

LEARNING AND VALUE CREATION: EXPLORING THE ROLE OF SERVICE QUALITY

Rabia Sana

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Corresponding Author: *

Rabia Sana

Abstract

Purpose: Learning is a permanent behavioral change for any organization to create value; it is necessary to maintain its service quality with increased learning processes. Exploitative learning includes gaining knowledge to refine and rejuvenate existing competencies, whereas explorative learning refers to gaining knowledge to change the nature of existing practices and competencies; both types of learning are seen as complementary and mutually constitutive of an organization's long-term success. Service Quality is a long-term relationship of any organization with its stakeholders for a value to be maintained for the long term. Every organization has used various employment techniques. Human Capital is managed through employment relationships and human resource programs. And these learning processes increase the betterment of human capital and Service Quality of that human capital so organizations can increase their value creation for their stakeholders. Human capital is used to determine exclusive employment relationships, human resource arrangements, and their variants. This study identifies the learning and value creation by exploring service quality role.

Design/Methodology: The study follows quantitative design which covers four aspects. The learning processes, Service quality and Value creation. Collection of data is being done with the help of primary data collection techniques from Public Sector organizations of Quetta Baluchistan Secretariat with random sampling techniques from N = 385 participants. The structural equation modeling technique has been used for data analysis and testing of hypotheses. Correlational analysis has been implemented with different well-designed analysis sections with Statistical Package for Social Sciences (SPSS- Version 26.0) and PLS-SEM tools packages signify the study and provide comprehensive, reliable outcomes.

Results/Findings: The results of research concluded that the relationship between exploitative and explorative learning creates service quality that generates value creation for an organization. Exploitative learning leads to improved service quality, as organizations are able to refine and optimize their existing processes. This results in increased efficiency, reduced costs, and higher levels of employee service quality and value creation. Furthermore, explorative learning leads to the creation of new and innovative services, which result in increased value creation for organizations. And also results in new and unique service offerings, increased differentiation, and a competitive advantage for the organization.

Implications: This study provides a milestone for future research in public and private sector organizations and becomes the most cited research draft and paves many ways for upcoming research. Exploitative learning and explorative learning are two different types of organizational learning. However, there are also

challenges associated with both exploitative and explorative learning. For example, exploitative learning leads to a focus on short-term goals, while explorative learning can be risky and unpredictable.

Chapter 1

Introduction

1.1 Background of Study

Exploitative learning is obtaining knowledge to improve and grow on current organization's capabilities, technologies, practices, and products. The goal of exploitative learning is to improve and expand present technologies or abilities (Agbenyegah, 2013). Exploitative learning includes gaining knowledge to refine and rejuvenate existing competencies.

Whereas explorative learning refers to gaining knowledge to change the nature of existing practices searching for new technology and business competencies (Khan et al., 2019). Explorative learning focuses on gathering and analysing data that has the potential to change an organization's present capabilities, technology, products, processes, and practices while exploitative work more on potential results (Khan et al., 2019).

Both types of learning are seen as complementary and mutually constitutive of an organization's long-term success. Organizations run the risk of falling into a "failure trap" without exploitative learning (Ali, 2021). caused by a frenetic focus on inquiry that pushes exploitation out. Furthermore, without explorative learning, businesses risk moves into a "competency trap" (Jackson, 2019) though both types lead to different goals in the same work environment (Ryan et al., 2018).

Existing research highlights the need for companies to participate in both exploitative and explorative learning simultaneously to maintain the organization service quality and increase value (Chung et al., 2015). Subsequent studies have changed the emphasis from a static comprehension of the value creation system of a firm to a dynamic view from the learning process and role of service quality and transformation (Climent & Haftor, 2021).

However, such studies have concentrated on the organization's internal issues. Which are related to learning that is explorative and exploitative learning to create value in the products and services, the way the characters and activities are arranged, as well as the method the system of an organizations has created in this dynamic environment. They have to be alert every time so both type of learning could processed back to back (Foss & Saebi, 2017).

Exploitative and explorative learning are separate from one another and serve different functions. Explorative learning is more unpredictable, long-term focused, and more on exploratory. An alternative generation strategy emphasizing goal flexibility and ambiguous structures is required to handle exploratory training, as opposed to planning and controlling exploitative learning. In explorative education, preparation is ineffective because of the high level of uncertainty.

Instead, firms may use a variety of low-cost probes to forecast the future and adjust their strategic plans. The upshot is that explorative learning is often organized differently in enterprises than in schools, which is more closely related to everyday work (Mandasari & Oktaviani, 2018). Finding a the right combination of exploitation and exploration balance is very creative but hectic task, even though both types of learning lead to different outcomes, is one of the most challenging situation in organizational learning (Agbenyegah, 2013).

Malar et al (2019) explains the transformation of the themes of Value creation to gain a competitive advantage the organizations keep work hard. This tendency in the research is quite encouraging since practical experience indicates that for success, organizations may need to address several topics in a variety of situations. The level of a firm or any organization is a very hard time work to maintain. So for that explorative and exploitative learning are related and complementary for promoting long-term organizational success, even though they

are opposing modes of operation carried out by wholly distinct types of organizations and organizational structures (Katila & Ahuja, 2002; Khan et al., 2019).

Hagedoorn and Duysters (2002) denoted one of its types of research about these both learnings exploitative as routinized learning since it adds to a company's current knowledge and competencies without disturbing the nature of its operations. Despite their seemingly opposing goals, Explorative learning is seen to be complimentary to exploitative learning and is considered as being essential to long-term organizational performance. Exploratory learning is the acquisition of information to modify the character of current practices and capabilities (Ali et al., 2021).

Explorative learning involves looking for and trying out new technology or business ventures. Changes in corporate procedures and experimenting with new options are part of this non-routinized learning (Dodgson et al., 2013). Which, if effective, changes the focus of firms' skills and improves their performance in terms of innovation. For a successful organization, diversity and experimentation are central entrepreneurial activities.

Consequently, both exploitative and explorative learning serve different purposes and are distinct. On the other hand, exploration and exploitation are more experimental, long-term focused, and unpredictable. Exploitation can be planned and controlled, but explorative learning can only be handled through an option generation method characterized by goal autonomy and ambiguous structures (McGrath, 2001).

Without exploitative learning, organizations may don't have option to stay in the market, hence a simultaneous emphasis on these two forms of learning is crucial" (Levinthal, 2020) and without explorative learning today's competition between organizations are hard to achieve

Determined efforts to exploit outdated knowledge and competencies. As a result, one of the primary issues facing today's leaders is allowing businesses to adapt and establish a sustained Value creation edge in an increasingly demanding and dynamic business environment. To do so, leaders must use

both exploitative and explorative learning (Uhl-Bien & Arena, 2018).

The central role of service quality in the human capital architectural model is also an area of interest that identifies the role of explorative and exploitative learning in the human capital architectural model. Every business greatly values the Human Resource (HR) Architecture model because of its uniqueness. Every organization's fundamental objective is to operate efficiently and manage its human capital (HC) to reach the intended goal.

According to Hong et al. (2019) provides a broader evaluation and will undoubtedly add significantly to this study. The human resources model has been playing a key role in acquiring human capital with both type of learning adds a flavour to it. This model is effective since it relates different types of HC differently. Employment modes, relationships, and HR setup are a few examples. When multiple Processes are seen within the same firm, the model is restricted (Sandleris & Wright, 2014)

According to Flores et al. (2020) and Lepak & Snell (1999) the human capital architecture model retains great value and individuality in any organization. Every organization's fundamental objective is to operate efficiently and manage its human capital (HC) to reach the intended goal. The introduction of deliberate human resource administration has resulted in a new set of human resource practice practices inside a company, and ultimately numerous organizations highlight the practices of HR by using it more seriously.

Established a human resource architecture theoretical pattern based on several ideas, like the resource-dependent rating and human capital theory. A company's intangible or extraordinary assets, Knudsen et al. (2021) do not include its human capital. Among many other human capital models, the architecture model holds a high value and individuality for the organization. An employee's worth is the monetary value of their skills and knowledge. There are several features that businesses look for when hiring new employees, including a high level of loyalty and punctuality (Hidaya et al., 2020).

Planning is ineffective in explorative learning because of the high amount of uncertainty. Instead, businesses could use a change of low-cost analyses to examine the future and adapt their next strategic steps appropriately (Aronson et al., 2022; Fayda-Kinik, 2022). As an effect, in many companies, exploitation is related to daily tasks and activities. At the same time, explorative learning is organized differently due to the novelty of the organization's culture (Vanhaverbeke et al., 2003).

Some partnerships are formed to enhance a corporation's existing technical skills (e.g., exploitative learning), while others are formed to drill a company with more novelty or developing proficiencies (i.e., explorative learning). Exploration education is crucial when there are changes in industry players and dominating technologies, this, if successful, alters the abilities that businesses concentrate on and enhances their performance in terms of creativity. Consequently, there have been deep structures of connection and 'gregariousness,' with repeating encounters and continual information flows (Chuah et al., 2021). According to Li & Shang (2020) The customer's total assessment of the usefulness of services or goods based on perceptions of advantages acquired in the trade-off is known as perceived value. Between the price and the gain. Public organizations produce public value by providing civil services, rules, policies, and regulations in a more sophisticated fashion than private organizations do. Private businesses create economic value by providing consumer goods and services (Chohan, 2022).

Customers judge commercial products and services based on the balance between benefits and costs, whereas citizens evaluate public services far more in terms of their utility and how well they function (Núñez-Barriopedro et al., 2023). Labor is the human capital of an organization and resources provide a better service quality that leads to meet the needs of stake holders. "A good, service, or activity's ability to meet needs or benefit a living being or a legal entity is what gives it value" (Eggers et al., 2022).

The conventional notion of value employed by some economists is narrower than this definition.

It includes any good, service, or action that provides a benefit—whether real or intangible or meets a need. This involves raising standards of living, knowledge, status, safety, and financial and physical security. And providing food, shelter, transportation, income, etc. Consequently, both market and nonmarket values are incorporated into our definition. The recipient must recognize the value for it to exist.

This has been made clear by Haksever et al. (2004), who suggested that stakeholder interactions are platforms for business processes that create value (Tapaninaho & Heikkinen, 2022). The primary idea is that value creation may be enhanced over time by taking stakeholders' interests and what they value into account. Observed that stakeholders have utility functions with several attributes (Kujala & Sachs, 2019) that provide managers the opportunity to create value concurrently for several stakeholders. Although value creation is frequently the objective, managerial choices may value for some stakeholders is destroyed while it is created for others.

(Haksever et al., 2004).

Tapaninaho and Kujala (2019) highlights that In order to produce value for sustainability, stakeholder research has increasingly examined company-stakeholder relationships it is necessary to identify and leverage stakeholders' shared interests in order to solve sustainability.

Freudenreich et al. (2020) offered a framework for creating value with and for stakeholders in a sustainable manner that takes into account the many value types but prior into account the learning. Stakeholders are viewed as value producers, beneficiaries, and co-creators (Freudenreich et al., 2020).

The present study draws on the Freudenreich et al. (2020) framework to explicate value creation in a CE business putting a priority on stakeholder interactions and value-generating activities (Fernando & Perera, 2022). According to a comprehensive explanation, citizens also take into account the services' policy goals and the legitimacy of the political performance they represent. However, while e-services' financial viability is a problem for business, the majority of

e-government services are nonprofit, and in many cases, consequently, users have no other options than the government-provided service, two obvious distinctions that make it challenging to assess the value of e-government services similarly to the assessment of the value of commercial e-services. Due to these factors, the public's appraisal of government services is focused more on how well they function and if they live up to their expectations than on a review of the performance to price ratio. Nonetheless, the value that individuals anticipate from e-government services is vital. According to Moore (Bagde et al., 2022), it should be government first priority to satisfying citizens' needs and creating value for the public when it comes to public provision.

Consequently, the main purpose of this paper is to provide a framework with exploitative and explorative learning with service quality to create a general view of value for organizations and businesses, which may be beneficial to a wider group of managers and academics and act as a foundation for specialized and in-depth research at the same time. Value creation in an organization for its stakeholders is a very important task, to be in a market with lots of rivals' human capital, an organization has to work hard to compete in every situation (Zhu et al., 2018).

1.1.1 Theoretical Underpinnings

Regarding the theoretical underpinnings of different studies supports the learning and value creation exploring the role of service quality. As they illuminate several facets of the learning process, learning theories are crucial for efficient teaching. The trio of principal domains in learning theories consists of behaviorism, cognitivism, and constructivism. For an extended duration, behaviorism dominated educational settings as an instructional approach that placed the teacher at the center of the learning process, impacting all aspects of the curriculum and instructional methods. In contrast, cognitivism, a relatively contemporary learning theory, may not be well-known or understood by educators, and could be confused with constructivism due to some overlapping features (Yilmaz, 2011).

Several aspects of learning and instruction are highlighted as crucial to the development of knowledge, abilities, and habits. Methods such as these involve lesson planning, presenting information in bite-sized chunks (easily digested by the brain), allowing for repeated practice and feedback, and holding regular reviews (Asyafah, 2014). Putting what you learn in class into practice is essential. Cognitive theories of learning emphasize drill and practice to cement connections in the brain between ideas and concepts (Anderson & Narus, 1990).

According to Groth et al. (2009) Theoretical pragmatism, with an excessive emphasis on the political components of the change process, has come to define change management. There is a window of opportunity presented by the growing popularity of the "learning organization" to address this discrepancy by creating a theory of change that better reflects the need to enhance an organization's capacity for learning (Hendry, 1996).

According to Honig (2008) Central office administrators, particularly those with school support ties, may benefit from organizational learning theory because it shows how they can utilize evidence from varied experiences to influence district operations. The intellectual forefathers of the sociocultural learning theory, the researchers examined learning outside of the mind. Instead, it is via interaction with people and certain objects or tools that learning takes place. In turn, these actions are embedded in distinct cultural, historical, and social settings.

Value is created through collective action in society. The significance of specific practices shapes how individuals engage in various activities, contributing to the generation of value on a social level. The standards upheld by consumers play a crucial role in determining the creation and perception of value, as these norms dictate the appropriate, desirable, and feasible behavior within a given practice.

Since the behaviors that generate value are influenced by the specific context, there is no single, overarching definition of value. As a result, creating exceptional value offerings requires an understanding of the diverse needs and desires of

consumers who are shaped by their social context (Holttinen, 2010). Does S-D logic resemble Wittgenstein? I dare suggest. S-D logic holds that usage creates value, not offers (Lusch et al., 2007). S-D logic also links value creation to value networks where consumers and corporations combine resources (Holttinen, 2010).

Yet, despite the fact that S-D logic studies acknowledge that value is not generated in a vacuum, they have not yet concentrated on investigating the value-creating environment and its effect on customer value creation. Now one of the major contributors to what would become concurrent practice theory (PT) is here to provide a hand (Schatzki, 1996). The process of generating value is inherently linked to social interactions, making practice theory (PT) a valuable framework for examining this occurrence.

Holttinen (2013) highlights the richness of this setting for studying value creation. Meaning structures, as proposed by Schatzki (1996), guide individuals in socially constructing value by effectively combining and applying resources in accordance with specific practices and circumstances. Furthermore, consumer culture theory (CCT) provides an insightful perspective on consumer behavior by focusing on the socio-cultural, experiential, emotional, and symbolic aspects of consumption. As suggested by Thompson et al. (2013), this approach allows for a deeper understanding of how value is generated through various behaviors.

1.2 Problem Statement

It is feasible to examine organisational learning as a mechanism of knowledge renewal, which is explorative learning, from the knowledge-based viewpoint as the capacity that can lead to acquiring and exploring unique knowledge, define knowledge assets renewal. Working on current and basic learning to maintain their level of work exploitative. Organizations often suffer from a lack of effective learning processes and underutilized human capital, which hinders their ability. Many organizations struggle to develop better learning processes due to environmental constraints and resource limitations (Boon et al., 2018).

This problem highlights the need to explore the interplay between human capital, learning processes, and the HCAM, specifically focusing on organizations which can effectively balance explorative and exploitative learning behaviors (Hong et al., 2019). In addition, the role of service quality in the HCAM has not been thoroughly studied in the literature. Although previous studies have explored the impact but still there is a knowledge gap regarding the specific relationship between service quality, value creation, and learning processes within the HCAM? The primary research problem is to understand how organizations can effectively balance explorative and exploitative learning behaviors within the HCAM to enhance service quality with helps to increases the value creation.

This research provides valuable insights into the mediating role of service quality by using organizational learning. By addressing these knowledge gaps, this study aims to offer practical guidance for Government organizations Pakistan of seeking to optimize their learning processes with mediating service quality and achieve value creation. The aim of the study is to improve learning processes and the value creation: exploring the role of service quality for the government organizations of Baluchistan widely Pakistan and it's been one of the important topics in the recent era. Because organizations have to work for their novelty, existing knowledge improvement and use of that knowledge for the further process's diversity and novelty.

Consequently, for this, the learning process works simultaneously. Value creation is the main effort for every organization to achieve the highest rank, and a firm has to perform better than its rivals. While considering the recent problems facing the government organizations of Baluchistan. Create an opportunity for researchers to conduct a study that tries to assess how much improvement occurs when learning uses accordingly and by working on it how much service quality creates value.

1.3 Research Objectives

The foremost objective of this study in the provision of a detailed understanding above mentioned problem the government sector

organizations of Baluchistan. How exploitative and explorative learning increases service quality. That actually in results creates value. Following are the major aims of the study around which this study moves:

1. To assess the effects of explorative learning and exploitative learning with value creation.
2. To assess the effects of explorative learning and exploitative learning with service quality.
3. To examine the role of service quality which mediates the relationship between explorative learning, exploitative learning and value creation.

1.4 Research Questions

The subsequent primary questions will be countered in the study:

1. What is the role of explorative learning and exploitative learning with value creation?
2. What is the role of explorative learning and exploitative learning with service quality?
3. What is the role of service quality which mediates the relationship between explorative learning, exploitative learning and value creation?

1.5 Research Significance

In previous research that has investigated organizational learning using an explorative and exploitative learning strategy, explorative learning entails looking for new chances and learning new things. In contrast, exploitative learning entails using what one already knows to better things. In organizational ambidexterity, in order to survive and advance, it is needed to strike a balance between exploration and exploitation (Ali et al., 2021).

Literature has found a correlation between human capital explorative and exploitative learning. However, there has been little discussion of the importance of human capital.

Explorative and exploitative learning is critical to any organization's architectural model. According to previous research, human capital has both positive and negative effects on explorative and exploitative learning. In this regard there is no research done before.

This study will discuss a novel topic neglected in national and international literature, especially from the perspective of human capital. The study has significance in two prominent ways; first, due to novel topics, the research will prove a valuable addition to local, national and international literature. Secondly, as the study has discussed an issue having a large knowledge gap, the Government sector of Baluchistan as well as cooperative sector may take guidance from the finding of this research. The study will follow the quantitative design of the study with the help of primary data, which strengthens the study's results. The well-designed analysis section with well-known tools packages will also signify the study and provide comprehensive, reliable outcomes. The study will provide a milestone for future research and become the most cited research draft and pave many ways for upcoming research.

1.6 Research Gap

Despite increased curiosity on the connection between exploitative learning, explorative learning, value creation, and service quality, there remains a significant research gap in understanding these dynamics within the context of public sector organizations in Pakistan specifically Baluchistan. The current study reports this gap by investigating the relationship among these variables and the mediating role of service quality in this context. The research gap was to be identified as follows:

First, most prevailing studies have primarily focused on private sector organizations or in developed countries (Li & Shang, 2020), leaving a gap in knowledge regarding the dynamics of exploitative learning, explorative learning, value creation, and service quality in public sector organizations in developing countries such as Pakistan. This study fills this gap by focusing on Pakistan's public sector context.

Second, while previous research has examined the direct relationships between exploitative learning, explorative learning, and value creation, there is limited understanding of the role of service quality as a mediator in these relationships (Eriksson et al., 2017). This study scrutinized the mediating relationship of service quality between exploitative

learning, explorative learning, and value creation, providing a more comprehensive understanding of the underlying mechanisms.

Third, the existing literature has primarily treated exploitative and explorative learning as separate constructs. However, there is a need to examine their interplay and potential synergies concerning value creation and service quality. This study investigates the combined effects of exploitative and explorative learning on value creation and the mediating role of service quality in these relationships.

Fourth, a research gap exists in understanding the organizational factors influencing the relationships between exploitative learning, explorative learning, value creation, and service quality in public sector organizations. In addition, this research adds to the body of knowledge by identifying the role of specific organizational factors, such as organizational culture, leadership styles, and human resource practices, in shaping these relationships with the human architecture model.

Finally, previous studies have often relied on cross-sectional research designs, (NúñezBarriopedro et al., 2023), which limit the ability to conclude the causal relationships between exploitative learning, explorative learning, value creation, and service quality. This study used a more robust research approach, such as a variance-based model using Partial least square structural equation modeling, to provide stronger evidence of the causal relationships among these variables.

While addressing these research gaps, this study contributes to a deeper understanding of the relationships between exploitative learning, explorative learning, value creation, and service quality in public sector organizations in Pakistan. Moreover, it provides valuable insights for policymakers, practitioners, and researchers interested in enhancing organizational performance and value creation through effective learning strategies and service quality improvements in the public sector.

1.7 Scope and Limitations of the Study

This study will provide new insights into the public sector organizations in Baluchistan.

Moreover, it would create a platform for organizations to create Human capital that generates specific value of the organization. While considering this research is significant because such a study has not been conducted in the past with these specific set of variables explorative learning, exploitative learning, service quality and value creation in Baluchistan. Therefore, research would contribute to the knowledge body of literature, and it generates solid information about all the key variables.

Thus, the research on different aspects of explorative and exploitative learning process and value creation exploring the role of service quality. Learning with variables has been demonstrating a significant impact on Human capital operations. Based on analysis root issues are expected to be analyzed which causes the learning processes to stop and failure in service quality and value creation. No such studies have been done with the current unique set of variables. Therefore, the intent of this study is to find out specific relationship of these variables.

Such as the learning and role of service quality with and value creation.

The study has some limitations particularly, related to its methodology used and generalizing of the results as it is correlational study among the public sector of Baluchistan, in other words it is academic research with the limitation of time and budget that is why it is impossible to cover it throughout sectors of Baluchistan. So, the Baluchistan secretariat is specifically mentioned, this study is solely based on academic interest and verdicts of research cannot be generalized for all government sectors of countrywide. Due to scope in terms of sample size and specific interest. However, it can be used as important aspect of learning and improving human capital in Organizations of Pakistan.

Chapter 2

Literature Review

Explorative and exploitative learning by examining the outcomes of each learning approach. A study has identified each learning strategy as a factor in both drastic and gradual advances. Organizational ambidexterity is

possessing the capacity to seek both gradual and discontinuous innovation while concealing numerous conflicting structures, procedures, and cultures within the same enterprise (Wang & Zhang, 2020).

Explorative and exploitative learning methods are distinguished by the expectation of producing both incremental and radical innovations. Explorative learning is accompanying with radical innovations that result from knowledge exploration (Patky, 2020), although incremental innovations are linked to exploitative learning that result from knowledge exploitation. Certain specialists have thought of exploitation and exploration as two opposites on a degree. On the other hand, exploratory and exploitative learning has traditionally been seen as two separate processes (Zheng et al., 2020).

Explorative and exploitative learning undertakings manifest themselves in various ways, including ambidexterity. At the corporate level, for example, maintaining ambidexterity is easier when done temporally or structurally. At the project level, only forms of temporal and contextual ambidexterity have been identified and verified (Ngo et al., 2019). Contextual ambidexterity is the most effective technique for managing extremely dynamic and complicated situations such as projects (Linden et al., 2006). In addition, when combined with contextual ambidexterity, norms like adaptation, trust, and risk-taking might aid PBFs in resolving explore-exploit tensions. In contextual ambidexterity, individual behavioral capacity, rather than structural ambidexterity, is indispensable for keeping exploitation and exploration in check. (Berraies et al., 2020).

Prieto-Pastor et al. (2018) used knowledge integration as an internal mediator to examine exploratory and exploitative learning and intra-organizational social capital. These results demonstrate the need to employ intra-organizational human and social capital to transfer and integrate knowledge across projects. Wart emphasized the value of human capital in exploratory and exploitative learning, as well as the need of sustaining ambidexterity in any corporate organization or sector.

Even though scholars believe that inventive distinctiveness at various business levels increases exploratory and exploitative learning (Wang & Zhang, 2020; Zheng et al., 2020), there has been no empirical research to assess the relationship between these characteristics in project-based organizations. On the other hand, previous research on the qualities of inventive uniqueness suggests that it has a favorable effect on exploratory and exploitative learning. Organic organizations, for example, have qualities that are like inventive uniqueness in that they give better levels of communication and cooperation than mechanistic organizations (Richter et al., 2020).

Through aiding in organizational learning, innovation, and dyadic talents, relational archetypes have demonstrated their significance. First, organizational learning is the practice of a company's acquisition, distribution, and explains fresh information (Kang et al., 2003). The firm's knowledge base, behavioral options, and adaptability are all increased through organizational learning, which is a significant source of long-term competitive advantage (Hong et al., 2019).

Although organizational learning may come from a variety of places (for example, internal or external) or from a variety of entities (for example, individuals or organizations themselves), it mostly develops through mutual learning between people and organizations

(Wilden et al., 2018). Relational archetypes may have an impact on organizational learning by dictating how staff members access, share, interpret, and assimilate distributed information and resources to grow. As a result, we contend that both explorative organizational learning and exploitative organizational learning create new value for the business and are better supported by entrepreneurial relational archetypes than cooperative relational archetypes.

Second, through developing fresh knowledge and skills, relational archetypes may in turn support organizational innovation. Internal recombination, which involves untangling, changing, and integrating other information with specialized knowledge and abilities dispersed within and outside the organization, can result in

the creation of new knowledge and competencies which leads to create value for organization. Employees may interchange and combine scattered knowledge and competencies through the use of relational archetypes, which is a crucial technique

(Belderbos et al., 2004; Belderbos et al., 2016).

Prior study has indicated that an organization's potential to innovate is enhanced by inventive distinctiveness. Individuals that are creatively unique can pool their resources and ideas. As a result of this scenario, radical innovation and ground-breaking ideas arise. Innovative distinctiveness enables the ability to share the risks and failures connected with innovation (Hund et al., 2021). From the standpoint of knowledge management, innovative uniqueness facilitates knowledge production, integration, and transfer inside and between organizations

(Tabesh et al., 2019).

Innovative distinctiveness has an impact on multiple levels of an organization and speeds up knowledge sharing and discovery. Innovative uniqueness fosters ongoing research and significant innovation in any sector via improved dialogue, collaboration, and transparency (Ferraris et al., 2020). Firms are more prone to seek solutions through further exploration when radical ideas or the outcomes of explorative learning fail. Even if a certain level of flexibility is permissible owing to innovative distinctiveness, organizations must also focus on contemporary realities, which necessitates centralization and standardization (Yang et al., 2018).

Knowledge acquisition is a very systematic and sensitive process for a firm; Therefore, neither exploitation nor exploration should be used as a sole learning approach in this process of acquiring information, Wilden et al. (2018) described firms that focus solely on exploration face significant experimental costs while failing to acquire the rewards. It results in underdeveloped ideas and skills. Exploring new technology brings new issues for the organization; as a result, knowledge is often disputed, tacit, and difficult to explain.

However, the outcome of explorative learning cannot be predicted initially, as it is impossible to predict any outcome very early. It is an

entrepreneurial search for business opportunities in technological fields the company is unfamiliar with. The inter-organizational learning process is difficult to start because of its exploratory nature: the focus business cannot forecast how often and topics it will have to communicate with its partners (Hansen et al., 2019).

Furthermore, because the process involves tacit and disputed knowledge, the communication between the partners will be iterative and informal "discussion of ideas, sharing viewpoints, rewriting the approach when unanticipated challenges arise, and so on" (Chou & Ramser, 2019). Exploratory and exploiting education have diverse natures, rewards, and organizational needs, and both must be balanced in each industry or organization.

This frequently occurs due to tenacious attempts to exploit old information and

competencies. As a result, one of the most significant challenges facing today's leaders is enabling organizations to adapt and gain sustainable service quality and value creation in an increasingly demanding and dynamic business environment, which necessitates leaders to use both exploitative and explorative learning (Arena et al., 2022; Jackson, 2019).

Innovative uniqueness creates a culture of openness, transparency, and flexibility that fosters knowledge exchange and cross-sector integration multiple organizational levels. Continuous exploitation is common in companies that have constant access to existing knowledge at all levels of the organization (Arzubiaga et al., 2020). Internal collaboration is essential for the transfer of tacit knowledge. The higher the level of innovative distinctiveness and interrelation strength (human capital), the greater the transmission of tacit knowledge (Zheng et al., 2020). Effective knowledge management practices within organizational constraints increase innovation potential by creating a collaborative atmosphere. As a result, innovative distinctiveness improves a company's search depth by allowing it to utilize existing knowledge more frequently (Berraies, 2019).

According to prior research, human capital appears to have a favorable impact on exploratory and exploitative learning activities in any

organization (Yan & Guan, 2018). Collaborative mechanisms have also been highlighted as a role in preserving PBFs' organizational ambidexterity, as well as their potential favorable impact on exploratory and exploitative learning. Human capital's structural, relational, and cognitive components have also been demonstrated to have a favorable impact on inventive distinctiveness in the previous study. It can be claimed that inventive uniqueness moderates the affiliation between human capital and explorative and exploitative learning by connecting these constructs (Ali, 2021).

The company's most precious asset, according to the company's experience and understanding paradigm, is information and training. Diverse data sources and capacities across organizations are a crucial factor in sustaining competitive advantage and improved corporate performance, according to proponents of the theory of experience and understanding superiority. This information is ingrained in many different aspects of a business, including its culture and identity, as well as its rules, procedures, records, systems, and workers. With its roots in strategy literature, this approach expands, rather than detracts from, Penrose's resource-based view of the company (RBV) (Ashcroft, 2022).

However, proponents of the knowledge-based viewpoint say that the firm's resource-based perspective falls short in recognizing the critical role played by knowledge in achieving a competitive advantage. Knowledge is seen as a general resource by the RBV, not as anything with unique features. It doesn't differentiate between various kinds of knowledge-based skills. Information systems may be used to synthesize, enrich, and speed up huge inter- and intraorganizational learning, which can play an essential part in the firm's knowledge-based vision (Alavi & Leidner, 2001).

It's a hypothesis that explains how, why, and at what pace new ideas and technologies spread. Originally published in 1962, Professor Everett Rogers' book diffusion of innovations popularized the notion. The book has been reprinted five times since its original publication in 2003. (Berraies et al., 2020) with Rogers defined

diffusion as the process through which a novel idea gradually spreads across a society. The idea of the distribution of inventions has been influenced by a number of sectors. Five key factors drive the propagation of a new idea: the invention itself, adopters, communication routes, time, and the social structure. Social capital plays an important role in this process. To be self-sustaining, the invention must be broadly embraced. An invention achieves critical mass at a certain rate of adoption.

Geoffrey Moore posits in his 1991 book "crossing the gap" that this is the moment at which the initial consumers and the early adopters meet. "Cross the Chasing" refers to the moment at which the attractiveness of a product or service shifts from a specialized audience to a large audience." Through different theories like the resource based view, human capital theory (Lepak & Snell, 1999) developed a theoretical model of HR architecture. The main thesis of the model is summarized as follows:

Exclusive groups have employed a variety of hiring techniques. HR programmers manage Human Capital in those job arrangements. That is, HC is used to determine exclusive employment relationships, HR arrangements, and their variants. For HC, there are two sizes: its value (for example, the potential to produce HC price and related expenses) and variations (e.g., unique HC specs in a company). The amount of charge and the variability of HC might differ, which affects the different combinations. HC may be quite obvious in many combinations in the company, and these combinations impose on the firm's strategic decisions on employment tactics, employment relationships, and HR reforms; in the HR structure model, the four HC kinds are divided into four quadrants (i.e., types). Within these structures, there are four quadrants. Any business should establish an approach to HC with high value and distinctiveness.

2.1 Human Capital Architecture Model

2.1.1 Human Capital Architecture Model (Quadrant 1)

For HC to have a high value and originality, organizations should adopt an 'internal

development' employment style (i.e., experience and understanding of labor in HC with significant importance and distinctiveness).

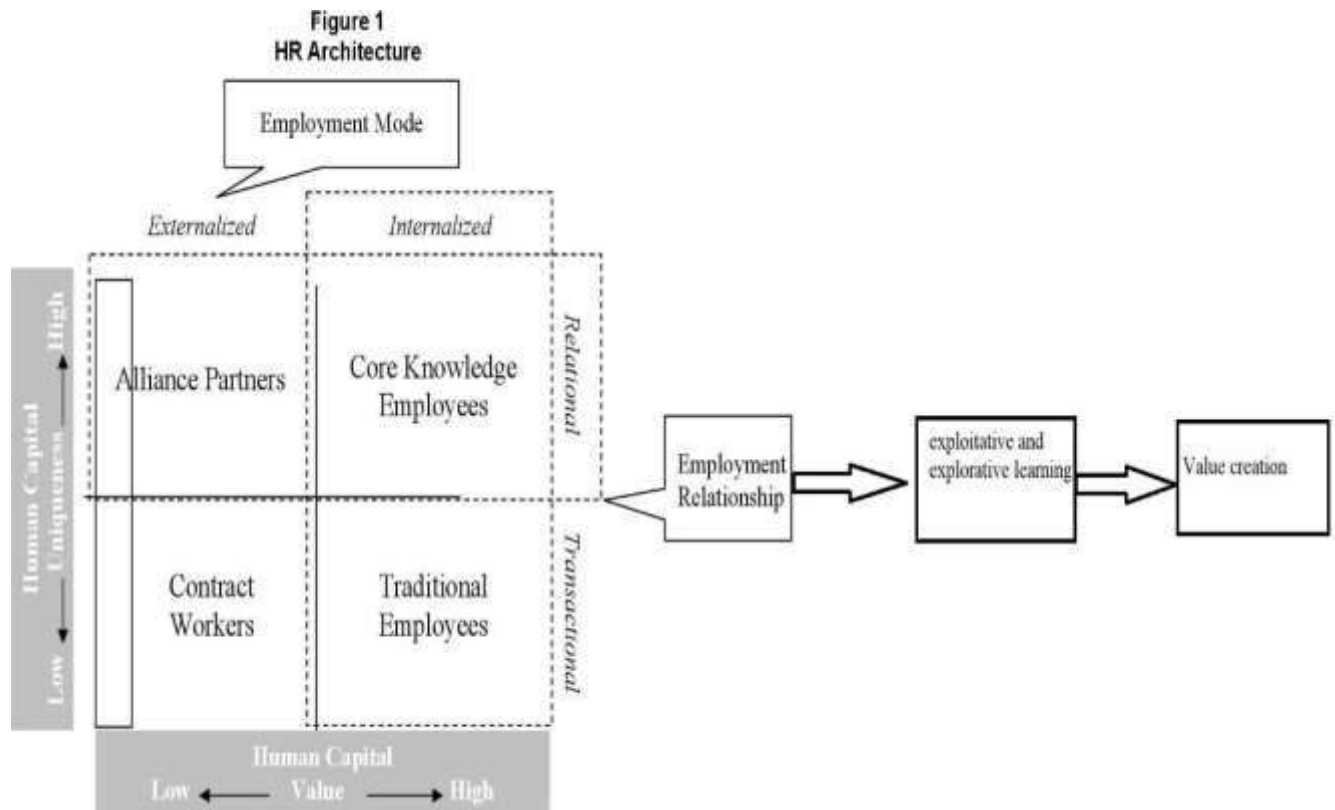


Figure 1 is thoroughly explaining the HR architecture model with learning process and value creation.(Kang et al., 2003)

According to Institution employment connections and a 'commitment-based' HR architecture (Lepak & Snell, 2002)(Quadrant 1, hereafter Q1). The "knowledge-based total employment" shown in the first quadrant refers to workers with remarkably useful and precise knowledge. The HRM tool for specialized personnel is commitment-based and supports internal professional growth as well as employment relationships that are agency-focused between the core team members and the business. speaking about (Lepak & Snell, 2002), the task design for expert employees lets in for modifications in how the activity is done and empowers personnel to make their own selections. Related jobs are based totally on a wide venture range, everyday activity rotation, and an excessive level of task protection. Recruiting and selection are designed to discover the 'excellent round' task

candidate and recognition at the personnel's potential to examine in addition to the potential to contribute to the company's goals and strategic goals. Furthermore, the choice practices have enterprise-inner attention and, therefore, 'emphasize advertising from inside the comprehensive and continuous education is lengthy-term-orientated and is geared toward growing firm-unique talents and understanding. The Company invests a significant number of resources (both money and time) in the education of its center know-how personnel. Performance assessments are generally based on input from a variety of assets, including peers and subordinates, and emphasize individual mastery. The overall performance assessment, like the education sports, is oriented toward achieving the firm's strategic objectives and includes developmental feedback.

The payback and reward procedures are similarly long-term focused, with large benefits applications (for example, inventory ownership application) and incentives for the production of new ideas.

2.1.2 Human Capital Architecture Model (Quadrant 2)

For HC with significant importance but low distinctiveness, businesses should use a "acquisitions" method of hiring with a "mutually supportive" employment connection and a "market-based" HR design (also termed an HR productivity design (Lepak & Snell, 2002) (Quadrant 2, hereafter Q2).

The second quadrant is defined by a 'job-based employment' system, it is based on a market- or productivity-based human resource management system where information is collected and individuals with relevant but not unique skills engage in a symbiotic employment relationship. Workers do tasks that are industry-standard, which is a feature of the productivity-based HRM system. Many job prospects are vetted in the complete recruitment and selection process by targeting diverse recruiting sources, such as colleges and agencies, and utilizing selection methods such as interviews and tests. In order to improve present work performance and promote short-term productivity, training focuses on collecting on-the-job experience.

Performance evaluations are based on objective and verifiable outcomes that By assessing the level of production from each person, both quality and quantity, you can gauge productivity and efficiency. Individual incentives and bonus components are used in conjunction with each other. Pay and awards are based on a straight salary with specific incentives and bonus components added to achieve the market rate. The productivity based HRM system acknowledges total seniority.

2.1.3 Human Capital Architecture Model (Quadrant 3)

A "contractual" employing method (also called contract work schedule in (Lepak & Snell, 2002) is suitable for low and distinctive HC since it allows firms to create "transactional" employment

relationships while still adhering to a "compliance" HR design (Quadrant 3, hereafter Q3).

In the third quadrant, a compliance-based entirely HRM system is used to agree on employees who have no value or specific understanding based on transactional job connections. Employees who work on a settlement basis do duties that are well-defined, straightforward, and have a small number of responsibilities. There isn't a lot of variety in terms of regular and training sports, as well as total performance evaluations that take into account 'regulations, rules, and techniques' (Hong et al., 2019). The compensation is based totally on hourly pay, and rewards focus on brief-time period performances.

2.1.4 Human Capital Architecture Model (Quadrant 4)

Lastly, businesses should implement a "partnership" labor mode with a "partnership" employment relationship and a "cooperative" HR setup for low-value and high-uniqueness HC (Quadrant 4, hereafter Q4) (Lepak & Snell, 2002). Alliances or partnerships and a collaborative HRM machine are mentioned in the fourth and final quadrant. Alliances with outside parties who are involved in employment relationships in the form of a partnership provide very specific knowledge which can't be evaluated but isn't immediately instrumental in developing strategic cost that can't be evaluated but isn't immediately instrumental in developing strategic cost. These employees carry out tasks that are tailored to the individual skills of those working in cross-functional teams and relational networks.

Recruiting and selection processes pay attention to candidates' experience and industry knowledge, as well as their ability to work as a team and collaborate. As a result, the training exercises aid interpersonal family members and crew building. Together with complimenting the team member's performance, the performance of the group as a whole is also included in the performance reports. The core of the compensation schemes are group-based incentives (such profit sharing), which are complemented with bonuses based on previous expertise in the field. According to the rationale shown above, the four HRM systems each provide

a unique contribution to addressing the high expectations for adaptability and inventiveness.

Commitment-based HRM setups meet the demands of keeping up with a fast-paced workplace while also fostering radical innovation. Even in such arrangements, however, additions of productivity and collaborative HR configurations are critical complementarities (for example, for top managers and those involved in R&D). When organizations rely on the knowledge of others). A compliance HRM setup is appropriate in assessments when settings are more predictable and stable, and the demand for improvements concerns extra incremental additions.

Productivity and collaborative HRM arrangements are, once again, essential complementarities (e.g., For senior managers and for the ones sports which might be most effectively used quickly consisting of consultants, who regularly optimize their business strategies to be able to continue to be efficient). In the following sections, we'll look at three alternative HR designs (exploratory, exploitative, and ambidextrous), each of which contributes in a different way to keeping up with the changing environment. Ambidextrous HR designs allow a strong link between exploration and exploitation in terms of context.

Context-agnostic HR designs depend on a mix of commitment- and productive output. Human resources management systems (HRM to cycle workers between explorative and exploitative HR efforts. To sustain dexterity in both the contextual and structural bidirectional HR architecture, integrated HRM techniques (e.g., inducement programming, cross-functional groups, and program frameworks) provide a shared frame of reference for knowledge bridges across exploratory and exploitative domains.

Furthermore, it is important to analyze how different HRM systems and practices might help organizations to build the most effective HR architecture in various dynamic settings (Hansen et al., 2019). An empirical study on how organizations adapt to environmental pressures by implementing ambidextrous HR structures and differentiating their HRM systems according to strategic needs through remuneration systems,

induction programmers, performance assessments, training, and development is particularly relevant (Kang & Snell, 2009). As a result, in order to remain in a dynamic and competitive market, businesses must maintain and deliver service uniqueness flexibility while also moving toward innovation by using their resource base (Hansen et al., 2019). Previous studies have not looked at the adoption of effective HRM systems that always help to provide a balance between service uniqueness and innovation, allowing for a balance of efficiency and innovation. e.g. (Jiang et al., 2012). As a mix of several HRM systems, the varied requirements to leverage current resources and explore new prospects in relation to HR structures must be extensively considered. As a result, in this study, we look at the function of HR architectures in maintaining exploration and exploitation, which allows a company to rearrange its resource base to meet the demands of various dynamic contexts.

To that goal, the following research question is posed: What role do HR designs play in providing a proper balance of exploration and exploitation in a variety of dynamic environments?

The intersection of ambidexterity, exploration, and exploitation, as well as HR structures, is the subject of research. & HRM systems are in short supply? We show how diverse HR designs, which are distinct combinations of HRM systems at the business unit level, generate the essential balance of exploration and exploitation to stay up with service uniqueness and value.

Human capital is an intangible asset or exceptional that is not recorded on a company's balance sheet. It is defined as the monetary value of an employee's knowledge and abilities. This includes factors like education, IQ, talents, health, and a variety of other things. Employers' ratings take into account loyalty and timeliness (Jung & Leem, 2021). The concept of human capital acknowledges that not all labor is equal and that firms may improve the quality of that capital by investing in employees, employees' education, experience, and talents all have monetary value for employers and the economy as a whole (Mirvis & Googins, 2018).

Human capital is important since it is thought to increase productivity and, as a result, profitability. As a result, the more a business invests in its employees (i.e., in their education and training), the more effective and profitable it will be. It is frequently claimed that a company is only as good as its people. Human capital, which includes directors, workers, and executives, is critical to a company's success (Stafoggia et al., 2019).

The success of a firm depends on its board of directors, employees, and management (Stafoggia et al., 2019). Human resource management is the responsibility of the firm's HR department. The recruiting, management, and optimization of personnel fall within the purview of this department. Other goals include personnel strategic planning, recruitment, employee relationships, and reporting and analytics. In global economies, human capital tends to migrate. Thus, a large number of individuals relocate from rural or developing areas to more affluent urban areas. Some economists have labeled this a brain drain since it leads deprived areas to become poorer and wealthy areas to become wealthier.

This has a label on it. This has been labeled a brain drain by some economists, as it causes impoverished locations to become poorer and affluent places to become richer. These investments in human capital are simple to quantify since they are based on the education and training of employees. Before and after making any investments, HR managers may figure out how much money they'll earn. The overall profits of the firm may be divided by the whole amount of human capital investments to arrive at any human capital return on investment (ROI) (Nurmahmudah & Putra, 2020).

2.2 Variables hypothesis And Conceptual Framework

2.2.1 Explorative Learning

Exploring new concepts means "investigation," which is looking at things from various angles and taking risks (Tamayo-Torres et al., 2011), which will be employed to quantify exploration. Students gain knowledge through access to various contexts, including classrooms, the real world, and both virtual and live encounters. Searching for novelty,

thinking about learning from the perspective of meta-reflection allows for learning patterns to be used in a variety of contexts.

2.2.2 Exploitative Learning

An exploitation strategy uses current capabilities, technologies, and paradigms in new ways. As a result, exploitative learning refers to learning achieved by local search, experience improvement, and choosing and using different routines that follow the same path as the previous one (Su, Li, Yang, & Li, 2011). New ideas and knowledge are generated via continuous experimentation to respond to environmental change.

2.2.3 Service Quality

It is the most important tool for an organization to pursue or keep with the organization's novelty and representation depends on its unique services provided to customers through a policy maker or their human capital. And for a unique service, a strong HR Architecture should be built in the organization.

2.2.4 Value Creation

A resource or feature that does not appear on a company's financial sheet is known as human capital. Everything businesses look for in a potential employee is covered, from education and training to IQ to skills and health. Recognizing the fact that not all labor is made equal, human capital. Another important thing for an organization is to maintain its value creation through a positive mind creation of the customer who is providing the services; for strong value creation, strong human capital and HR architecture should be built.

A company may generate significant value creation via the use of both learning methods. Scholars in a variety of management and technical professions, in addition to economics, provide diverse definitions. They might be as simple as "price" being the only concept of value, or they can be more complex. For instance, Flagestad and Hope (2001) When a company delivers cheaper pricing than rivals for comparable advantages or when it gives distinctive benefits that aren't offered by competitors, it creates higher value. more than

offset a higher price. Most economists, however, make a clear distinction between the value and price of a good or service.

2.3 Hypothesis of Study

Through an intensive literature review, this study attempted to extract learning constructs with Value creation and service quality variables from the architectural model, to test the study hypothesis and utilize a suitable method to obtain a more reasonable service quality and with creating a better value creation. As the purpose and nature of this research is to explore service quality implications on value creation, we focus on the conceptualization and measurement of service quality and value creation, as well as their relationships.

Learning processes are very important to keep maintain the service quality and for creating value of the organization. Service quality is an organization's most important tool, which keeps organizations. Up-to-date, and representative based on the unique services their policy makers or human capital. provide to clients, where explorative learning is the creative way to experience ideas, diversity, risk-taking, and creating resilience and discovering new things.

2.3.1 Explorative Learning and value creation

Creating value is another important thing for an organization; in order to maintain added value by creating a positive mindset for customers who provide services, in order to create strong value, a strong human capital, and human resource structure must be established (Fullwood et al., 2019). Both of these learning processes lead organizations to build strong value. Creativity has never come from a single person; instead, it has always come via networks, groups, and organizations.

Value creation for any organization normally arises from diffused and distributed social networks (Sawyer, 2015). Weick and Sutcliffe (2001) states that "increasing social worries about how to manage discontinuities and numerous commitments are indicative of the rising urgency in organizational studies to understand improvisation and learning. (O'Cass & Sok,

2013), disruptions, and fleeting intentions that disintegrate without notice"(Paschen et al., 2021; Podsakoff et al., 2003).

H₁: Explorative learning has a positive relationship with value creation.

2.3.2 Exploitative Learning and Value Creation

Gulati et al. (2008) made the case that corporations may engage in exploitative learning when they completely rely on client knowledge to carry out a range of creative tasks making quick fixes. In this process, businesses must look into the present environment and resources that are accessible, integrate those resources with current knowledge gaps and practical challenges, increase the application of knowledge, and make up for product deficiencies (Duymedjian & Ruling, 2010). Additionally, as communication frequency and closeness gradually improve, customers and businesses' trust in one another will grow, resulting in the development of a solid and long-lasting relationship (Hagedoorn & Duysters, 2002). This close connection will progressively advance knowledge.

This solid connection will steadily encourage information exchange and transmission as well as in-depth knowledge mining, aid businesses in continually improving the present knowledge system, and encourage the progressive accumulation of current knowledge (Yan & Guan, 2018). The enterprises' exploitative learning will thus be supported by the gradual knowledge acquisition and accumulation produced by solid partnerships. As a result, hypothesis:

H₂: Exploitative learning has a positive relationship with value creation.

2.3.3 Service quality as mediator

Using the information and tools offered by an external environment might be added to the concept of explorative learning, which is developed from such notions. Exploratory learning is an option that corporations may consider. However, it might pose certain difficulties when a business contemplates striking a balance between expertise and technology. (Ali, 2021). The knowledge may come from inside the organization, or it may come from very innovative

information they get from outside sources. That can lead the company to stray even more from its initial objectives. (Livieratos et al., 2022).

Explorative learning tactics should also be seen as a long-term goal since if too much thought is given to them, it might have unfavourable effects. Exploratory learning may include costly experimentation, incompetence, and poorly formed ideas when it is used excessively. It may also involve looking for other solutions. With the purpose of offering the highest level of service quality to the stakeholders, new technologies are being tested together with enhanced learning (Dodgson et al., 2013).

For instance, any organization who wants to retain its customers, stakeholders, Organizations have to be committed to provide the best service quality with novelty and being novel depends on how much an organization is treating its human capital with best approval learning (Fullwood et al., 2019; Galvagno & Dalli, 2014; Kang et al., 2007). Sometimes the human capital is not willing to accept the change but providing resources and opportunities could lead them to new learning processes. Better environment and explorative learning involve looking for and trying out new technology or business ventures. Changes in corporate procedures and experimenting with new options are part of this non-routinized learning (Dodgson et al., 2013).

This, if effective, does alter the businesses' areas of expertise and improves their capacity for innovation. For a successful organization, diversity and experimentation are central entrepreneurial activities. Consequently, it provides a positive change in organization. so explorative learning and with novelty and a better service quality can leads to a best value creation in the minds of stake holders. For survival in this era every organization has to be competent. in all aspects.

H3: Explorative learning has a significant relationship with Service quality.

H5: Service quality mediates the relationship between explorative learning and Value creation.

2.3.4 Service Quality as mediator

Exploitative learning is the essence of exploitation, a modification and extension of existing capabilities, techniques, and paradigms, and reuse of existing routines (Pantouvakis & Mpogiatzidis, 2013; Valaei et al., 2017). Leading organizations focus on how to maintain their service quality with existing knowledge. In Government organizations human capital mostly survive on exploitative learning to compete and positively meet the needs of stake holders (Sok &

O'Cass, 2015; Yaşlıoğlu et al., 2013).

While it has long been a contentious subject in academia, government research has not adequately studied how service quality relates to the attainment of value creation continuous-use behavior. (Tantalo & Priem, 2016; Tapaninaho & Heikkinen, 2022). Value creation is a crucial component of the link between service quality and ongoing consumption. It precedes security intention and follows any kind of public service directly. The value users perceive in e-government is quality, and value of price, quality, and value: A means end model and synthesis of evidence, determined in large part by their usage of e-government services and their perception of the quality of those services. E-government can also benefit from this contribution.

(Li & Shang, 2020)

This research explores the relationship between several aspects of perceived value and the actual structure of service quality. (Jamal & Sharifuddin, 2015) Government websites with solid systems, thorough information, user-friendly service design, simple accessibility, strong security measures, dependable operation, and interactive and responsive communication platforms should unquestionably improve people' perceptions of e-government. (Li & Shang, 2020).

H4: exploitative learning has a significant relationship with Service quality.

H6: Service Quality mediates the relationship between exploitative learning and value creation.

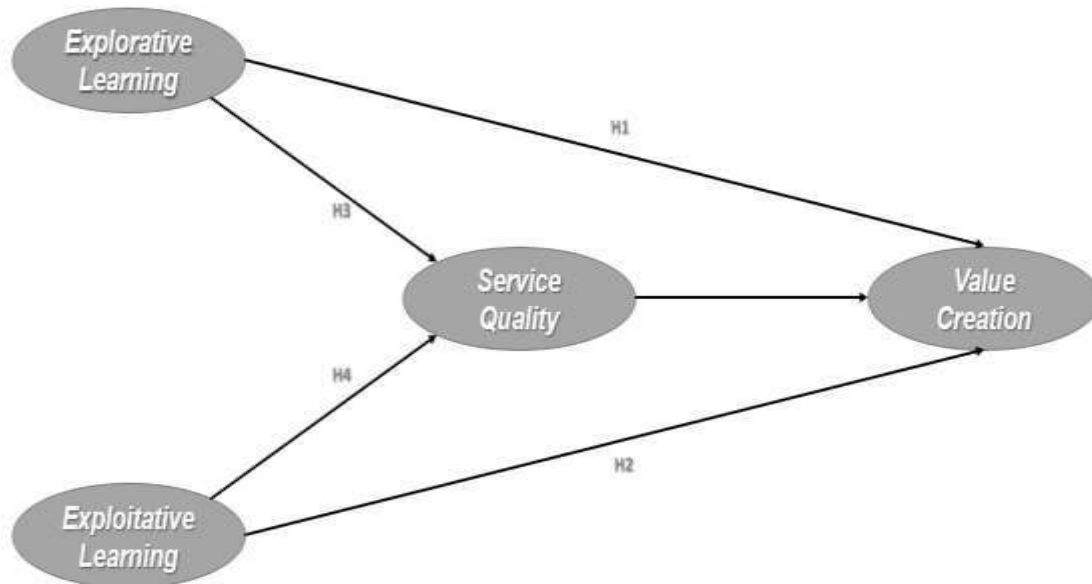


Figure 2 Conceptual Framework

Chapter 3 Research Methodology

The technique plays a critical part in this study project. With the use of the methodology, the study is guided in selecting data gathering techniques, data analysis methods, and data interpretation methods (Supino & Borer, 2012). The research approach used is determined by the subject, the accessibility, and the availability of the data. This chapter is taken as a basis for explaining variable relationships. The methodology section goes over all of the strategies for gathering information and displaying computation and method study.

This chapter aims at highlighting the different stages that have been adopted concerning the methodology of the current study. This chapter explains the nature of the study by discussing the overall research design. Further, this chapter advances with the selection of appropriate research approach, sampling technique, sample size determination, data collection method, development of research instrument, items for measurement, and statistical analytical tools for analyzing the data in the context of this study.

3.1 Research Participants

3.1.1 Research Design

The most crucial component of the research technique, which governs the total research process, is the study design. The study design uses two simple methods of analysis., namely quantitative and qualitative data analysis (Dannels, 2018; Thomas et al., 2018). The main focus of this study was only the quantitative data analysis. Quantitative research involves using data and numbers, and measurements must be quantitative and statistically effective (Bloomfield & Fisher, 2019).

Researchers adopting the positivist approach are expected to examine the interaction of variables, configure events and cause outcomes in quantitative terms (Antwi & Hamza, 2015). Positivism is recognized as Empirical Science, Quantitative Research, Scientific Method, and Post Positivism (Rahi, 2017). Founded on prior literature, the author considers the positivism paradigm to be a more reliable and appropriate approach for this study. To accomplish the research goal, the survey research design was

adopted, where the data is gathered and examined by means of quantitative research procedures.

3.1.2 Data Collection

This study were employed survey questionnaire for the data collecting process (Thomas et al., 2018). The exploratory study used a variety of literary data sources, such as internet publications, published papers, government reports, and news stories, to perform the research. The study design in this work is totally necessary for the overall functioning atmosphere by choosing the appropriate data-gathering technique and executing the procedure of reaching data observations and results (Mallinson et al., 2017). In order to collect maximum authentic data, this study utilizes primary data collection.

3.1.3 Research Population

The study collected quantitative data from government organizations in Quetta city with the help of a research instrument. The population for this research were people from government organizations, having from both gender orientations in Quetta Baluchistan secretariat.

3.1.4 Research Sampling Size and Technique

The study will follow random sampling techniques to collect data from tangible respondents within the research population. The sample size was calculated by an online Raosoft sample calculator and G*power Analysis at the level of significance or $\alpha=0.05$, and 95% is a confidence interval for this study. The study interacted with $N = 368$ people from government organizations. Quantitative data was used to analyze how explorative and exploitative learning affect the human capital architecture model.

The study was attempted to adopt a non-probabilistic convenience sampling technique to collect data from the target sample size. In non-probabilistic sampling the chances of every single element or case chosen from the aggregate population are unknown. Plus, it is also impossible to make statistical inferences from the selected sample although one might still be able to generalize the characteristics of the population from the non-probabilistic samples.

Consequently, convenience sampling entails the random selection of the cases or elements that are easiest to access as a representation of the sample (Saunders et al., 2009).

3.2 Material and Instrument

3.2.1 Research Instrument

Data collection techniques are a very vital factor in the research process. A closed-ended, fully structured, 5-Likert scale questionnaire was used as a research instrument for this study in order to collect responses from a given population. The questionnaire has attached along with this draft (Appendix "A"). The current study employed a self-administered structured questionnaire for obtaining data from the customers that are availing the employees of government organization according to their needs and wants.

The questionnaire was composed of two sections. The first section of the questionnaire contained questions associated with the demographic traits of the subjects in particular their gender, age, monthly income, and education. The second section of the questionnaire comprised of questions specifically aimed at collecting data regarding the service quality, value creation, exploitative learning and explorative learning. The researcher adapted those items for operationalizing the constructs which have already been validated in the relative literature previously. Likewise, the Likert scale were employed for the assessment of items and their quantitative scoring (Abdeen et al., 2016; Bianchi et al., 2019; Cho & Sagynov, 2015; Clemes et al., 2011; Wu et al., 2011). The response of respondents on each item of the study was rated at 5 points Likert scale with ranging with the values assigned 1 as strongly disagree and 5 as strongly agree. The scales were adopted from the past studies such as, four items of the service quality

(Liu et al., 2021), the sample items were "Do you think the employees of your organization are trustworthy" and "Do you think the employees of your organization serve staff accurately".

Moreover, the five items of value creation (Boadi et al., 2022), and the sample items was "Do you think participation in value creation makes the exchange of service with employees enjoyable" and

“Do you think your organization makes you to involve in deciding how the services should be provided by service provider”. The five items of both exploitative learning and explorative learning (Kostopoulos & Bozionelos, 2011), and sample the items for exploitative learning were “The employees of your organization recombine existing knowledge for accomplishing work” and “During the project your organization employees implemented standardized methodologies and regular work practices”. And the sample items for the explorative learning were “The employees in your organization will be systematically searching for new possibilities during the task” and “Employees in your organization offered new ideas and solutions to complicated problems”.

3.3 Procedure

3.3.1 Validity and Reliability

Legality and consistency of the data was maintained all through the data compilation procedure. The history slip was used as an instrument to assemble the information. Samples only from secretariat of government of Baluchistan situated in Quetta were taken. Diverse respondents for the casual interview and history sheet were taken. Data consistency is fundamentally apprehensive with the constancy of data, the exactitude of data assortment technique, and the repeatability of the data collection system. In sort to lessen prejudice, an identical history sheet with similar questions were agreed upon and was analyzed by the same method (Linden et al., 2006).

3.3.2 Pertest Study

A questionnaire pretesting was conducted with the academic experts and random employees of government organizations (Grealish, 2004; Olson, 2010; Presser & Blair, 1994). It was perform to examine and get feedback with regards to various facets of the survey instrument such as ambiguity, readability, and wording of scale given into the questionnaire (Hair, 2009). Expert reviewers aim to ensure that the wordings of the survey instrument are technically appropriate, correct, and rationally demonstrated to the target respondents (Olson, 2010).

Experts help in identifying the questions with potential issues along with those which are structurally or linguistically incorrect, to improve them before incorporating into the final questionnaire (Presser & Blair, 1994; Yan et al., 2012). To avoid any sort of misinterpretation, respondents were requested to share their opinion concerning the wording, clarity, and meaning of the survey questions. Following the feedback process, the questionnaire was revised as a whole.

3.3.3 Pilot Study

A pilot study was conducted on the sample of 50 random employees of government organization and conducted to assure the reliability of the questionnaire. The Cronbach's alpha test were employed to assess the constructs' reliability. It helps to examine the amount of consistency among multiple items of constructs (Hair, 2009). Reliability used to ensure the quality of the questionnaire (Churchill Jr, 1979). The acceptable values of Cronbach's alpha was above the 0.70 values (Hair, 2009). The Cronbach's alpha value for the exploitative learning was 0.924, for the explorative learning was 0.911, for the service quality was 0.908, and for the value creation was 0.927.

3.3.4 Research Data Analysis

After quantitative data collection, all responses were entered into a spreadsheet in tabular format. Statistical Package for Social Sciences (SPSS- Version 26.0) and SMART PLS 4 were brought into use for data analysis. Initially, explanatory statistics were premeditated by SPSS. In descriptive statistics, the data were described, explanatory statistics are followed by inferential data in which hypothesis was tested, and various models were used in accord with the research.

The researcher was used SPSS for screening the data and PLS (partial least square) path modelling technique for testing the relations in the conceptual framework. The researcher suggested the PLS-SEM approach for the following reasons such as it is useful in the estimation of very complicated models with numerous (reflectively measured) constructs (Ali et al., 2018; Hair et al., 2017; Rigdon, 2016; Sarstedt et al., 2016),

specifically when the prediction is the main objective of the analysis (Sarstedt et al., 2017).

PLS-SEM is also an appropriate method of analysis with the statistical objective of examining the maximum variance resulting in the dependent variables by the independent variables (Joseph F Hair et al., 2012; Matthews et al., 2018). PLS-SEM is considered to be the standard multivariate analysis method for determining the causal-predictive relationships (Joseph F Hair et al., 2012; Joe F Hair et al., 2012; G. F. Khan et al., 2019; Richter et al., 2016; Richter et al., 2020; Ringle et al., 2012).

Moreover, the PLS-SEM technique can also be configured in a way to execute advanced modeling analyses such as mediation (Wong, 2016), which is usually measured through a multiitem scale (Matthews et al., 2018). PLS-SEM is also appropriate when the research demands the scores of the latent variable for follow-up analyses (Hair et al., 2019a). This approach is often selected when the sample size is small and the data is non-normal, and when the study is exploratory (Hair et al., 2017). It provides a more comprehensive second-generation approach for statistical data analysis which is more powerful compared to first-generation multivariate methods, which could only examine a single relationship at one time (Hair Jr et al., 2021).

3.4 Research Ethics

The study assessment took a number of ethical concerns pertaining to honorable recognition into account. The initial ethical concerns in this research are the validity and dependability of the sources. (Halcomb & Hickman, 2015). The data was collected on a volunteer basis and was ensured only authentic responses were included. The research report's findings were presented in their original format to guarantee that the data was accurate and trustworthy. No data is copied and pasted in this research. After the survey, the analysis study ensured that all authors cited in the data retrieval submitted a correct and complete reference list.

3.5 Limitations of the Study

This study may have limitations, as mentioned below: -

1. The proposed study was limited to only the mentioned Public sector governmental organizations. Thus, the findings can be generalized for the respective companies only.
2. The study is limited to only the selected people of the respective government organizations located in Quetta Baluchistan due to the associated time and financial constraints.
3. The research relied on data provided by the participants of the study; therefore, the chances of biasness can happen.

Chapter 4

Data Analysis

4.1 Introduction

This chapter aims to examine the data analysis and provide an overview of the research problem and the specific research questions being addressed, the statistical significance of the study, and a brief explanation of the methods and data used to analyze the data. This chapter also provides a brief results discussion on the existing research on service quality and its relationship to explorative and exploitative learning and value creation. The responses acquired were empirically analyzed by using Smart PLS-4 software.

This chapter starts with an explanation of the data screening process. Furthermore, after the brief explanation of descriptive analysis for the target sample, the author described a two-step PLS method for determining the reliability, the validity of the construct and examined the proposed hypothesis, followed by a brief discussion of the findings. Finally, the analysis of variance, predictive relevance, and PLS prediction of the related models are also explained.

4.2 Data Screening

Data screening is used in data analysis to identify and remove any errors, inconsistencies, or outliers in the data set. This process is typically done before any statistical analysis is performed, as these issues can significantly impact the results' accuracy and interpretability (Hair, 2009). There is a greater chance of missing data being present when the

respondent fails to address one or more items in the survey, as they are less likely to try to answer those questions (Tabachnick et al., 2013). Data cleaning involves checking for and removing any missing or invalid data values. This can include removing duplicate records or data outside the expected range. The missing value analysis (in SPSS-26) of this study shows that 17 questionnaires from 385 responses were incomplete and dropped from the final analysis.

Moreover, the data validation process involves checking the data for consistency and accuracy. This can include checking for outliers, ensuring that data is entered in the correct format, and checking for any other cross-checked and corrected inconsistencies. Finally, the process of data transformation entails converting the data into a format that is acceptable for analysis. Recoding variables, developing new variables, or gathering data are examples of this. (Tabachnick et al., 2013). Data screening is essential in data analysis as it ensures that the data is accurate and reliable and that any issues are identified and addressed before the data is analyzed.

In addition, bootstrapping is a statistical method used to estimate a population's distribution from a sample. It is a resampling technique that allows us to estimate the uncertainty in the data sample statistics by generating multiple samples from the original sample and calculating the statistics of interest for each new sample. This study did not consider examining the outliers and normality due to the bootstrapping of PLS-SEM analysis. Bootstrapping is a powerful tool for understanding the uncertainty in sample statistics and making inferences about populations. It can be particularly useful in cases where the sample size is small or the population distribution is unknown (Jimenez-Mesa et al., 2023).

PLS-SEM by using Smart-PLS is a non-parametric (bootstrapping) method in which the findings are not affected by the assumptions of outliers and normality issue detection (Hair Jr et al., 2021). Above all these preliminary analysis procedures, the most substantial part of data screening determining before proceeding to the assessment of the measurement model and structural model is the determination of common-method bias.

Provided that the present study employed self-reporting scales, Harman's single-factor analysis was conducted using SPSS-26 by determining a fixed number of factors as 1 in factor extraction. Harman's single factor test indicates that the total variance explained by the single factor was only 46.6%, below 50% (Fuller et al., 2016; MacKenzie & Podsakoff, 2012; Podsakoff et al., 2003) (Table B1-Appendix B).

4.3 Descriptive Statistics

The study further examined the sample characteristics for the fundamental investigation of the research respondents. It provides an interactive illustration of the demographic information for the study sample. The demographic attributes of the target sample are determined through frequency analysis using SPSS-26. Identifying a better understanding of targeted respondents, a frequency table is designed for gender, age, qualification, income, experience, employment status, and marital status. The frequency and percentage of each demographic variable are demonstrated in Table 1.

The first demographic characteristics gender variable estimates the sample proportion of gender participating in the research. This characteristic is important to consider in research as it can influence the responses of individuals. The gender variable shows that 220 male respondents participated in the research survey (59.8%) of the overall sample research, and 148 respondents were females, which is 40.2% of the sample.

Similarly, the data was obtained from 368 respondents via the distribution of face-to-face structure. The age variable indicates that out of the overall sample of 368 respondents, 10.6 % of the sample respondents (39) were age less than 25 years, 17.4% having age (64) between 26 to 30 years, 23.9% of respondents age (88) were between 31 to 35 years, 38% of respondents age (140) were between 36 to 40 years, and rest of respondents age (37) were above 40 years.

Likewise, the dissemination of sample data according to income variable was divided into had categories, out of which 19% of respondents had monthly income between 20,000 to

40,000 Pakistani rupees, 21.2% of respondents had monthly income between, 12.5% between 40,000 to 60,000, 40.8% of respondent’s monthly income ranges from 60,000 to 80,000 rupees, 16%

of respondents had monthly income between 80,000 to 100,000, only 3% of respondents having above 100,000 monthly incomes.

Table 1 Descriptive Statistics

Variables	Categories	Frequency	Percent
Gender	Male	220	59.8
	Female	148	40.2
Age	Below 25	39	10.6
	26 to 30	64	17.4
	31 to 35	88	23.9
	36 to 40	140	38.0
	41 to 45	19	5.2
	46 to 50	12	3.3
	Above 50	6	1.6
Qualification	Intermediate	53	14.4
	Bachelor	152	41.3
	Masters	156	42.4
	Ph.D.	7	1.9
Income (PKR)	20,000-40,000	70	19.0
	40,000-60,000	78	21.2
	60,000-80,000	150	40.8
	80,000-100,000	59	16.0
	Above 100,000	11	3.0
Experience (Years)	Less than 3	46	12.5
	3 to 5	138	37.6
	6 to 8	87	23.6
	9 to 12	52	14.1
	Above 12	45	12.2
Employment Status	Permanent	227	61.7
	Contractual	141	38.3
Marital Status	Single	65	17.7
	Married	301	81.8
	Divorced	2	0.5

The qualification variable represents that 14.4% (53) of respondents had an intermediate level of education, 41.3% (152) had a bachelor’s qualification, 42.4% (156) of respondents were having master’s qualification, and 1.9% of respondents were having Ph. Ds degree. Hence, respondents possessing a master’s qualification were high in percentage. Moreover, the experience

variable shows that 37.6% of respondents (138) had working experience of 3 to 5 years and 23.6% of respondents (87) had working experience between 6 to 8 years, only 12.5% had working experience less than 3 years, and 12.2% of respondents were having working experience greater than 12 years. The employment status variable shows that 227 respondents were

permanent government employees, 61.7%, and 141 employees are contractual base, which is 38.3% of the overall sample. Finally, the marital status indicates that 36.1% of respondents were single, 63.4% were married, and only 2, which is .5% of the overall sample respondents, were divorced.

4.4 PLS-SEM

The current research has employed PLS-SEM (version 4) for analyzing data empirically to meet the research questions (Ringle et al., 2012). Partial Least Squares Structural Equation Modeling (PLS-SEM) is a statistical method used in management science to analyze relationships between latent variables and their indicators. It combines elements of both traditional Structural Equation Modeling (SEM) and Partial Least Squares (PLS) regression analysis (Hair Jr et al., 2021; Lee et al., 2011; Nitzl, 2016).

The main use of PLS-SEM in management science is to test complex theoretical models, such as those that describe the relationships between several variables in a business or organizational context. PLS-SEM allows researchers to test models with latent variables, which are variables, that cannot be directly observed but can be inferred from the measurement of other variables (Hair, 2009; Henseler et al., 2009).

PLS-SEM also allows for the estimation of relationships between variables that are not linear, and it can handle complex data structures, such as those with missing values and multicollinearity. Overall, PLS-SEM is a valuable tool for management researchers and practitioners interested in understanding the relationships between variables in complex systems. It provides a way to test theoretical models, predicts outcomes, and make decisions based on the results (Hair Jr et al., 2020; Sarstedt et al., 2014).

4.5 Measurement Model

The first step that must be taken as a part of the PLS-SEM process involves assessing the measurement models. There is a difference between the standards that should be applied to formative and reflective constructs (Hair Jr et al., 2020). If all the required standards are achieved,

the researchers must evaluate the structural model (Hair Jr et al., 2021). PLS-SEM has particular guidelines that function to assess the model results as is the case with most statistical techniques (Chin, 2010; Götz et al., 2010; Roldán & Sánchez-Franco, 2012).

In evaluating the reflective measurement model, the reliability of each item, discriminant validity, convergent validity, and content validity are examined (Henseler et al., 2009; Sarstedt et al., 2014). According to Hair Jr et al. (2021), researchers must determine each item's reliability along with their internal consistency, discriminant validity of construct, and convergent validity measures for the evaluation of the reflective measurement model. The current research model investigates reflective constructs, value creation, explorative and exploitative learning and service quality.

4.5.1 Individual Items Reliability

The first step in assessing the reflective measurement model is examining the indicator's reliability. It indicates the extent of variance of each indicator explained by its construct (Hair et al., 2019a). The reliability of each item can be determined by evaluating the outer loadings of indicators (measures) of each construct (Hair Jr et al., 2017). The outer loading values are analyzed in the outer model to check the correlations among the latent variable and its associated reflective indicators (Hair et al., 2019a; Wong, 2013).

As a rule of thumb, items with an outer loading above the threshold of 0.6 are retained, while items with outer loadings within the range of 0.4 and 0.6 are deemed for removal only when removing those items will result in improving the average variance extracted (AVE) value or the composite reliability above the recommended thresholds (Afthanorhan, 2014; Hair Jr et al., 2014). The outer loadings of the indicator should not be less than 0.6, and preferably above 0.7 is recommended (Henseler et al., 2009).

Therefore, the outer loadings of constructs presented in (Table 2), such as value creation, ranged from 0.757 to 0.887, exploitative learning ranged from 0.778 to 0.878, exploratory learning ranged from 0.730 to 0.812, and service quality

ranged from 0.805 to 0.912. Furthermore, two items were dropped in the inter-item reliability analysis due to low factor loadings. The two items for the latent constructs, value creation V Creation 3 and exploitative learning construct ExploitLearn3 deleted due to loading less than 0.6 (Hair Jr et al., 2020).

4.5.2 Internal Consistency Reliability

Internal consistency of constructs usually is determined through the composite reliability of

latent constructs when using PLS-SEM (Sarstedt et al., 2017). It has been suggested that a threshold of 0.7 or higher should be used to measure the coefficient of composite reliability (CR) of latent constructs (Hair et al., 2020). Table 2 exhibits the coefficients of composite reliability for the constructs of this study. The composite reliability coefficient for value creation was 0.902, exploitative learning was 0.897, explorative learning was 0.885, and service quality had 0.914.

Table 2 Reliability and Validity

Latent Constructs	Factor Loadings	Cronbach's alpha	CR	AVE
Value Creation		0.854	0.902	0.698
VCreation1	0.887***			
VCreation2	0.871***			
VCreation4	0.757***			
VCreation5	0.820***			
Exploitative Learning		0.847	0.897	0.686
ExploitLearn1	0.859***			
ExploitLearn2	0.878***			
ExploitLearn4	0.795***			
ExploitLearn5	0.778***			
Explorative Learning		0.842	0.885	0.607
ExploratLearn1	0.730***			
ExploratLearn2	0.807***			
ExploratLearn3	0.812***			
ExploratLearn4	0.805***			
ExploratLearn5	0.739***			
Service Quality		0.875	0.914	0.728
SQuality1	0.912***			
SQuality2	0.833***			
SQuality3	0.858***			
SQuality4	0.805***			



Note. CR = Composite Reliability; AVE = Average Variance Explained. Vcreation= value creation, Exploit Learn=Exploitative Learning, ExploratLearn=Exploratory Learning, and SQuality=Service Quality. On the other hand, Cronbach's alpha approach also be used to examine the internal consistency

reliability of variables (Sarstedt et al., 2017). Table 2 indicates that the Cronbach's alpha coefficients for all the constructs of the current study are greater than the minimum threshold value of 0.7 as suggested by (Churchill Jr, 1979; Hair, 2009); that is, the coefficient of Cronbach's alpha value creation was 0.854, exploitative learning was

0.847, explorative learning was 0.842, and service quality have 0.875.

4.5.3 Convergent Validity

The convergent validity of the constructs can be assessed with the average variance extracted (AVE) value recommended by Fornell and Larcker (1981). In order to determine the convergent validity of the construct, a rule of thumb is that the AVE value must be at least 0.5 in order to determine convergent validity (Chin, 1998). A measure of the proportion of the variance of an indicator that is explained by the latent variable. AVE should be greater than 0.5 for an indicator to be considered a good measure of the latent variable (Hair Jr et al., 2020). Based on the AVE reported in Table 2, this study confirms that the constructs all have attained an AVE value above 0.5 and range from 0.607 to 0.728; thus, it

confirms that the variables explain sufficient convergent validity (Chin, 1998).

4.5.4 Discriminant Validity

While evaluating the discriminant validity, the first criteria used in this study was Fornell and Larcker's guidelines to evaluate the quality of structural equation models (SEM). Discriminant validity assesses the extent to which indicators measuring different latent variables are not correlated (Hair Jr et al., 2020). It is important to ensure that indicators of different latent variables are not measuring the same construct to avoid measurement errors and increase the study's validity. The correlation between latent variables should be less than the square root of the average variance extracted (AVE) for each latent variable (Fornell & Larcker, 1981).

Table 3 Discriminant Validity Fornell and Larcker Criterion

	Exploitative Learning	Explorative Learning	Service Quality	Value Creation
Exploitative Learning	0.828			
Explorative Learning	0.681	0.779		
Service Quality	0.499	0.472	0.853	
Value Creation	0.535	0.513	0.716	0.836

Note. The bold elements represent AVE's square root value, and the correlations among constructs are depicted through diagonal values. AVE is a measure of the proportion of the variance of an indicator that is explained by the latent variable. The correlation between latent variables should be less than the square root of the AVE to ensure that the latent variables are not measuring the same construct (Hair et al., 2016; Hair et al., 2019b).

Nonetheless, Table 3 illustrates that the square root of AVE is higher than the correlations between the variables. Therefore, it can be presumed that indicators in the current study have a considerable extent of discriminant validity, and all the square root values of AVE are greater than the variables' correlation values.

Table 4 Discriminant Validity Hetro-Trait Mono-Trait Ratio (HTMT Ratio)

	Exploitative Learning	Explorative Learning	Service Quality	Value Creation
Exploitative Learning	0.806			
Service Quality	0.577	0.511		
Value Creation	0.623	0.570	0.825	

Secondly, the HTMT ratio is used as a second evaluation criterion of discriminate validity. The results of the HTMT ratio in Table 4 show that all the values are lesser than 0.85; hence the discriminate validity is achieved. Furthermore, a cross-loading approach can also be employed to determine the discriminant validity of the constructs (Duarte & Amaro, 2018; Henseler et al., 2009). As a general principle, the outer loading of an indicator on the related construct should be

higher than the rest of its cross-loadings, that is, its correlations with other subsequent constructs (Chin, 1998; Götz et al., 2010; Tehseen et al., 2017). Similarly, the results indicate that the cross-loadings on each indicator are greater than all of its related cross-loadings, which suggests that there is no issue of discriminant validity see Table 5. The measurement model for reflective constructs is also depicted in Figure 2.

Table 5 Discriminant Validity Cross Loadings

	Exploitative Learning	Explorative Learning	Service Quality	Value Creation
ExploitLearn1	0.859	0.246	0.172	0.076
ExploitLearn2	0.878	0.205	0.02	0.216
ExploitLearn4	0.795	0.132	0.253	0.083
ExploitLearn5	0.778	0.185	0.128	0.186
ExploratLearn1	0.035	0.73	0.211	0.128
ExploratLearn2	0.052	0.807	0.236	0.285
ExploratLearn3	0.111	0.812	0.146	0.276
ExploratLearn4	0.224	0.805	0.222	0.251
ExploratLearn5	0.052	0.739	0.038	0.188
SQuality1	0.182	0.274	0.912	0.267
SQuality2	0.195	0.284	0.833	0.244
SQuality3	0.234	0.191	0.858	0.271
SQuality4	0.103	0.005	0.805	0.214
VCreation1	0.058	0.269	0.177	0.887
VCreation2	0.236	0.082	0.155	0.871
VCreation4	0.292	0.106	0.181	0.757
VCreation5	0.084	0.164	0.014	0.82

Note. The highlighted value in the same factor highlights the factor loading with the same factor of each item.

4.6 Structural Model Analysis

When the evaluation of the measurement model is satisfactory, the second step in assessing the results of PLS-SEM is the structural model assessment. The conventional criterion for assessing the structural measurement model includes collinearity issues, statistical significance,

path coefficients relevance, coefficient of determination (R^2) and f^2 effect size (Fornell & Larcker, 1981). Besides, the out-of-sample predictive power of the model is also determined using the PLS prediction method (Shmueli et al., 2019).

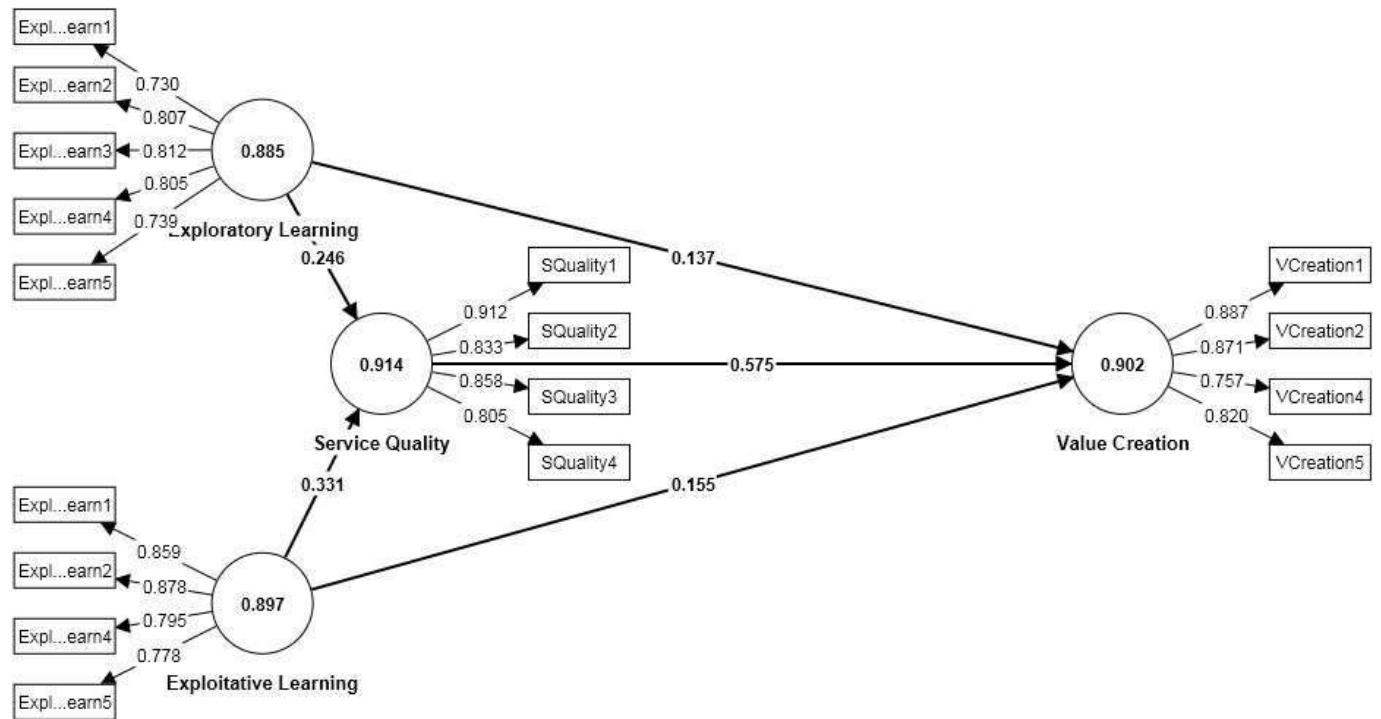


Figure 3 Measurement Models of Constructs with Outer Loadings

4.6.1 Issues of Collinearity

In structural model assessment, the first step is to examine the collinearity among the predictor constructs of the endogenous variable, which was analyzed through variance inflation factor (VIF) values before evaluating the relationships in the structural model. There is an issue of multicollinearity if the VIF values are equal to 5 or above (Sarstedt et al., 2017). VIF values close to 3 or below are ideal (Hair et al., 2019a). Inner VIF values for predictor constructs of the structural model, as shown in Table 7, demonstrate that there is no problem of collinearity as all the VIF values are lower than 3, service quality has a VIF value of 1.39, exploitative learning has a VIF value 2.01, and exploratory learning having VIF 1.94.

4.6.2 Path coefficients

The researcher employed the standard bootstrapping approach with 5000 bootstrap samples and used a total of 368 cases to estimate the significance of path coefficients (Hair Jr et al., 2021; Henseler et al., 2009). Table 6 depicts estimates of significance level (p-value), path coefficients (β), and t-statistics for every hypothesized association in the conceptual model. Analyzing the findings from the bootstrapping of paths, the rejection and acceptance of the proposed hypothesis are assessed following the previous literature in the social science domain by considering alpha (α) at a significance level of 5% (Tabachnick et al., 2007).

Results exhibited in Table 6 show a positive and significant association of exploitative learning with the value creation of government sector employees ($\beta = .155$, $t = 3.12$, $p = 0.001$), where β reflects that

a 1% increase in exploitative learning causes a 0.155% increase in value creation of government sector employees. Therefore, H_1 is supported.

Table 6 Structural Model (Hypothesis Testing)

Hypothesis	B	ST. D	T-Stat	P Values	Decision
Exploit Learn → VC	0.155***	0.050	3.120	0.001	Supported
ExploratLearn → VC	0.137***	0.055	2.469	0.007	Supported
Exploit Learn→SQ	0.331***	0.081	4.105	0.000	Supported
ExploratLearn→SQ	0.246***	0.077	3.211	0.001	Supported
Exploit Learn→SQ → VC	0.190***	0.047	4.063	0.000	Supported
ExploratLearn→SQ → VC	0.142***	0.046	3.101	0.001	Supported

Note. *, **, *** represents 10%, 5% and 1% respectively. B=path coefficients, ST. D= standard deviation of the sample, t-statistics and p values is calculated through 5000 bootstrapping.

Moreover, it is observed that the second hypothesis of the current study for the learning perspective as explorative learning is also supported. H_2 with ($\beta = .137$, $t = 2.47$, $p = 0.007$) demonstrates an association between exploratory learning and value creation in a positive and significant direction. Furthermore, both learning perspectives on service quality were also investigated. The H_3 with the values of ($\beta = .331$, $t = 4.105$, $p = 0.000$) shows that exploitative learning is also associated with significant increases in service quality.

Moreover, H_4 with ($\beta = .246$, $t = 3.21$, $p = 0.001$) presents that the relationship between exploratory learning and service quality is positive and significant. Moreover, the mediating results show that service quality significantly mediates the relation of exploitative learning and value creation ($\beta = 0.190$, $t = 4.063$, $p = 0.000$); thus, H_5 is supported. Finally, the mediating results show that service quality significantly mediates the relation of explorative learning and value creation ($\beta = 0.142$, $t = 3.101$, $p = 0.000$); thus, H_6 is supported. The structural model of conceptual framework constructs is depicted in Figure 3.

4.6.3 Analysis of Variance

Another principle standard for assessing the structural models involves the evaluation of the R^2 value, also entitled the coefficient of determination (Hair et al., 2011; Henseler et al., 2009). R-

58

squared is a measure of goodness of fit in Partial Least Squares Structural Equation Modeling (PLS-SEM) that reflects the proportion of explained variance in the dependent variable. In PLSSEM, R-squared is calculated as the proportion of variance in the latent variable explained by the independent variables. It summarizes how well the model fits the data, with higher values indicating a better fit. R-squared can be used to compare different PLS-SEM models to determine which model provides the best explanation of the data.

The value of R^2 reflects the percentage of variation in the endogenous constructs, which could be explained collectively by one or more exogenous constructs (Elliott & Woodward, 2007; Hair, 2009). Generally, the R^2 value of 0.60 is considered substantial, 0.33 is reasonable, and 0.19 is weak (Chin, 2010). The values of R^2 are given in Table 7, and the value of R^2 obtained for the construct was 0.565 (as shown in Table 7), demonstrating that the overall model with constructs (See Figure 3) explains 56.5% of the

variance in value creation and 28.1% in service quality by exploitative and exploratory learning.

Table 7 Explained Variance, Effect Size and Multicollinearity

	R ²	Adj-R ²	f ² Service Quality	f ² Value Creation	VIF
Service Quality	0.281	0.277		0.546	1.391
Value Creation	0.565	0.561			
Exploitative Learning			0.082	0.027	2.017
Explorative Learning			0.045	0.022	1.948

Note. R² = coefficient of determination, f²= effect size, VIF= variance inflation factor for multicollinearity.

Conclusively, as per Chin (1998) guidelines, the values of R² obtained for constructs are strong.

Correspondingly, the f² effect size statistic for the current study is also measured, which evaluates the extent to which a predictor construct contributes to explaining the endogenous variable in terms of R² value.

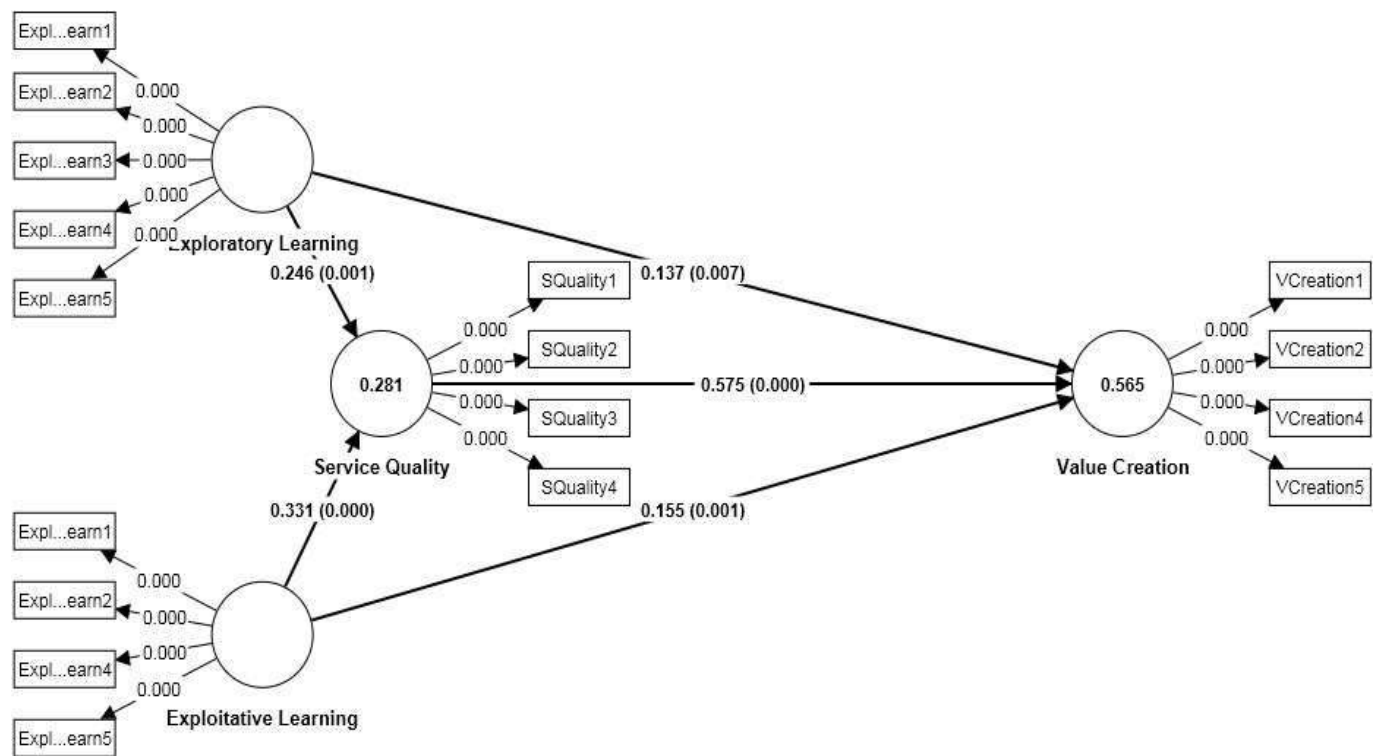


Figure 4 Structural Models between Constructs with Beta and Significance Values

According to Cohen (2013) guidelines, the value of f² above 0.35 indicates substantial, 0.15 shows moderate, and 0.02 reflects small effect sizes. The f² effect size for latent constructs is given in Table 7. The f² effect size values in Table 7 for constructs

illustrate that both learning perspectives (exploitative and explorative) have small effect whereas service quality has a large effect on value creation.

4.7 Chapter Summary

This chapter discussed the analysis and findings, beginning with the descriptive analysis and briefly explaining the purpose of the chapter and the research questions being addressed. The researcher discussed the method of analysis being employed. Descriptive Statistics provide summary statistics such as mean, standard deviation, and frequency distribution to describe the characteristics of the sample.

Furthermore, this chapter elaborated on the tables and figures associated with the reliability and validity of constructs in assessing the measurement model. Moreover, the structural model assessment briefly discussed the proposed hypothesis, which was empirically analyzed and presented the results of hypothesis testing, including tables to visualize the results and help illustrate the relationship in the data. Finally, the results interpretation, and the statistical tests, including the effect size, significance levels, and variances, are explained. The upcoming chapter five is further built on the definite discussion and conclusion of the current study.

Chapter 5

Discussion And Conclusion

5.1 Introduction

This chapter discusses and provides the conclusion for a study examining the relationship between exploitative and exploratory learning, service quality, and value creation should provide an overview of the study's purpose, objectives, and main findings. In the following chapter, the present study's findings are elaborated in detail, which was previously described in the results section. Further, this chapter comprises a discussion, conclusions, and theoretical and managerial implications sections. The proposed hypothesis and findings are briefly described in the discussion section. Moreover, this chapter provides context for the discussion and conclusion and sets the stage for the reader to understand and appreciate the significance of the study's results and implications. The clear and concise overview of the study makes it easy for the reader to understand the study's purpose, methodology, and main findings.

5.2 Discussion

The current research investigated the influence of exploitative and exploratory learning and employee service quality and value creation in the government sector in Quetta, Baluchistan. The conceptual model and hypothesis for the present study were established following the review of latent literature.

Exploitative learning involves using existing knowledge, systems, and processes to improve efficiency and productivity, whereas exploratory learning involves seeking new information, ideas, and methods to expand knowledge and create new value. In the government sector, exploitative and exploratory learning is important for enhancing service quality and creating value for citizens. Exploitative learning helps to improve existing services by making them more efficient and accessible, thereby improving customer satisfaction.

On the other hand, exploratory learning can lead to developing new and innovative services that address emerging needs and trends, creating new value for citizens. When used in combination, exploitative and exploratory learning drives continuous improvement in service quality and enhances the overall value proposition of government services. Investing in both types of learning, government organizations ensure they are meeting the changing needs of employees while also leveraging existing resources and knowledge to create maximum value.

5.2.1 The Significant positive relationship between explorative learning and value creation

A preliminary study of the findings of this study suggest that exploratory learning positively influences value creation, as outlined in the second hypothesis. The statistical test also confirms the suggested claim; the results established a significant association between exploratory learning and value creation. The results suggest that exploratory learning is a process that helps in discovering new information, generating new ideas, and creating new opportunities (Bauer et al., 2018; Bordeleau et al., 2020; Fink et al., 2017). This process of learning can lead to value creation by enabling individuals

or organizations to identify new market trends, unmet customer needs, and untapped resources, which then be leveraged to create new products, services, or business models that deliver value to customers and employees (Madichie & Gbadamosi, 2017; Weerawardena et al., 2021).

The positive relationship between explorative learning and value creation refers to the idea that explorative learning can create new value. When individuals or organizations engage in exploratory learning, they gain new insights and knowledge about their environment, which can inform the development of new products, services, or business models (Jonsson et al., 2008).

This results in creating new value for customers, as the organization is better equipped to meet their needs and preferences (Sumanarathna et al., 2020). Additionally, exploratory learning led to the discovery of new market opportunities, which can be exploited to create new value for customers and stakeholders.

Explorative learning help organizations discover new resources, such as technology or talent, which can be leveraged to create new value. The insights generated through explorative learning inform strategic decision-making, allowing organizations to make better choices about the direction of their business and the types of products and services they offer. Overall, the positive relationship between explorative learning and value creation is driven by the ability to drive innovation and inform strategic decision-making, leading to improved outcomes for customers and organizations. Therefore, exploratory learning is a key driver of organizational innovation and value creation.

5.2.2 The Significant positive relationship between exploitative learning and value creation

A preliminary hypothesis of this research suggests that exploitative learning positively affects the value creation of government sector employees. The statistical analysis also affirms the suggested claim; the results also verified the positive impact of exploitative learning and the value creation of employees (Bauer et al., 2018; Kang et al., 2007). Exploitative learning uses existing knowledge, systems, and processes to improve efficiency and

productivity. It plays a crucial role in value creation by helping organizations optimize their existing resources and processes to increase efficiency, reduce costs, and improve quality (Fink et al., 2017;

Sumanarathna et al., 2020).

Exploitative learning enables organizations to understand better their existing systems and processes, which can provide a foundation for future innovation and value creation.

Organizations continuously refining and improving existing processes and systems, exploitative learning enables organizations to deliver higher value to customers and stakeholders. This increased value can come from better products, improved services, or more efficient operations. Exploitative learning also helps organizations stay competitive by enabling them to keep pace with changes in the market, technology, and customer needs. The organization continuously optimizes its existing systems and processes, and it can maintain its edge and continue delivering value to customers and stakeholders over time (Eriksson et al., 2017).

Exploitative learning provides organizations with the data and insights they need to make better decisions, leading to improved performance and increased value creation. Organizations that engage in exploitative learning can stay ahead of competitors by continuously improving their systems and processes, leading to a more competitive position in the market and higher value creation (Zhu et al., 2018).

Exploitative learning can also lead to increased innovation by providing organizations with a better understanding of their existing systems and processes, which can serve as a foundation for future innovation (Hughes et al., 2007). In conclusion, exploitative learning is important for value creation as it helps organizations leverage their existing knowledge, systems, and processes to continuously improve efficiency, reduce costs, and deliver higher value to customers and stakeholders.

5.2.3 Explorative Learning with Service quality and mediates the relationship among explorative learning and value creation.

The next assumption of the study emphasized determining the positive relationship between service quality and value creation in government sector organizations. The relationship between service quality and value creation from an employee perspective refers to the idea that high-quality service delivery results in increased value for employees and the organization (Galvagno & Dalli, 2014; Luo et al., 2019). When employees deliver high-quality services, they create value for employees by meeting their needs and expectations, and also for the organization by improving its reputation and building trust with employees. The statistical outcome of the study supports the hypothesized relationship between service quality and value creation (Huang & Lin, 2020; O'Cass & Sok, 2013; Yaşlıoğlu et al., 2013).

This positive relationship between service quality and value creation is enhanced through effective training and development programs, collaboration and communication among employees, and continuous improvement initiatives that allow employees to refine their skills and knowledge continuously. In summary, service quality and value creation are closely linked in government organizations, with high-quality service delivery leading to increased value for citizens and the organization. Developing effective training and development programs, collaboration and communication among employees, and continuous improvement initiatives can help further enhance this relationship.

The study also implied that service quality has a significantly positive effect on explorative learning and value creation. The statistical tests also confirmed this assumption and demonstrated a positive link between explorative learning on service quality. In the context of a government organization, the positive relationship between explorative learning and service quality from an employee perspective refers to the idea that explorative learning can lead to improved job satisfaction, performance, and service delivery among employees (Mosadeghrad, 2014; Pantouvakis & Mpogiatzidis, 2013; Seth et al.,

2005). When employees in a government organization engage in explorative learning, they have the opportunity to gather new information, insights, and knowledge about their environment and the needs of citizens, which can inform the development of new policies and programs that deliver higher-quality services (Phipps, 2001; Slåtten, 2010).

In explorative learning, employees can identify new trends and issues facing citizens and new opportunities for improvement in service delivery. This informs the development of new policies and programs that better address the needs of citizens and lead to improved service quality. In addition, explorative learning also helps employees better understand the challenges and limitations of their current policies and programs, allowing them to identify areas for improvement and make changes that deliver better outcomes for citizens.

This results in continuous improvement and enhanced service quality for citizens. Therefore, exploratory learning is critical for government organizations as it allows employees to gather new information, insights, and knowledge that inform the development of better policies and programs, leading to improved job satisfaction, performance, and service delivery for citizens.

5.2.4 Exploitative Learning with Service quality and mediates the relationship among exploitative learning and value creation.

The last assumption of the study proposed that service quality has a positive effect between exploitative learning and value creation along with the mediating effect of service quality. The statistical test supports this presumption; the results indicated a significant relationship between exploitative learning and service quality (Tho & Duc, 2021). The positive relationship between exploitative learning and service quality refers to the idea that exploitative learning leads to improvements in service quality (Sok & O'Cass, 2015; Wang & Rafiq, 2009).

Exploitative learning is the process of refining and improving existing services and processes based on knowledge and experience gained from past performance (Dhar, 2015).

Organizations continuously refine and improve existing offerings, enhancing service quality, which can result in increased employee satisfaction and loyalty. For example, through exploitative learning, organizations identify and address pain points in their service delivery process, implement employee feedback, and improve their operations to provide a better employee experience (Phipps, 2001; Xie, 2005).

When employees engage in exploitative learning, they can refine and improve their skills and knowledge, leading to increased job satisfaction and a sense of accomplishment. This, in turn, results in higher levels of employee engagement and motivation, leading to improved job performance and enhanced service quality (Ramayah et al., 2011). Exploitative learning in an organization identifies the areas for employee improvement in their job performance and takes steps to address those areas (Seth et al., 2005). This can include ongoing training and development and collaboration with colleagues to share best practices and gain new insights. This improvement process can lead to increased job satisfaction, motivation, and performance among employees, resulting in improved service quality for customers (Pantouvakis & Mpogiatzidis, 2013).

Therefore, exploitative learning is important from an employee perspective as it allows employees to continuously improve and enhance their skills and knowledge, leading to improved job satisfaction and performance and, ultimately, higher service quality for customers. When employees in a government organization engage in exploitative learning, they have the opportunity to refine and improve their skills and knowledge, which can result in enhanced service delivery for citizens.

5.3 Practical Implications

In terms of the practical implications of exploitative and explorative learning, organizations may create value for employees and customers by continuously improving service quality and streamlining operations. Organizations should encourage employees to experiment with new ideas and approaches and to take calculated risks to improve service quality.

Secondly, organizations may foster a culture of learning, creativity and experimentation, encouraging employees to take ownership of their work and contribute to continuous improvement. Thirdly, by providing resources and support, organizations may encourage collaboration between employees and departments to leverage their employees' collective insights and expertise to drive continuous improvement in service quality and value creation. Fourthly, organizations may leverage data and analytics to identify areas where they can streamline operations and improve service quality.

Fifthly, organizations may implement continuous improvement processes, such as Lean or Six Sigma, to identify and address pain points in the service delivery process and create a better experience for employees and customers. Finally, organizations may invest in employee development programs, such as training and professional development, to equip employees with the skills and knowledge they need to improve their performance and contribute to continuous improvement.

Organizational learning for employee value creation and service quality is the development of a continuous improvement culture. This involves creating an environment where employees are encouraged to continuously seek new ways to improve their skills and knowledge and to use this knowledge to drive improvements in service quality and value creation.

Organizations can create a supportive and empowering work environment for employees and drive continuous improvement in service quality and value creation for customers. This can help organizations stay ahead of the curve, meet changing customer needs, and remain competitive in the marketplace.

5.4 Theoretical Implications

Organizational learning has important implications in terms of value creation, especially with service quality in an organization. An analysis of the contribution of exploitative and explorative learning to the success of service quality and value creation in the workplace. Organizational learning is a process through which organizations

continually improve their capabilities and performance through acquiring and integrating knowledge and skills.

Theoretical implications for organizational learning and its impact on employees' value creation and service quality can be discussed. As a result of the research, it may be possible to gain a more comprehensive understanding of how exploitative and explorative learning can facilitate service quality and higher levels of value creation. Secondly, according to human capital theory, employee knowledge, skills, and abilities are the most valuable assets of an organization. Organizations can increase their human capital by investing in employee training and development programs, leading to improved performance, higher employee satisfaction, and better service quality.

Thirdly, the resource-based view of the firm suggests that an organization's resources and capabilities play a crucial role in its success. Organizational learning can help organizations build and develop the necessary skills and knowledge to create value for their customers and improve service quality. Fourthly, this study results also extend the knowledge that organizations can create a competitive advantage by effectively managing their knowledge resources.

Finally, this study would like to highlight that organizations continuously learning and adapt are more likely to remain competitive and achieve long-term success. Organizations can continuously learn and develop their employees to create value for customers and improve service quality. This study improves understanding of how organizational learning influences service quality and value creation. Specifically, organizational learning and its impact on employees' value creation and service quality highlight the importance of employee involvement, cultural support, effective leadership, continuous learning, and knowledge management. Organizations can create a culture of learning that leads to improved performance and higher levels of employee satisfaction.

5.5 Recommendation

Despite its worthwhile practical and theoretical implications, the current study also has some recommendations. First, encourage a culture of continuous learning and development among employees to enhance their knowledge and skills. Second, develop effective communication channels to facilitate employee value creation and ideas among employees.

Third, encourage collaboration and teamwork to promote the sharing and co-creation of knowledge.

Fourth, provide incentives and recognition for employees who contribute to the organization's service quality and value creation.

Fifth, invest in technology and tools to support service quality and value creation, such as cloud-based platforms and data analytics tools.

Sixth, create a clear vision and strategy for service quality and value creation and ensure that it is aligned with the organization's overall goals and objectives.

Seventh, encourage experimentation and risk-taking to foster a culture of value creation.

Finally, regularly measure and evaluate the effectiveness of the organization's service quality and value creation efforts and make adjustments to improve performance.

5.6 Limitation and Future Research

Despite its worthwhile practical and theoretical implications, the current study has some Limitations as well. First, lack of investment in technology and infrastructure to support service quality and value creation processes. Second, Inadequate communication and collaboration among employees and departments to silos of value creation. Third, there is a limited ability to measure and track the outputs and impacts of service quality and value creation on the performance of the organization. Fourth, limited access to external knowledge and resources, due to geographic, economic and political factors. Finally, limited ability to manage and protect intellectual property and proprietary value creation.

The present study has established a positive relationship among exploitative learning,

explorative learning, value creation, and the mediating role of service quality in public sector organizations. Building on these findings, several future research directions can be proposed to further advance our understanding of these relationships and their implications for organizational performance in different contexts. Firstly, further research could extend this study by comparing the relationships among exploitative learning, explorative learning, value creation, and service quality in different sectors, such as private organizations and non-profit institutions. This comparative analysis would help identify the similarities and differences in the relationships and provide insights into how these learning processes can be effectively managed in various organizational contexts.

Secondly, to better understand the dynamics of the relationships among the variables, future research could adopt a longitudinal design, tracking the changes in exploitative learning, explorative learning, value creation, and service quality over time. This approach would provide valuable information on the causal relationships among the variables and how they evolve as organizations grow and adapt to their environments.

Thirdly, given the potential influence of cultural factors on learning processes, service quality, and value creation, future research could explore the relationships among the variables in different cultural contexts. Comparing the findings from public sector organizations with those from other countries may reveal important cultural nuances that could inform the development of context-specific management strategies.

Fourthly, future research could examine the potential moderating effects of other organizational variables, such as leadership style, organizational structure, and organizational culture, on the relationships among exploitative learning, explorative learning, value creation, and service quality. Identifying these moderating factors may help organizations develop targeted interventions to enhance the effectiveness of their learning processes and service quality initiatives.

Finally, building on the findings of this study, future research could design and implement

interventions aimed at enhancing exploitative and explorative learning in public sector organizations. These interventions could focus on improving service quality, promoting value creation, and fostering a culture that supports both types of learning. Evaluating the effectiveness of these interventions would provide practical insights for organizations seeking to optimize their learning processes and achieve a competitive advantage.

5.7 Conclusion

It has been determined from the current research results that organization learning (exploitative learning and exploratory learning) positively affects the service quality and value creation of government organizations in the service sector of Quetta, Baluchistan. In conclusion, the topic of explorative and exploitative learning and its impact on employees' service quality and value creation has been widely researched and debated in the academic community. Explorative learning is characterized by a focus on creating new knowledge and innovation, while exploitative learning is characterized by a focus on refining existing knowledge and processes.

The findings suggest that a balance between explorative and exploitative learning is important in achieving high levels of service quality and employee value creation. Explorative learning can improve service quality through increased innovation and creative problem-solving, while exploitative learning can lead to increased efficiency and cost savings. However, it is important to note the effectiveness of explorative and exploitative learning in enhancing service quality and value creation. As such, organizations should assess their needs and implement a tailored approach that balances both explorative and exploitative learning to achieve optimal results. The research findings also suggest that both explorative and exploitative learning play a crucial role in enhancing employees' service quality and value creation. Organizations should strike a balance between both approaches to achieve optimal results.

In terms of explorative learning, organizations can use this approach to find new and innovative ways of improving service quality and creating value for

employees. For example, organizations can encourage employees to experiment with new ideas and approaches and take calculated risks to improve service quality. In a culture of innovation and creativity, organizations can leverage the insights and expertise of their employees to drive continuous improvement in service quality and value creation.

On the other hand, exploitative learning can be used to refine existing processes and systems to optimize performance and efficiency. For example, organizations can use data and analytics to identify areas where they can streamline operations and improve service quality and implement changes to achieve these improvements. While leveraging their existing knowledge and expertise, organizations can identify and address pain points in the service delivery process and work to create a better experience for employees and customers alike. In summary, explorative and exploitative learning is critical in determining an organization's ability to create value and improve employee service quality. Organizations that foster a culture of learning and experimentation are well-positioned to stay ahead of the curve and continue to create value for employees and customers alike.

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