% satisfaction rates in our hospitals. Most unsatisfied group was the healthcare personnel of the ministry. The revenue schema causes their salaries to decrease.”

“We also make sure that the ministry personnel is satisfied with out performance.”

6.2.12. Optimum Compromise (P12)

The interdependencies between multiple parties in these projects meant that compromises are inherent in these projects for the reconciliation of the stakeholders. The encountered problems were solved with compromises from different parties. For example, the problems related to the financing were solved with mutual compromises from the public and private party. The government provided additional guarantees and agreements. For example, one of the additional guarantees provide support to the cashflow from the revolving fund where the government personnel make a considerable part of their salaries. The private party put foreign companies such as medical device providers to attract finance from their origin country. These companies in the SPV meant that they could dictate procurement from their company, decreasing the possibilities for choices for other companies in the SPV. The problems between the government and the private part were observed to be resolved by the compromises of the private party. This yields an image of power relationship in these projects where the lenders are the most powerful, the government comes after them, and the private party is the least powerful. The private party also compromised from areas that would affect themselves rather than other parties as such they employed additional labor to speed up the construction which meant increases in costs. Compromises were seen to

be also made for increased future benefits. The compromises were seen to be most prominent in the operations, implementation, and financing phases.

“Time limitations sometimes cause compromises from the construction quality. But it is on EPC contractor’s responsibility.”

“The ministry didn’t want to pay us for secretary services. It caused some problems, at first, but resolved by dividing the payments between the public and private parties by half.”

“The tight schedule required us to deploy quite a large amount of resources. There is a considerable employment in these projects, resulting in cost increment.”

6.2.13. Effective Tendering (P13)

The tendering stage was said to be important in several aspects. First, for selection of an appropriate concessionaire. Second, for developing knowledge and a better project with resolved problems. Third, to reduce the costs. While a multiple stage tendering process was required to achieve all of the above-mentioned benefits, it was also found out that the tendering process should be kept fast in order to avoid some cost increases and changes due to the elapsed time. The tendering process was seen to be creating value even by itself by generating new knowledge and reducing costs.

“The pre-qualification stage requires competitive proficiencies.”

“The long tendering stage cause changes in prices while filling out the bill of quantities. For example, a medical waste disposal became monopoly during the tendering. This caused a ten times increase in this cost.”

“At the end of the first stage, the government sets time aside for the tenderers to propose their solutions to the problems in the project. For example, a tenderer suggests a way to decrease the electricity costs. Every tenderer makes such suggestions. In this way the ideas, and suggestions of the tenderers are accumulated to produce the fixed project.”

“Tenderers underbid until there is one tenderer left. Then a negotiation takes place. This is important to decrease costs.”

6.2.14. Collaborative Operation (P14)

The participants were highlighted the importance of a collaborative operation of the hospital due to the bi-lateral management of the facility which involves both the public party and the private one. A successful operations phase is connected to the offerings of the facility, gauging the stakeholder satisfaction, an effective functioning operational body from both sides, attitude, and the complementary core skills.

“The biggest difference from the PPPs in other sectors and the hardest part are on the operations phase. BOT model is used in the other sectors (private party operates the facilities by itself – government is not involved in the operations phase). In the hospitals, the operations will be conducted with the government. In a sector like health, where the number of constituents and complexities are high, operation with ministry can be problematic. The operation is already too complex due to the size of these hospitals, a double-headed management can cause severe problems. The contracts may fall short of providing the necessary order. There is the appendix-14 related to the operations phase which also involves the deduction mechanism. It is 450 pages and too complicated.”

“We are doing surveys to ensure that our public counterpart and the patients are satisfied with the services.”

“They must collaborate with us in the operation phase.”

“The government should not intervene with the service subcontractors that we are working with. That would make a success impossible.”

6.3. Governance

In political science, governance of projects represents the relationship between the project owner and its temporary project organization. It includes the political and administrative systems implemented to oversee initiatives on behalf of the society

(Klakegg et al. 2016). In PPPs, public body's logic differs from that of the profit-driven private companies (Villani et al. 2017). Therefore, public oversight is considered to be critical to the definition of PPPs together with the resources and competencies of the private parties (Kivleniece and Quelin 2012). For this study, governance represents the interface between the public body and the project organization which is about the legal form of organization and the way flows of information, resources and goods are controlled by the relevant parties (Casadesus-Masanell and Ricart, 2010; Zott and Amit, 2010; Klakegg et al. 2016; Villani et al. 2017). Poor governance is identified as a major bottleneck for the projects. (Hjelmbrekke et al. 2017)

6.3.1. Well-Balanced Legal Framework (G1)

The data revealed that a sound legal framework to govern the project was crucial for the healthcare PPPs. The framework should be well balanced – neither too strict nor too loose. It should provide for adequate incentives for a sound revenue stream for financing these projects and a fair allocation of responsibilities and risks. Multiple laws were said to be enacted through the time course, some of which started before the tendering stages and some after that. This implied that a favorable framework should be in place in the preparatory phases. While the government was decisive for granting additional guarantees for the financing, and removing the subjection of these projects to the “public procurement law” and “environmental impact assessment”, it was also found that they were hesitant in some cases, as such, they didn't enact a law to provide for the use of forestry land.

“The legal framework was one of the issues that we discussed in the meetings with government. Now it is discussed whether if enactment of a new law which would provide broader authorization to the minister would be adequate to resolve the problems in the future. Framework should provide enough flexibility to the private sector. Too strict regulations would be unfit to different projects.”

“Laws provide the necessary incentives and adequate for financing.”

“We have issues regarding the forestry lands. The forestry law prevents building commercial facilities outside of the main hospital building despite it allows for putting them inside of the hospitals. I have been attending meetings in the Ministry of Forestry for 3 years, and we haven’t still produced a solution. However, the solution is so simple they could have resolved that with enactment of a law.”

“The legal framework provides for adequate convenience. Both the laws and the model secure the public party, lenders, and the private party. These cater a fair allocation of responsibilities.”

“The revenue stream is clear in the contracts. The laws protect the private party against the government-led changes. For example, if the government changes the “healthcare quality standards”, it would not have any implications for us until the government makes the related payments.”

“Uncertainties surrounding the legal framework were at times underestimated. Ensuring that a favorable legal framework is in place in the preparatory phases is, therefore, essential.”

6.3.2. Sound Revenue Stream (G2)

As these projects were financed through non-recourse loans, where the project itself is the only collateral. In the non-recourse loans, if the borrower fails, the lenders can only seize the collateral but cannot seek out the borrower for any further compensation, even if the collateral does not cover the full value of the loan. Therefore, a sound revenue stream was imperative. The revenue stream was supported with currency- and inflation-based indexations, and a multiple-level guarantee. The quotes and cashflow diagrams are provided below (Fig. 6.4 and 6.5).

“The prices for the volume and non-volume services are increased based on the maximum increase in the minimum wage or the inflation. Additionally, there is a mechanism that compensates for a portion of the fluctuations in the exchange rates.”

“For example, if the laundry services are determined to be for 100 kg per day, we get paid for the 70 kgs whether if we do it or not. These guarantees are the baseline measures for the financial model.”

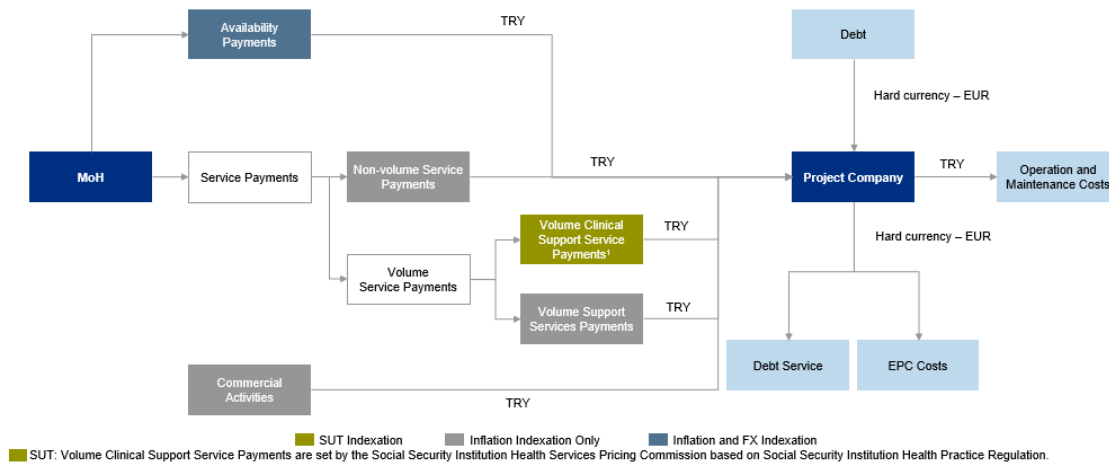


Figure 6.4. Revenue Stream Diagram 1

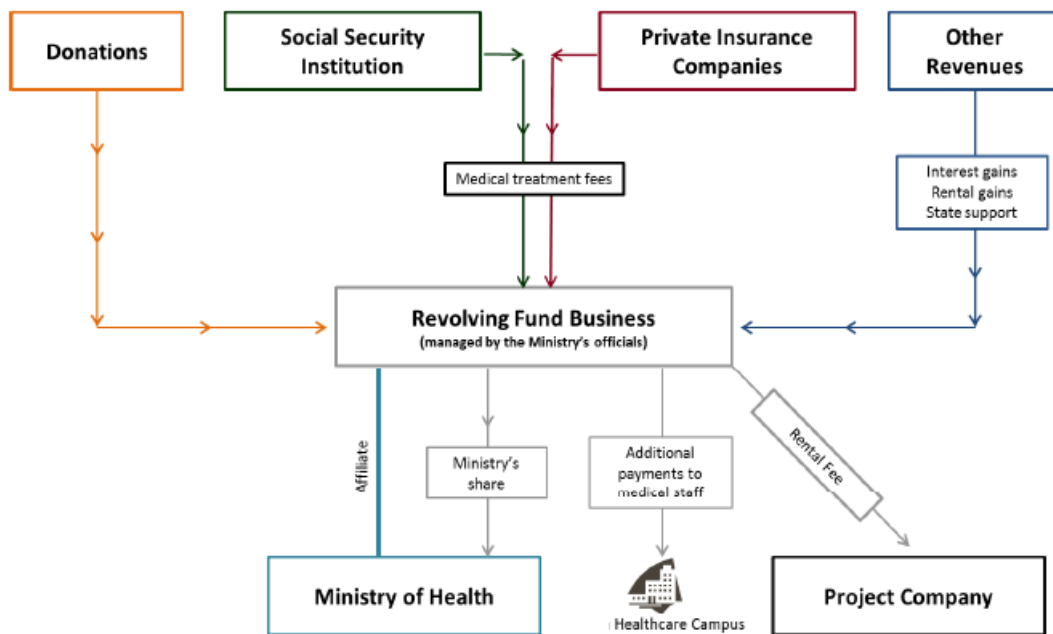


Figure 6.5. Revenue Stream Diagram 2

6.3.3. Allocation of Risks and Responsibilities (G3)

A fair allocation of risks and responsibilities should be provided by the legal framework. Additionally, passing down the risks, guarantees and deductions were observed to be important for the financing. In some cases, the private party did the works that falls in the government’s responsibilities to compensate for their partners deficits, despite it is not required by the framework. A risk allocation matrix for these projects is provided below in Fig. 6.6.

Risk	Grantor	SPC	EPC	O&M
Land Title, Superficies Right	✓			
Site Conditions	✓		✓	
Construction Consents			✓	
Clinical Services Consents	✓			✓
Clinical Support Services Consents				✓
Commercial Activities Consents		✓		
Operating Licence	✓			
Design			✓	
Construction Cost			✓	
Construction Programme			✓	
Defects in Construction			✓	
Additional Works	✓			
Maintenance Cost				✓
Staffing (clinical staff)	✓			
Staffing (non-clinical staff)				✓
General Changes in Law		✓		
Discriminatory Changes in Law	✓			
Health & Safety Compliance		✓	✓	✓
Inflation	✓			
Currency	✓		✓	
Non-availability of Revenues				✓
Commercial revenues		✓		

Figure 6.6. Risk Matrix

“While the public party should be the one to lead these projects, the private sector bore this responsibility, mainly due to the capacity deficit of the government. The

government personnel were not properly trained. Due to the inadequacy of the government employees, most of the companies did the works that falls in the government's responsibilities.”

“The risks are passed-down with a back-to-back schema.”

“We pass down the deductions to our subcontractors.”

6.3.4. Integration Between Project and Service Delivery Units (G4)

Integrating the project and service delivery units was found to be important for an increased cohesion between the facility and its operation. While the EPC and O&M contractor being subsidiaries of the same company provided for an increased cohesion, the low integration between the parallel government units caused changes. This had implications in the design, construction and operations.

“The O&M contractor and EPC contractor being subsidiaries of the same company was the biggest advantage for us. It provided for a mutual understanding. Normally, there is an interface agreement between these contractors. In our case that agreement did not come into effect. If these contractors were from different companies, many problems would be encountered.”

“There are two different units in MoH, one works in the investment period the other would operate the facility. These two units have different expectations. The approval mechanism of the public party is weak. The approvals for the changes take too long.”

6.3.5. Incentives (G5)

The interviews showed that the PPP projects should be well-incentivized to generate benefits for the society and other stakeholders. In some cases, the incentives were made by means of compromises from the government (e.g. additional guarantees in the revenue stream for increasing bankability of the projects). Government's support was important here. The most important incentives were closing down the hospitals which would reduce the demand risks, the revenue guarantees, free allocation of government land, and the permission for commercial areas. The incentives were not

always positive as the government applied deductions to ensure that the hospitals would be kept fully operational. A diagram showing the multiple level guarantee mechanism is provided below (Fig. 6.7) with the other findings.

“Old hospitals will be closed when the new ones start their operations.” For example, 6 old hospitals will be closed for this one.”

“There are 6 hospitals which are to be closed when this hospital gets operational. This hospital is to substitute them. Total volumes of the closed hospitals are much higher than the guaranteed ones. We expect a volume around 2-3 times of the guaranteed one.”

“For example, if the laundry services are determined to be for 100 kg per day, we get paid for the 70 kgs whether if we do it or not. These guarantees are the baseline measures for the financial model. Due to the broad uncertainties in the tendering stage investors did not show the courage to do their own feasibilities, we used the guaranteed volumes for the financial model. However, this does not mean an additional burden for the government, it won't be like what happened in the bridges and highways.”

“The framework gives tremendous power to the lenders.”

“The feasibility studies are based on 70% occupation. While there are consistent guarantees, there are also inconsistent ones where the forecasts are too low. When the guaranteed occupations are surpassed, the Y factor comes in effect. With this factor, the ministry can buy the services with up to 50% discounts. The guarantees in the waste disposal service is too low. Other than that, most of the guarantees are consistent. It is not like what happens in the bridges. We are not a burden for the government.”

“There are two types of deductions. Ministry deducts the maximum of the two from the payment. But they are dovish, if you act fast they don't make any deductions, but if you are slow they make the deductions as much as they can. The deductions are limited to a 20%. Until now, the deduction that we encountered were at around 1/1000

of the payments. This is a success of our proper help desk. The help desk also gauges the customer satisfaction. The benefit/cost of the help desk investment is too high for us. We spent once for the help desk software, now we are using it in every hospital we have.”

“If we carry out a feasibility study, the land would be the most important cost. As we don’t spend money to land in these projects, the 25-year operational period is more than enough to reimburse the investment. When you put a “0” for the land costs in the feasibility study, the investment becomes a “roaring trade”.”

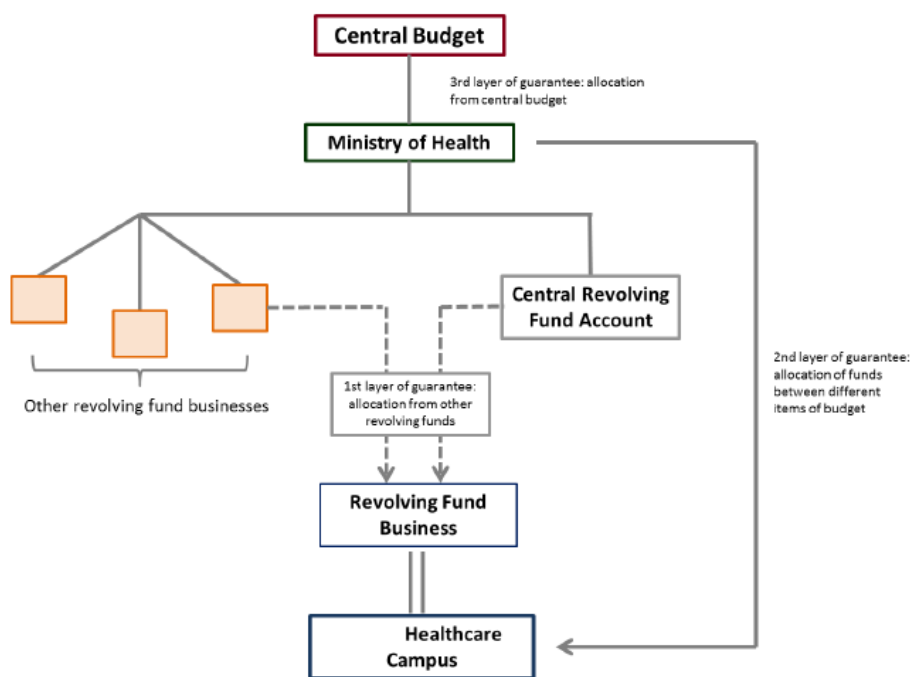


Figure 6.7. Multi-Level Guarantee Mechanism

6.4. The Value Creation Framework

The resultant value creation framework, which shows the interdependencies between these subcomponents, is below in Fig. 6.8.

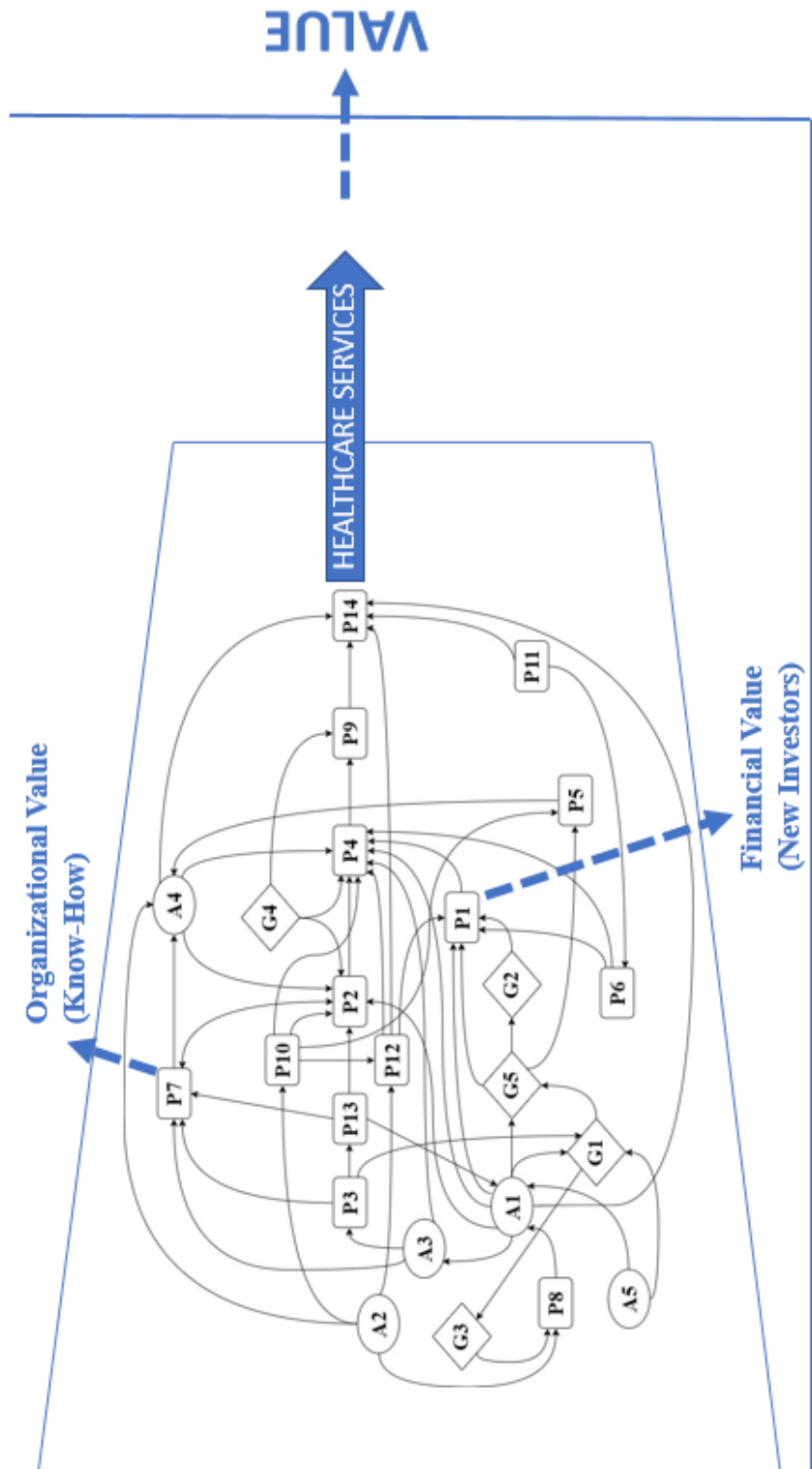


Figure 6.8. The Value Creation Framework (zoomed in view)

CHAPTER 7

DISCUSSION OF FINDINGS

7.1. Discussion on Findings of the Semi-Structured Survey

The findings of this study and the framework is discussed in this chapter. A matrix (see Table 7.1) is provided below for a better discussion of the results where the findings are compared with those of the value creation literature. Findings from the surveys are given in the first column. The second column shows the type of availability. “+” sign means that a parallel finding exists in the literature. “0” sign reads as no related finding was observed in the review of the literature. “-” represents that the finding is the opposite of what was found in the literature. Corresponding studies are cited in the third column. The discussion is provided below.

Table 7.1. *The Comparison Matrix*

Component	Availability	Source
Complementary Skills and Resources (A1)	+	(Kivleniece and Quelin 2012) (Villani et al. 2017)
Long-Term Commitment (A2)	+	(Villani et al. 2017)
Stable Governmental Unit (A3)	0	
Attitude (A4)	+	(Aliakbarlou et al. 2017) (Ahola et al. 2008)
Government Support (A5)	+	(Villani et al. 2017)
Sound Project Financing (P1)	+	(Villani et al. 2017)

Table 7.1 *Continued*

Effective Design Development (P2)	+	(Hjelmbrekke and Klakegg 2013) (Kujala et al. 2010) (Artto et al. 2016) (Kolltveit and Grønhaug 2004)
Externally Oriented Early Phase Execution (P3)	+	(Klakegg et al. 2016)
Internally Oriented Implementation Phase Execution (P4)	-	(Verweij 2015) (Hjelmbrekke and Klakegg 2013)
Exploiting the Business Opportunities (P5)	+	(Green and Sergeeva 2019)
Complying with Environmental and Social Requirements (P6)	+	(El-Gohary et al. 2006) (Verweij 2015)
Organizational Learning (P7)	+	(Kivleniece and Quelin 2012)
Elaborative Partner Selection (P8)	+	(Kwak et al. 2009) (Hjelmbrekke et al. 2017)
Early Establishment of the Operational Body (P9)	+	Artto et al. (2016)
Continuous Innovation (P10)	+	(Kolltveit and Grønhaug 2004) (Kivilä et al. 2017) (Hjelmbrekke et al. 2017)
Gauging Stakeholder Satisfaction (P11)	+	(El-Gohary et al. 2006)
Optimum Compromise (P12)	+	(Chang et al. 2013)
Effective Tendering (P13)	+	(Ahola et al. 2008)
Collaborative Operation (P14)	+	(Artto et al. 2016)
Well-Balanced Legal Framework (G1)	+	(Villani et al. 2017)
Sound Revenue Stream (G2)	+	(Kivleniece and Quelin 2012)

Table 7.1 *Continued*

Allocation of Risks and Responsibilities (G3)	+	(Kivleniece and Quelin 2012)
Integration Between Project and Service Delivery Units (G4)	+	(Hjelmbrekke and Klakegg 2013) (Kujala et al. 2010)
Incentives (G5)	+	(Kivleniece and Quelin 2012)

“Complementary skills and resources” is found to be one of the most important component of the value creation process in healthcare PPPs. The parties involved should have resources and skills which complements each other. These resources are recombined and deployed to create value. Similarly, Kivleniece and Quelin (2012) and Villani et al. (2017) addressed the resource and skill complementarities as a principle source of value created by these projects. However, the parties do not always bring in what they are supposed to. The findings showed that, the private party did works which falls beyond their responsibilities to sustain the value creation process. The resource and skill recombination here, therefore, is substitutive, rather than collaborative. In their comparative case study Villani et al. (2017) observed this “substitution effect” in the unsuccessful project by means of value creation. Even though the legal framework is required to provide for a fair allocation of responsibilities (Villani et al. 2017), the setup may change in the actual practice and force parties to compromise. While the major lack of competencies in Turkish PPPs was observed to be on the government front related to knowledge and capacity, it was also seen that scarcity of tangible resources such as lack of an adequately large land also inhibited value creation process in some cases.

The “long-term commitment” was also emphasized by Villani et al. (2017), albeit in a different terminology – “partnership loyalty”. The relationships between the commitment of the partners to long-term value creation and the innovations in the architectural design was also addressed by them. For achieving long-term value, the project participants should compromise from their short-term interest for longer-term

benefits. The importance of such commitment is also acknowledged by Aliakbarlou et al. (2017). The long-term commitment was also found to affect the partner/supplier selection, as the parties selected their partners based on their abilities to cope with the challenges in the long-term value creation process. One of the interviewees well-pronounced that case: “We brought the best firms in, all first-tier companies as these are projects are done for the first time. We wanted to minimize the risks. Now it pays dividends. Our setup works as it was supposed to be.”.

The long-term commitment of the project participants seems to be motivated by an aspiration of “ownership feeling”. Such ownership feeling is said to be a normative aspect of the PPP projects, or the turn-key projects in general. These models are cooperative arrangements that are proposed to deal with the underlying divergence of goals between the parties to a contract (Kwak et al. 2009), where a key consideration is to increase the commitment of the contractor by forcing them to think of themselves as owners of the project (Ahola et al. 2008) with a long period of operation/service provision component assigned to the private party.

“Stable governmental unit” was found to be important as frequent changes in the ministry personnel hindered the value creation process. Due to these changes, an organizational memory could not be constructed in the public party. Considering that knowledge creation is an important part of the value that is created by these projects, it won't be wrong to say that the unstable government unit in the Turkish case destroyed value. No similar finding was observed in the literature, which may be caused by lack of a similar situation where the government personnel changed multiple times during the course of the projects. The unstable government unit also hindered the planning and implementation phases, with the undone analyses and delays in approvals caused by the learning curve of the newcomers personnel respectively.

The attitude of the ministry personnel was one of the areas that multiple interviewees complained. The lack of trust emerged conflicts on the design development process,

commercial areas and the progress and change approvals. Ahola et al. (2008) endorsed a close and trust-based interorganizational relationship, where the customer and supplier consider each other as business partners rather than a master and a servant in turn-key projects for enhanced value creation. Aliakbarlou et al. (2017) addressed “attitude” to influence the project performance.

The government support was primarily important for resolving the issues related to the financing. They deployed their legal and contractual skills and provided additional guarantees to provide for the necessary grounding for the finance. In Villani et al.’s (2017) study, the government support was more comprehensive than that is observed in the Turkish PPPs.

The importance of “sound project financing” was also addressed by Villani et al. (2017). The data revealed that, the project should have a sound revenue stream, together with additional factors to minimize the risks of the lenders. Complementarities of the government, multi-lateral bank and sponsors are important together with a proper allocation of risks and responsibilities, environmental and social compliance, and government support was observed to be necessary for finding the necessary finance. Additionally, the experience of a 6 months’ delay in the financial close caused by the coup attempt, pointed-out the vulnerability of these projects to the uncertainties, especially to the black swan events. The negative consequences were overcome by some innovative solutions from the private party and additional guarantees from the public party. Some compromises were also made for that particular case. Last but not least, the interview with the MDB showed that these projects have created a broad financial value for Turkey with “an increased investor interest in Turkey with many first-time investors”. This is an important implication as it shows that the PPP projects, especially when pipelined as in the case of Turkey, can provide much broader benefits than their immediate, first-order deliverables.

An “effective design development” process is important as the functionality of the physical asset has a significant impact in the future value creation, because the day to

day activities would be carried out in the physical asset. The implications of this understanding is on the innovations in design and the modes of managerial practices to achieve that functional design, such as increasing the coherence between the client and the contractor for future value creation, or for the case of the PPPs, increasing the “integration between project and service delivery units”. Kujala et al. (2010) argues that, integration of the project and service delivery units can result in a more cost-efficient and high-quality life cycle offerings with higher cohesion. Therefore, an externally oriented design phase is especially important to understand and translate the needs of the users to a functional design of the physical asset (Hjelmbrekke and Klakegg 2013). Kolltveit and Grønhaug (2004) also emphasized devoting the necessary efforts to prevent prospective conceptual design changes, which may increase the downside risks during the execution phase.

The surveys revealed that the private party sometimes went further than the expressed needs of the ministry to incorporate flexibility into the design of the physical asset. The facilities had a modular design which allows to separate the blocks from the main hospital building in the case of changes of the needs in the future. Similar findings are observed, such as Kujala et al. (2010) suggest that a supplier sometimes needs to go beyond the customers’ expressed needs in solution-specific business model context. Arto et al. (2016) propose that creating long-term scenarios involving possible future developments in the multi-organizational business system of the operations phase and the incorporating flexibility into the design of the capital element and its technical systems are likely to increase the system's use value. They both endorsed modularity in design to incorporate flexibility.

One of the most reconciled subjects in the value creation literature is that the “externally oriented execution of the early phase” of major and complex projects would give a significant potential for greater value generation, especially when the projects have high degree of novelty. This conclusion is founded on the broad uncertainties in the early phase, which, by its very nature, is associated on both upside and downside risks. Little is known about the project at the early stage and this

uncertainty must be explicitly taken into account to improve the project results. Klakegg et al. (2016) highlights the importance of focusing on the needs with a clear and robust foundation in front-end planning. They add that such planning should be integrated - both horizontally (spatial planning, economy, and liveability) and vertically (central government, provinces, and municipalities) which highlights the need for an extensive and early involvement of stakeholders. Many participants criticized the ministry for inadequate planning.

While some studies in the literature endorse an externally-oriented approach (Verweij 2015) or an outside-in focus (Hjelmbrekke and Klakegg 2013) in the implementation phase, this study showed that in the Turkish case, most of the stakeholders wanted to focus on their own business without much intervention in this phase – an “internally oriented implementation phase execution”. This difference may be caused by the reported weak causality between the modes of management and the results (Hjelmbrekke et al. 2017), or by these projects being contingent to the social and cultural context within which it is delivered (Zwikael and Smyrk 2012).

“Exploiting the business opportunities” is addressed as an important aspect, not only for value creation process of these projects, but also for the value creation literature at large. Green and Sergeeva (2019) contend that the narrative of value creation is popular because it serves to enhance the status of project management discipline, and that of the individual project managers who seek to justify their actions in these terms. Hence, they ultimately interpret the continued advocacy of value creation as ‘identity work’. The identity here is the way that the new project management practitioners identify and distance themselves from the operational ones of old, by claiming to be more strategical – more business-savvy. The findings showed that multiple opportunities created by the incentives were exploited, especially in terms of the comprehensive commercial activities of the private sector in the healthcare campuses. This may be interpreted as the project management practitioners are already business-savvy and this is paralleled by the way that the scope of the project management literature extends from operational issues to more strategic one.

Particularly due to their public aspect, additional value expectations (e.g. increased transparency, environmental and social sensibility etc.) are set on the infrastructure projects by the public sector actor and/or the general public (El-Gohary et al. 2006). Infrastructure projects may be completed within time and budget and according to the specifications, but public values such as transparency or accountability may have been impaired, external stakeholders' interest (i.e. those of the general public, municipalities etc.) may have been harmed, and impact on the environment may have been overlooked (Verweij 2015). El-Gohary et al. (2006) suggest that, PPP infrastructure projects vary in the level of contention that they raise among stakeholders. Service-based infrastructure like hospitals and schools where the private entity provides non-technical services to the facility (everything except medical care and teaching), are much less likely to raise opposition among the public if compared to other basic infrastructure like highways or water supply. Despite these projects are service-based infrastructures, a public opposition was observed by the interviewees. One of them also informed about their apprehension of public opposition in a project which would to be built in a woodland area. This shows that the public concerns are still a decisive factor for these projects, as such capturing and addressing the society's input is critical to better facilitate the development of a project that will meet the needs of them. Together with that, the project stakeholders also highlighted the importance of liaising with the local interest groups. That makes "gauging public opinion" important to value creation process (El-Gohary et al. 2006). The lenders also dictated the environmental and social impact analyses (ESIA), during the implementation phase. Additionally, the surveys for stakeholder satisfaction were continued in the operations phase with 3 months intervals. This means that "gauging stakeholder satisfaction" was an important process for the created value of these projects.

The surveys revealed that organizational learning was an important process for value creation both by of creating value itself (i.e. creating knowledge) and preparing for the future phases of the project. The design development and implementation phase yielded important know-how. Additionally, the pipelined setup of the hospital projects

enabled the private party to use their experience from the previous projects in the current ones. Their public counterpart couldn't benefit from that due to the replacements in the ministry personnel. Organizational learning was previously addressed in the literature (Bowman and Ambrosini 2000; Kivleniece and Quelin 2012; Chang et al. 2013).

“Elaborative partner selection” was suggested to be important by the interviewees as the competencies of the partners would be employed on the value creation process. The private companies evaluated and selected their partners and suppliers based on multiple criteria such as financial position, experience, and health and safety records. Working with competent partners was suggested to decrease the risks as one of the interviewees expressed that “We brought the best firms in, all first-tier companies as these are projects are done for the first time. We wanted to minimize the risks. Now it pays dividends. Our setup works as it was supposed to be. We also have consultants – both local and international.”. Selection of suitable subcontractors was also emphasized by Kwak et al. (2009). Hjelmbrekke et al. (2017) study revealed that some particular projects should not be an educational arena for suppliers.

The compromises were observed to be inherent in the PPPs due to the multi-stakeholder and the long-term nature of them. Accordingly, these compromises should be optimized in order to sustain the relationships and long-term value. Chang et al. (2013) also addressed the “optimization of compromises”. The compromised were observed to be in three forms in the Turkish PPPs, first of which is regarding the trade-offs between the budget, quality, and schedule. The strong political pressure on the delivery time, and the commitment of the private party on the quality caused sacrifices on the budget front. When there were no possibility to deploy more resources to speed up, the EPC contractor compromised from the construction quality. The importance of these items are in an array of [Schedule>Quality>Budget]. The long-term of the contracts made the private party to sacrifice from short term benefits for long-term value creation. The compromises between the parties revealed a power relationship of [Lenders>Public>Private].

Ahola et al. (2008) suggest that, competition-based strategies emphasize short-term value creation while tendering strategies relying on a close interorganizational relationship between the buyer and the seller emphasize long-term value creation. The multi-stage tendering process was seemed to be a successful one as it incorporates the advantage of both of these strategies. However, the long duration of the tendering stage was criticized.

Artto et al. (2016) highlights the importance of integration of work among organizations within the project's multi-organizational system. They suggest that an important task of a project (which has an operational component) is to establish a well-functioning operational system which will continue to add value during the operations phase. Moving from the delivery of physical asset to the operation phase requires a multi-organizational network which will operate the facility. Such a network should be at least partly established during the implementation phase and transformed into a mature body that is capable of running operations. Such transformation is a long and evolving process which requires interactions between multiple organizations and mutual adjustment. The ultimate aim of through-life value creation perspective makes the operational body important. To ensure a smooth implementation-to-operation transition, the operational body should be established as early as possible. Similar findings were revealed by the interviews which emphasizes “collaborative operation” and “early establishment of the operational body”.

A favorable, “well-balanced legal framework” is addressed as an important prerequisite for value creation. Villani et al. (2017) similarly identified the legal framework to be central to a successful governance. The participants recommended the framework to be neither too strict nor too loose. Additionally, it was observed that the corresponding laws should provide for adequate incentives for a sound revenue stream for financing these projects and a fair “allocation of responsibilities and risks” – an important aspect which was also concerned by (Kivleniece and Quelin 2012).

The finding showed that the PPP projects should be well-incentivized especially by means of guarantees for a sound the revenue stream. Kivleniece and Quelin (2012) tapped into the same issue: “guarantees, or “shadow” tolls, are typically sought to ensure the viability of investments and revenue predictability in projects that the private sector may not be willing to assume alone.”

A commonly held view seems to be that the construction industry, in general tends to be conservative and not very concerned with incorporating new technologies or management insights into their practice (Hjelmbrekke et al. 2017). However, the problems encountered in the project in the course of the project required innovative solutions. Some of the innovations were by means of technological developments and the others were in managerial means. (Kivilä et al. 2017) suggested that the early phase is the most appropriate for putting innovations in place as there is room for changes at the early phase, before a detailed agenda is set and costs for these changes are low. Kolltveit and Grønhaug (2004) suggested that the innovative activities should be continued to allow for greater value creation.

The discussion above showed that most of the findings of this study is consistent with those of the literature. No findings were observed in the literature which corresponds to a need of “Stable Governmental Unit”. This is understandable as this finding is based on the frequent changes in the ministry personnel together with the ministers themselves in the Turkish case. The only conflicting suggestion between this study’s findings and those of the literature was found to be the “internally oriented implementation phase execution”. The interviewees expressed that they would prefer an internally oriented implementation phase where everyone is focused on their core business. This contrasts the suggestions in the literature of an externally oriented management in the implementation phase (Hjelmbrekke and Klakegg 2013; Verweij 2015). This difference may be justified by the reported weak causality between the modes of management and the results (Hjelmbrekke et al. 2017), or by these projects being contingent to the social and cultural context within which it is delivered (Zwikael and Smyrk 2012).

7.2. Discussion on the Preliminary Framework

As mentioned earlier, a preliminary framework was constructed based on the literature to systematically analyze the value creation process. Findings from the semi-structured surveys were consistent with that framework. Firstly, the healthcare PPP projects provided much broader benefits than the output of them, such as the generated know-how, building new relationships. With these projects, some of the companies entered into a new market (i.e. healthcare). Additionally, one of the interviewees expressed that these projects also enhanced the financial landscape in Turkey with an increased appetite and many first-time investors. Therefore, a broader view of value-creation better represents the success of these projects rather than evaluating their immediate output. Different value dimensions emerged in different phases of these projects which showed that value is created through the life of the project, in contrast with the studies that suggest the benefits are created solely through utilization of the projects output (Zwikael and Smyrk 2012).

Different interviewees emphasized different aspects of the projects while describing them. The emphasized aspects were usually parallel with the role, contribution and the background of the interviewee. For example, while an interviewee from the EPC contractor defined the aim of these projects as “constructing modern hospitals with new technology, better sustainability and earthquake resistance”, another interviewee from the O&M contractor suggested that the aim of these projects was to “provide higher quality healthcare services in the public hospitals”. A respondent with a long investment experience suggested that “these are investments rather than construction projects”. The participant from the MDB linked the benefits of this hospitals to the wider health transformation program: “these hospitals complement to the HTP in the provision of health services with broader coverage and greater equity”. These examples demonstrated the subjective nature of the project value and the diverse expectations of different stakeholders. It is also found out that, after some of the hospitals started their operations, the burden of the payments caused the ministry to order changes to make the hospitals smaller. Such changes in the expectation with

time was also noticed by Green and Sergeeva (2019)– which reflects the dynamic nature of the project value.

The broad uncertainties of these projects which include both upside and downside risks were also reported. A coup-attempt and was a good example for the downside risks associated with these projects. The connected 6 months delay in the financial close demonstrated the vulnerability of the PPP projects to black-swan events. The uncertainties related to the commercial areas allowed for diverse business opportunities to the private party. This was an upside risk which would not be possible in certain clauses limiting the types of the commercial facilities. These all showed that the uncertainty must be accepted and explicitly taken into account in these large and complex projects with high political sensitivity. The study also showed that different modes of management was preferred in different settings. The preference of the participants was in contrast with the suggestions in the literature. This can be attributed to the low causality of the management practices and the obtained results. The findings showed that the value creation was well represented with the business model design, particularly that of Villani et al. (2017). The antecedent “assets” were mobilized by the “processes” by the parties determined by the “governance”. The interaction between the components of the “assets”, “processes”, and “governance” indicated the inter-connectedness of value creation process. The adopted business model system was in line with the common understanding of a business model as a system of components, linkages between the components, and dynamics (Afuah and Tucci 2000 quoted from Villani et al. 2017).

CHAPTER 8

CONCLUSION

Based on the findings of this study, the healthcare PPPs have the potential to achieve success when reliance on these projects delivers new and appropriate benefits to the stakeholders and the wider society. The business model design is recognized as important, especially considering that PPPs integrate multiple logics in order to take advantage of new ways of organizing and combining resources and competences to produce social goods and stakeholder value. In other words, success of the PPPs is dependent on the business models they adopt and how successful those business models are at creating value. The created value is determined by the quality of the “assets”, the “processes” to mobilize them, and the “governance” which designates how these are controlled by the relevant parties. The practical and theoretical contributions of this study are given below together with the limitations and suggestions for future studies.

8.1. Practical Contributions

The practical contributions are of suggestions for the PPP participants. These are made in guidance of the suggestions and complaints of the interviewees.

- The SPV should at least involve one internationally reputable investment company and a large and experienced construction company – one for the finance, the other for the construction works. Problems were encountered in the SPVs which were formed by two large construction companies.
- The size of the hospitals should be kept as small as possible. Hospitals with around 700 to 1000 beds is suggested to be the optimum by multiple interviewees. Problems were encountered in projects with more than 1000

beds related to their construction and the tests of the installed systems in the commissioning phase.

- The public party should allow their private counterpart to freely select the suppliers they would work. The selection of the suppliers and the associated risks should be on the private side.
- Well-experienced suppliers should be selected. These projects should not be an educational arena for suppliers.
- The facility and service delivery units should be integrated in both the public and the private party to allow for an increased cohesion between the design and the operation. These units should be comprehensively planned and the replacements in the personnel should be kept minimum.
- Both parties should understand the contribution of their counterparts. A clear conceptual understanding is imperative. The parties should share a sufficient language. Necessary interactions should be made to achieve that.
- The guarantees, risks, and responsibilities should be transferred to the lower stages with a back-to-back schema.
- Contribution of an MDB, especially in the developing countries, is important due to their international experience. It provides benefits for finance in terms of both direct loans and mobilization of additional loans.
- All stakeholders which affect or get affected by the project should be involved in the design development and planning processes. These also include the municipalities, doctors etc.
- The architectural design should incorporate flexibility. A modular design is preferred due to the possibility of the changes in needs in the future. The design should allow for separating some parts of the building from the main facility. It should also allow for extensions.
- The planning should be done comprehensively. It should incorporate local authorities such as municipalities and other interest groups. After the planning

is finished, the prospective stages should be executed as quickly as possible to cope with the high speed of the developments healthcare sector.

- The “technological sublime” should be avoided. The term is used to describe building large and innovative projects by pushing the boundaries for what technology can do, like building the tallest building, the longest bridge, the fastest aircraft, the largest wind turbine, or the first of anything. The technology and size of the projects lure the decision makers to compromise from other aspects of the project. (Flyvbjerg 2017). In the surveys, multiple interviewees expressed that there is a considerable interest in building the biggest hospitals in the world with seismic isolators. Isolators were also suggested to be applied in the projects even where these are unnecessary which caused delays and cost increases. Such practices should be avoided. Effectiveness, functionality, and efficiency should be the top priority for the construction of the physical asset.
- The compromises should be made from the short-term benefits for greater long-term benefits.
- The decisions should be given at the right time. For example, the decisions regarding the procurement of the medical devices should not be made early. The decided equipment may become obsolete even before the hospital gets operational as the technology develops fast in the healthcare sector.
- Easy-reconciliations of dominant parties to the detriment of less-powerful ones should be avoided if the value is to be created for all. For example, the ministry reconciled with their private counterparts to allocate payments from the revolving fund (a performance-based personnel fund where the healthcare personnel get a large portion of their salary). This caused an opposition of the doctors on these projects. One of the participants articulated that “the healthcare services provided by unsatisfied doctors would be of doubtful quality”.

- The uncertainties should be minimized before the implementation phase. The parties should concentrate on their core business without much distraction or changes at the implementation phase.
- The participants should be aware of the power and information asymmetries and create their strategies accordingly. The power relations of major stakeholders related to their trumps in the Turkish PPPs is found to be Lenders>Government>Sponsors (the SPV). The array on the relationships based on the information that the parties have seemed to be the exact opposite.
- The framework should be permissive for private sector's economic activity to an extent. Too strict regulations would inhibit value capture (profit making) ability of the private party. Capturing value is reported as an important motivator for different parties to sustain the value creation process.
- Creating informal, trust-based relationships and communication at the initial phases is important for exchanging knowledge and creating a similar understanding. One of the participants expressed his concerns that the contracts may fall short to cope with the operation phase. The inadequacy of even well-prepared contracts is also reported in the literature. A partnership loyalty is emphasized.
- Necessary efforts should be devoted on the social and environmental issues to mitigate public opposition.
- Worst-case scenarios should be prepared for black-swan events.
- The operational bodies should be established early for a smooth transition from the implementation phase to operations phase.
- Mechanisms to capture the generated know-how should be established. This would be important to transfer the experience to the prospective projects, especially when there are multiple pipelined projects as in the Turkish case.
- Foreign companies such as medical equipment suppliers could be included in the SPV for obtaining finance from their origin country. However, there would

be a compromise from the supplier selection options as the involved suppliers could dictate procurement from themselves.

- All stakeholders should be gauged to avoid unexpected problems.
- Tendering should be multi-stage to ensure value for money. But also, should be as quick as possible to avoid future problems due to the changes in the circumstances.
- The legal framework should be well-balanced, neither too strict nor too loose. While the uncertainties of a loose framework cause unfavorable consequences, too strict clauses will be problematic to fit different projects due to their different conditions.

8.2. Theoretical Contributions

The theoretical contribution of this study is three-fold. First and foremost, it contributes to the literature on the PPPs, specifically those in the Turkish healthcare sector. It has an important position to understand the underlying mechanisms of value creation – how the PPPs create value for the stakeholders and the society as a whole. Second, this study furthers the theory on value creation at large. While most of the studies in the literature investigates specific phases from the focus of a singular source, the participants from multiple organizations with different orientations enabled to capture the value creation process from different perspectives with different stages of the projects. Additionally, due to the peculiar nature of them, the healthcare PPPs enabled to study different practices in projects such as planning, financing, and designing together with different types of deliverables such as a tangible asset and service. This portrayed a clearer image of value creation in project settings.

The preliminary framework is also important for the value creation literature as it represents the through life value creation. This contrasts the framework with the others in the literature which attribute the generation of benefits solely to the utilization of the projects' outputs such as that of Zwikael and Smyrk (2012). The understanding of through life value creation considers the value creation after the project completion

together with the value creation before the completion of the project output – the value that the project work brings with itself such as new knowledge and relationships. Therefore, the preliminary framework has applicability to different types of projects such as the creative projects, which has no specifically determined output. Third, it contributes to the literature on the success of the projects with a thorough review of the literature from a retrospective lens. While most of the studies set the “value-centric view” forth as if it was a competing approach with the iron-triangle, the literature review part shows that was not the actual case. An important observation here is that, there have been a slow but gradual expansion in the literature from the tri-partite test of success to the understanding of today’s which is the “value of the project”. The expansion was both horizontal – considering a broader timeframe from the implementation phase to the project lifecycle – and vertical – accounting for more extensive issues relating to the project from the time and budget to more strategical benefits of them. This expansion also served to enhance the status of the project management from an operational one to a more strategic one. The course of this evolution was iterative with reciprocal influences where the literature has sometimes affected the practice and the vice versa. Another important finding from the literature review is that the literature at times discussed the same issues with different terminology over and over again.

8.3. Limitations and Recommendations for Future Research

The most important limitation of this study was the lack of interviewees from the public party. Despite the contribution of the MDB moderated this perspective gap to an extent, the lack of a governmental perspective is still addressed an important limitation. As all PPPs have different attributes peculiar to the context within which it is delivered, the findings from the surveys are of doubtful generalizability for PPPs in other sectors and different countries. The findings from the interviews are also of limited transferability to other types of projects, yet the preliminary framework can still be applied to different types of projects.

While identifying the content of value (the constituents) was not an objective of this study, the findings revealed that some processes (e.g. organizational learning) relate to particular types of value (e.g. know-how). A future study may investigate the relations between the specific value components and processes. Works of Eskerod and Ang (2017) and Vuorinen and Martinsuo (2018) would be convenient for a departure point while identifying and categorizing different types of value such as transactional, generative, environmental, social, financial and systemic value.

During the study, it was found out that the PPP projects were part of a wider program called HTP. Studying how these projects contribute to the value of the wider program is also recommended. Adopting multiple levels of analysis (i.e. program and project) is also endorsed by Martinsuo et al. (2019). The power and information asymmetries and their effects on value capture processes (which party would capture a greater portion of the total value pie) can also be studied.

Additionally, I recommend the use of the business model literature for studying the value creation in projects. The project management scholars can seek ways to implement successful business models into the projects to increase their effectiveness. An important note is that, Magretta (2002) argued, when business models don't work, it is because they fail either the narrative test (the story doesn't make sense) or the numbers test (the p&l doesn't add up). This distinction between the qualities and quantities is reminiscent of the one between the Hard VM and Soft VM. In this sense, the business literature seems to well-correspond to the project management literature. It also complements to the business-savvy positioning of the recent project management literature.

Lastly, I see particular merit in the ideas of Green and Sergeeva (2019). They adopt a position to conceptualize value as an entirely abstract concept which is continuously shaped and contested through narrative. The "narrative turn" in organisation studies, that they derived their theoretical basis, can provide significant insights to the project value creation literature.

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