

# Impact of Transformational Leadership, Market Orientation and Knowledge Sharing on Business Performance

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In Pakistan, the new forms of business in collaboration with mobile service providers are bringing an evolution not only in every walk of life but also in the digital economy of the country. This study considers the effects of transformational leadership, knowledge sharing and market orientation on organisational performance through the mediating role of innovation to raise the market share. This study focuses on four cellular mobile telecom companies of Pakistan, including Ufone, Telenor, Mobilink and Cmpak. The losing of market share in the high competition by few cellular mobile companies, for example, Ufone and Telenor identify a significant problem due to lack of investment, network coverage, poor data/voice services and innovation in term of new products, processes and services. The focus of this study is mobile telecommunication sector of Pakistan including four companies, N=170 respondents (leaders include general managers, seniors, middle and line managers and employees) on departmental level related to innovation and performance. This paper aims to explore the mediating role of innovation to enhance the performance of an organisation by employing transformational leadership, market orientation and knowledge sharing.

**Key words:** *Innovation, knowledge sharing, market orientation, mobile cellular industry, market share, performance, transformational leadership, telecommunication.*

## Introduction

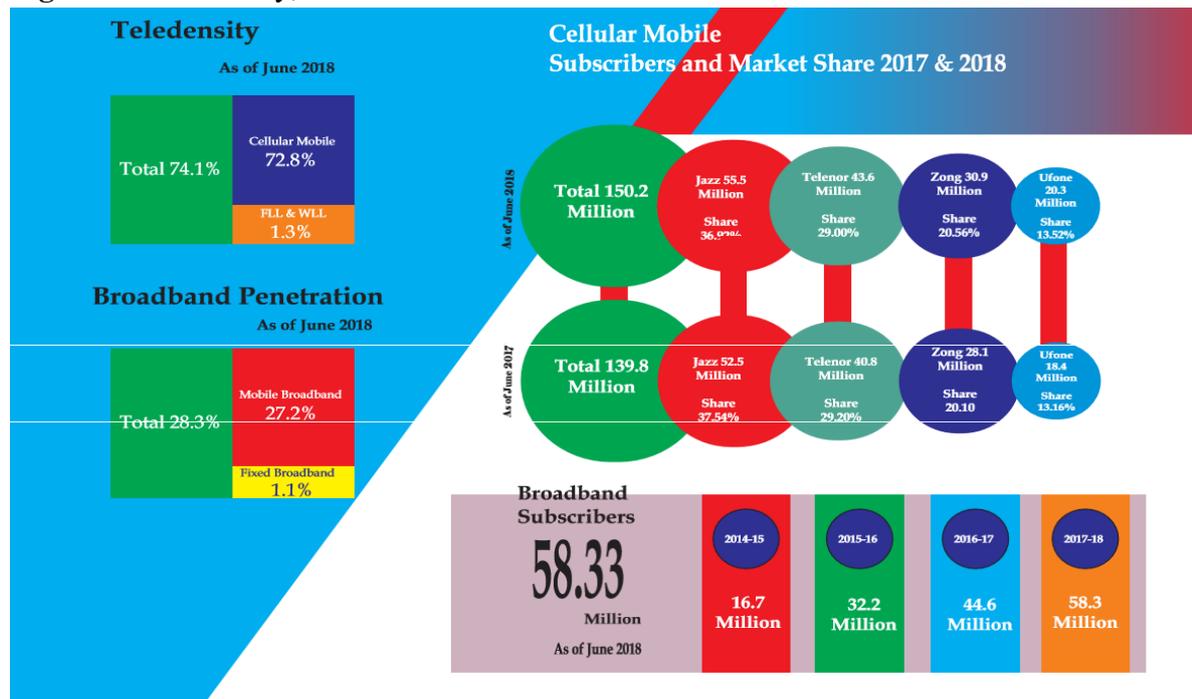
The telecommunication industry is one of the primary industries that play a vital role in the economic wellbeing of many countries today. Indian and Chinese economies are examples of the benefits to the fast growth of the telecom industry in the last decade (Eduah, 2019). Telecommunication is defined as the transmission of information using the electromagnetic waves via wired, for example, optical fibre, coaxial, twisted pair, copper and wireless like microwave and radio antenna. After the launch of 4G/5G spectrum, mobile cell phone companies are racing to become high-speed broadband service providers. Mobile cell phones are more than fixed phone since data is rapidly overtaking voice and is becoming a dominant source of revenue in the industry, for example, WhatsApp, Facebook voice call over the data. The rise of cellular mobile broadband from the analysts' point of view is the most important and dynamic era in the short and medium-term. Barnes (1993) explains a technological foundation for social communication. Telecommunication provides vital infrastructure and arrangements for national security, military operations and homeland security. Telecommunication not only plays a central role in the fundamental operations of society but also it enables the participation and development of people across the globe whether rural areas in Pakistan or from the developing nations in the global society or economy. According to the Information Economy Report of 2009, Pakistan is one of the top five dynamic economies for mobile penetration in its region from 2003 to 2008. As per Zave and Jackson (1997), the telecommunication sector is deemed to be complicated because of the competitive nature of organisations, the dynamic nature of technological development and time to time changes in the regulatory policy.

When Pakistan became independent in 1947, it had a capacity of 14000 subscribers (Sikandar, 2009). A publically owned organisation Pakistan Telecommunication Corporation Limited (PTCL) established in 1980 is the result of massive investment towards developing the telecommunication sector. However, to meet the needs of the public, there is a need for reform due to call traffic congestion, poor quality of service and state-owned monopoly. Mobile telecommunication was privatized between 1990 and 1993. Between 2005 and 2010, Pakistan Mobile Telecommunications was responsible for attracting 30% of the country's foreign direct investment and made a significant contribution to the entire nation's GDP (Rab, 2011). Multinational organisations like Etisalat an Abu Dhabi group, China mobile, Vimple Com and Telenor global have a share in Pakistan Mobile Telecommunications. Hence Pakistan Mobile Telecom had an emerging role in the global telecommunication sector and contributing towards growth and revenue of multinational telecom organisations.

In Pakistan, the total teledensity stands at 74% and broadband penetration of 28.3% as of June 2018 (PTA annual Report, 2018) as shown in the figure 1. Broadband subscribers stand at almost 58 million and are making further progress with high speed in those areas of the

country where the broadband is not available yet. The telecom sector contributed over 147.23 Billion to the national exchequer in the form of General Sales Tax (GST), Withholding Tax (WHT) and PTA deposits, including license fees and spectrum fees. This is in addition to levies by the local governments and custom duties by Federal Board of Revenue (FBR).

**Figure 1. Teledensity, Market Share & Broadband Penetration**



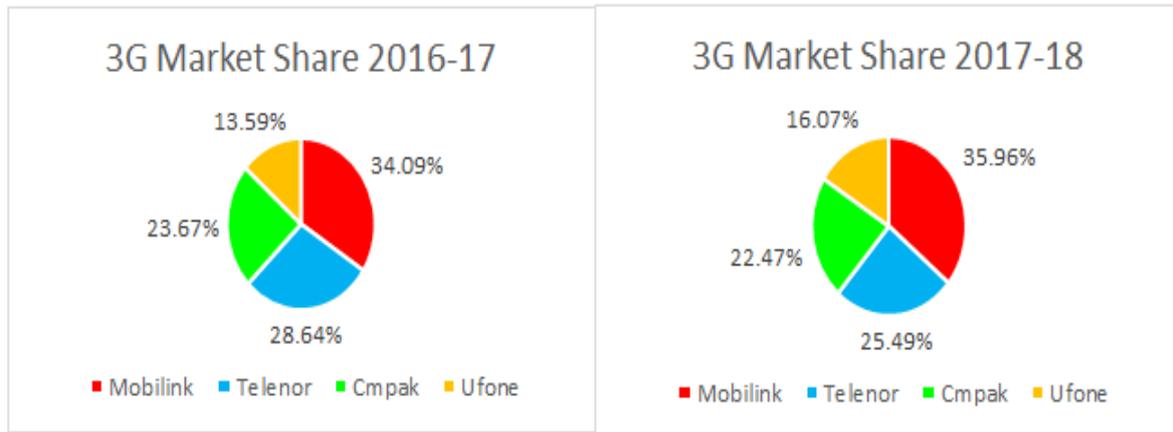
**Problem Statement**

According to PTA annual report (2018), the cellular mobile companies such as Mobilink, Cmpak, Telenor and Ufone have a market share of 36%, 20.56%, 29% and 13.52% respectively as shown in figure 1. Mobile broadband subscribers share by cellular mobile service providers have shown in figure 2.

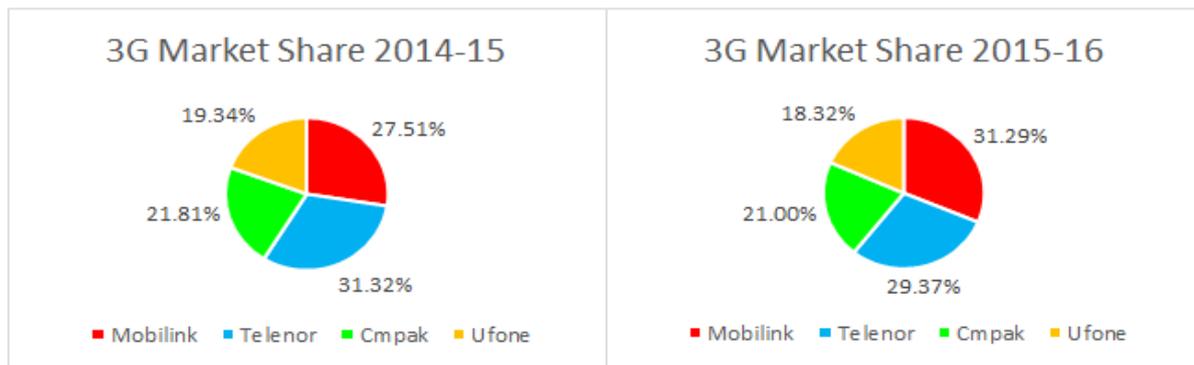
**Figure 2. Mobile Operators wise broadband subscribers share**



**Figure 3.** 3G Market share from 2016 to 2018



**Figure 4.** 3G Market share from 2014 to 2016



As per the above comparative analysis of voice and 3G/4G LTE subscribers shown in figure 3 and 4, Ufone and Telenor have lost market share to Cmpak (zong). Cmpak (zong) has emerged to be the fastest-growing mobile operators in Pakistan & has fierce competition with Mobilink. As per above evidence from the annual reports of Pakistan Telecommunication Authority losing market share by mobile operators like Ufone and Telenor identify a significant problem. Below are some elements which may be the cause of this problem.

### ***Investment on 3G/4G Spectrum***

Pakistan Telecommunication Authority awarded 3G/4G license in 2014. Mobilink and CMPAK acquired the primary block of spectrum that was 10 MHz at the cost of USD 300.9 million whereas Telenor and Ufone acquire a block of 5 MHz at the cost of USD 147million (Web article, 2014). CMPAK also walked away with a further 10 MHz in the 1800 MHz band for 4G services. Under the terms of the auction, providers were only eligible to bid for a 4G authorization if they had won 10 MHz of 3G frequencies, and while Ufone had also expressed an interest in bidding for 4G rights, its failure to secure a 10 MHz 3G lot made it

ineligible to bid for a 1800 MHz license. Due to lack of this investment Telenor and Ufone are not able to offer such innovative, superior data services to their valued customers that require high-speed internet bandwidth as compared to Mobilink and CMPAK because of spectrum limitation. Making such a massive investment in spectrum acquisition Mobilink and CMPAK seem performing well by offering high-speed innovative services and solutions to customers and winning the market share. CMPAK is the only player who secures the 4G license.

### ***Expansion of Network Coverage to Meet the Future Advance Technologies Demand***

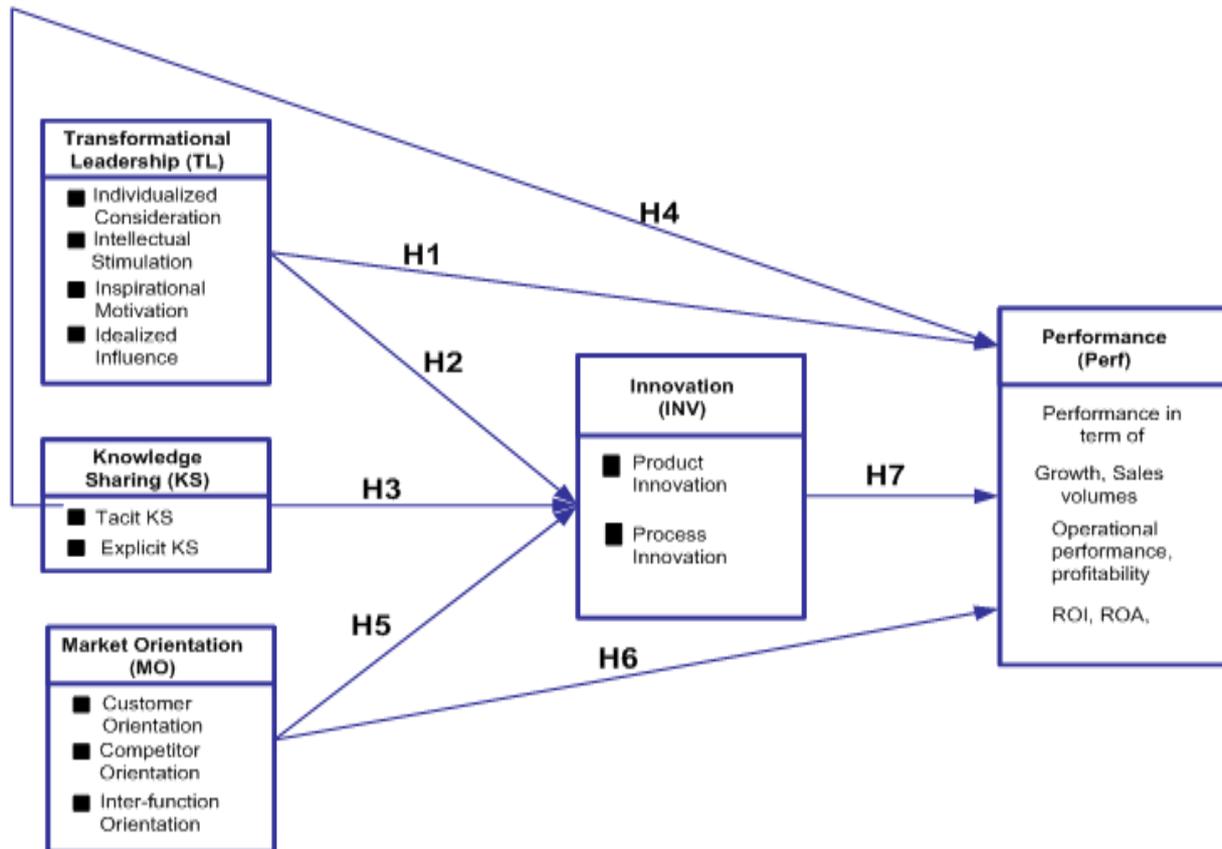
Some mobile operators are also losing the market due to network coverage that is limited to major cities. This limitation affects the customers, and as a result, the service provider loses the market. Recently edotco Group (“edotco”), a telecommunications infrastructure sharing company, through the platform of its local operations, has sealed a landmark long-term partnership with Mobilink (Jazz), the country’s leading mobile digital communications company, with a commitment to accelerate the new development of telecommunications infrastructure in the nation (Propakistani, 2019). Pakistan’s telecommunication sector is maturing as the country accelerates its push for digitalization. This transformation will result in Mobilink (Jazz) optimizing its network operations and meeting the hungry demands for fast, reliable and secure data, which is essential for a rapidly evolving digital landscape. According to CEO of Mobilink “As the nation’s leading Communications Company, it is our mission to spearhead Pakistan’s digital agenda through such innovative partnerships.” From this partnership, it seems Mobilink is performing well and leading the market in terms of market share. In order to grow in future, these kind of ideas related to partnership/alliances helps those telecom players that are losing the market.

### ***Innovative Solutions, Products, Process and Services***

Mobilink and Cmpak have invested not only 3G/4G license but have also initiate the partnership with infrastructure companies to expand its network coverage to meet the future technology demand of the digital world. Mobilink is offering many innovative solutions, for example, M2M, IoT and innovation lab and high-speed internet packages and services to its valued customers (Speed Test award, 2018). CMPAK is also offering innovative IoT solutions, for example, cold chain monitoring, smart fleet management, on-net IoT open platform and fuel monitoring (Zong Official Web). In order to raise the market share, the mobile telecom like Telenor and Ufone need to focus on innovative solutions in term of products, processes, services, infrastructure expansion and to invest in the spectrum for future advance technology to support such innovations in order to compete in the market.

## Theoretical Framework

This study proposes a conceptual framework to execute this research. By employing this model, the companies can improve the performance in terms of growth, customer satisfaction, sales volume, operational and financial performance, ROI, ROA of the organisation to raise the market share in competition.



## Literature Review

### *Performance*

An organisation's strategic management, the frequently raised question among the scholars, is the firm's difference performance and superior organisational performance (Crook, Bratton, Street, & Ketchen, 2006). In this context, the superior organisational performance refers to sustained performance of market share that is maintained over a long time in terms of employee performance, customer satisfaction, growth, operational performance and financial performance such as the return of investment and wealth creation for shareholders. Several paradigms describe the performance of an organisation (Snehota & Hakansson, 1995). The functioning of company's relationships to its customers, partners, suppliers and internal stakeholders is a crucial driver of performance in sales volumes, profitability and

growth. Out of these paradigms, one is through the application of the Resource-Based View (RBV) theory. RBV suggests that organisations are idiosyncratic having heterogeneous and immobile resources allowing them to acquire a competitive advantage. RBV highlights for organisations to achieve their competitive advantage and their need of resources to have unique characteristics that are difficult to imitate, imperfectly mobile, rare, non-substitutable and valuable (Barnes, 1991).

### ***Innovation***

Innovation has become a commonly used topic in the last few years explored by scientists, researchers and business people (Guzmán, 2019). Innovation is defined in various perspectives (West & Farr, 1990). Nohria and Gulati (1996) define innovation to include any product or any process opportunity that a manager of an innovation unit perceives to be new. Technically, innovation comprises of two parts, one is products, and another is process innovation (Jiménez-Jiménez & Sanz-Valle, 2011). From the organisational perspective, it is the intentional introduction and application of ideas, products, procedures or processes designed in a new way to significantly benefit the organisation. In any organisation, product and process innovations are the main activities to explore new markets, and any new idea from an employee about the product or process can perceive as product innovation or process innovation. Organisations employ process innovation to exploit new markets since it adapts new ways of infrastructure technologies, and product innovation is associated with the creation of a new product or improvement of the existing one. For example, an organisation like mobile operators develop new products of wireless modems for banking sectors that are fully equipped with both hardware and software with advanced security features to enhance the business.

### **Innovation and Performance**

Process innovation is involved with all operational and functional activities that help to reduce the manufacturing cost, enhance the delivery mechanism, quality, gain market share, achieving superior performance and competitive advantage (Gunday, Ulusoy, Kilic, & Alpkan, 2011; O'Sullivan & Dooley, 2009). Researchers and scholars regarded product innovation as a risk and crucial attempt that can create fruitful results and superior performance in enterprises (Cormican & O'Sullivan, 2004). Many previous studies have found that innovation has a positive effect on performance in many business fields (Maldonado-Guzmán, Garza-Reyes, Pinzón-Castro, & Kumar, 2019; Yang & Yang, 2019; Chege, Wang, & Suntu, 2019). Organisations with a speedy innovation process can develop and sell new products faster than competitors where the innovation process is slow, hence increasing the market share and operational efficiency. The coordination among different functional departments of an organisation in innovation activities (Product and Process) leads

to improved performance of an organisation. By encouraging product development innovation reduces competition and, consequently improves business performance. Hence organisations use innovation capabilities such as process and product innovation to obtain more and better competitive advantages. Based on the above studies, we propose the following hypotheses.

- H7.** Innovation positively affects organisational performance.
- H7a.** Product Innovation positively affects organisational performance.
- H7b.** Process Innovation positively affects organisational performance.

### ***Transformational Leadership***

According to James MacGregor Burns (1978) conceptualised leadership as either transactional or transformational. Transformational leaders are those who stimulate and inspire followers to achieve extraordinary outcomes and to develop their leadership capacity too (Bernard M. Bass & Ronald E. Riggio, 2006). Transformational leader behaves in one or more of four core components to achieve the superior results. These four components are (1) Individualized consideration (IC), (2) Intellectual stimulation (IS), (3) Inspirational motivation (IM) and (4) Idealized influence (II) (M. Bass & Ronald E. Riggio, 2006). Idealised influence leaders behave in a way to serve as a role model for their followers. These leaders are trusted, respected and admired. The leaders with inspirational motivation capability motivate their followers by providing meaning and challenge to their work, whereas the intellectual stimulation leaders encourage creativity in their followers. They stimulate them to be creative and innovative by handling problems, questioning, and assumptions and to approach old situations in new ways. A leader with individualized consideration behaves like a trainer by giving special attention to their followers' needs for achievement and growth — such leaders delegates tasks as a means of developing followers.

### **Transformational Leadership and Performance**

Several studies have determined that leadership has a positive effect on enterprises overall performance despite a good-sized effect and influence on personal and organisations (Sayyadi, 2019; Saleem, Bhutta, Nauman, & Zahra, 2019). Bass (1987) stated that leadership style and behaviours of individuals might additionally make contributions to significant subordinates' results, for example, perception towards the leader's effectiveness, satisfaction and performance. Researchers and scholars (Shih & Orochena, 2016; Khan et al., 2018; Berraies & Bchini, 2019) have validated that transformational leaders positively affect the overall performance of organisations. The transformational leaders not only motivate and stimulate the creativity inside their followers, but also coach and train in a way that they perform best with their creative skills and improve the performance of the firm by reduced

prices, improved stock price, expanded income, improved innovation potential, increased responsiveness to environmental change in trade, stepped forward product, process or service high quality, greater customer awareness and increased learning skill. Moreover, transformational leaders employ individual consideration to become aware of employees' personnel wishes to expose concern for each organisation's interest and followers' interests. A problem for employee's individual needs can, in turn, make a contribution to increase the organisational commitment that evokes employees to put extra exertion into their work, which improves the quality of processes, products or services, and customer satisfaction selling better return on investments (ROI) and an opportunity to increase income or services to improve revenue. In addition, Tasmin & Shafiq (2017) reported that leaders engaged in transformational initiative, such as via aligning with Blue Ocean strategy, create a more positive impact on organisational performance through innovation. Hence we propose the following hypotheses.

- H1.** Transformational leadership (TL) positively affects organisational performance.
- H1a.** *Individualized consideration positively affects organisational performance.*
- H1b.** Intellectual stimulation positively affects organisational performance.
- H1c.** Inspirational motivation positively affects organisational performance.
- H1d.** Idealized influence positively affects organisational performance.

### ***Transformational Leadership, Innovation and Performance***

#### ***Relationship between Transformational Leadership to Innovation***

Transformational Leadership focuses on the development of human capital that helps to transform an organisation into an innovative organisation (Birasnav, Albufalasa, & Bader, 2013). Many studies have observed a significant and positive relationship between transformational leadership and innovation (Yang & Yang, 2019; Al-Husseini & Elbeltagi, 2016). Elkins and Keller (2003) point out intellectual stimulation and inspirational motivation as crucial for organisational innovation. For the improvement of human capital in business organisations, they have to be empowered so they may take decisions on their behalf affecting creativity and innovation. The leaders with considerate and participative abilities might boom the creativity of subordinates. The transformational leader has to integrate all of the factors like human capital, technology, monetary resources and many others to achieve organisational objectives and success.

#### ***Relationship between Innovation and Performance***

The leaders who pursue transformational style help raise the levels of commitment in employees within the organisation (Bass, 1985; Gardner, Cummings, Dunham, & Pierce,

1998). Product innovation has a positive effect at each level of business performance in the enterprises sector (Jiménez-Jiménez & Sanz-Valle, 2011). The transformational leader articulates a vision that emphasizes long term over the short term commercial enterprise affects, increase and value in preference to a quarterly profit, and the leaders can affect direct subordinates' individual and joint efforts closer to innovative work processes and consequences. Innovation in the process encourages the creation or improvement of required knowledge, technique, process, system and skill in the creation of a new process for the creation new product or service and for producing a superior business performance (Oke, Burke, & Myers, 2007). With idealized influence, the transformational leaders can build respect and trust among employees, share the risks with followers, and giving them a sense of how important the organisation's goal is. These abilities encourage the employees to work hard, be more innovative and affect the performance of the firm positively.

### ***Impact of Innovation towards the relationship between TL to Performance***

Transformational leaders have an interactive approach and may encourage a suitable environment for product and process innovation (Saenz, 2011). Many firms consider innovative activities (Product & Process) to improve their business performance and competitive advantage (Easterby-Smith, Mark, Richard, & Paul, 2012). A problem for employee's individual needs can, in turn, make a contribution to increase the organisational commitment that evokes employees to put extra exertion into their work, which improves the quality of processes, products or services, and customer satisfaction, and selling better return on investments (ROI) and an opportunity to increase income or services to improve revenue in term of performance of the organisation.

Hence based on the above arguments lead to the following hypotheses.

- H2.** Innovation has a positive mediating effect on the relationship between Transformational leadership (TL) and performance.
- H2a.** Product innovation has a positive mediating effect on the relationship between Individualized consideration and performance.
- H2b.** Process innovation has a positive mediating effect on the relationship between Individualized consideration and performance.
- H2c.** Product innovation has a positive mediating effect on the relationship between Intellectual stimulation and performance.
- H2d.** Process innovation has a positive mediating effect on the relationship between Intellectual stimulation and performance.
- H2e.** Product innovation has a positive mediating effect on the relationship between Inspirational motivation and performance.

- H2f.** Process innovation has a positive mediating effect on the relationship between Inspirational motivation and performance.
- H2g.** Product innovation has a positive mediating effect on the relationship between Idealized influence and performance.
- H2h.** Process innovation has a positive mediating effect on the relationship between Idealized influence and performance.

### ***Market Orientation***

Towards different organisational outcomes, the resource-based view (RBV) has emerged as a dominant perspective to understand the contribution capabilities and resources (Feng & Morgan, 2017). This perspective of research has concluded that market orientation represents a necessary condition and foundation upon which different marketing capabilities can be deployed (Kamboj & Rahman, 2017). A market-oriented company organises its process and products in a way to meet the needs of its current and potential customers. A market-oriented company is also expected to respond to its competitors to balance the competitiveness in addition to customer-orientation. Market orientation is composed of customer orientation, competitor orientation and inter-functional coordination dimension as a multidimensional factor (Acar & Özşahin, 2018). According to Narver and Slater (1990), customer orientation is defined as the sufficient understanding of one's target customer as buyers to create superior value for the firm continuously. However, customer orientation is not only enough to create such superior value; there is a need to recognise the competitors in the market. Using competitor orientation dimension, a firm understands the strength and weaknesses in the short term, strategies and competencies in the long term of current and potential competitors. The primary focus of competitor orientation on three questions (1) who are the competitors? (2) What technologies do they offer? (3) Do they represent an attractive alternative from the perspective of the target customers? (Slater & Narver, 1994b).

### ***Market Orientation and Performance***

Much of the literature is focused on empirical analysis of the effect of market orientation on performance (Migdadi et al., 2017; Bucktowar, Kocak, & Padachi, 2016; Narver & Slater, 1990; Slater & Narver, 1994). A company that continually collects information about its clients and markets and acts correspondingly is predicted to acquire superior performance. Narver and Slater (1994) emphasized that market orientation is positively related to the return on investment (ROI) and sales growth. Customer-oriented organisations can collect data about its clients' desires, needs and by getting feedback, which in turn helps in the development of such products and processes that satisfy all those expectations enhances' organisations overall performance. Competitor orientation compels firms to develop better offerings as compared to their competitor's existing offerings (Im & Workman, 2004), that

reduces the competition and, consequently improves the business performance. Whereas the Inter-functional coordination promotes the coordination of the firm's resources across the entire firm to create superior value for potential clients and other stakeholders and, hence enhance the performance of the organisation in term of customer satisfaction. Based on the above study, we propose the following hypotheses.

H6. Market Orientation (MO) positively affects organisational performance.

H6a. Customer Orientation positively affects organisational performance.

H6b. Competitor Orientation positively affects organisational performance.

H6c. Inter-function Orientation positively affects organisational performance.

### ***Market Orientation, Innovation and Performance***

#### ***Relationship between Market Orientation to Innovation***

One crucial debate in the literature regarding market orientation and innovation is whether or not the previous fosters the latter or instead reasons incremental improvements in products coming from customer preferences modifications (Vázquez, Santos, & Álvarez, 2001). Research proving the positive relationship between market orientation and innovation by arguing that market orientation affects innovation (Zhou, Yim, & Tse, 2005; Baker & Sinkula, 1999; Fang, Chou, Yang, & Ou, 2012) positively. Market orientation covers the degree that organisations gather, distribute and use the data from the marketplace and that it has far considered as input for the innovation process. Organisations should understand the requirements of target customers by discussing competitors' weaknesses, strengths, and strategies and by using communication inside the organisation about new ideas to create unique and value-added products. In order to meet the changing and growing demand of the customer, the organisations have to invest in developing new products or modify original products (Kraus, 2012). Hence market orientation has a positive effect on innovation.

#### ***Relationship between Innovation and Performance***

Customer satisfaction serves as an essential tool for increasing innovation (Product & Process) and the performance of an organisation (Han, Kim, & Srivastava, 1998). Focusing on an excessive amount of on expressed client needs can also result in inertia inside the firm's innovation activity (Christensen & Bower, 1996), and therefore related performance gains. Competitor oriented culture enhances innovation (Product & Process) because it serves as a stimulus for holding a central position in the market.

### ***Impact of Innovation towards the relationship between MO to Performance***

A firm with competitor orientation capability develops better offerings as compared to their competitor's existing offerings (Im & Workman, 2004) to attract the current and potential customers, therefore encouraging product development innovation that reduces competition and, consequently improves the business performance. Also, Inter-function coordination among the different departments involves in innovation (process and product) lead to improved performance of a firm. Hence based on the above study, we propose the following hypotheses.

**H5.** Innovation has a positive mediating effect on the relationship between Market Orientation (MO) and performance.

**H5a.** Product innovation has a positive mediating effect on the relationship between Customer Orientation and performance.

**H5b.** Process innovation has a positive mediating effect on the relationship between Customer Orientation and performance.

**H5c.** Product innovation has a positive mediating effect on the relationship between Competitor Orientation and performance.

**H5d.** Process innovation has a positive mediating effect on the relationship between Competitor Orientation and performance.

**H5e.** Product innovation has a positive mediating effect on the relationship between Inter-function Orientation and performance.

**H5f.** Process innovation has a positive mediating effect on the relationship between Inter-function Orientation and performance.

### ***Knowledge Sharing***

In the knowledge-based economy, resources and competencies are expected to be the most critical factors for the survival of any organisation in a dynamic and competitive environment (Teece, Pisano, & Shuen, 1997). Knowledge becomes the most crucial element by replacing equipment, material and capital in production (Wang & Wang, 2012). As necessary intangible assets for any organisation, practitioners and scholars paid great attention to create, identify and to share knowledge (Nonaka & Takeuchi, 1995). Tasmin & Woods (2007) postulates that knowledge sharing, through organisational knowledge management programme, could contribute positively towards enhancing innovation capability. Effectiveness in an emerging organisation is highly dependent on how knowledge exchange between individuals, teams, departments and groups in a better way. Knowledge creation defines a knowledge is a process or capability held by human beings (Xu, Houssin, Caillaud, & Gardoni, 2010). Knowledge sharing behaviours have a contribution to the generation of an organisation's capabilities, for example, innovation and performance. Organisational

knowledge sharing is argued to be able to improve organisational performance and achieve competitive advantage (Hsu, 2008). The existence of knowledge sharing in any organisation will develop competencies of its human resources through knowledge transfer and exchange of information among employees, teams and departments. Nonaka and Takeuchi (1995) proposed the socialisation, externalisation, combination and internalisation (SECI) model that explains the function of tacit and explicit knowledge sharing. The primary mean for tacit knowledge sharing is the face-to-face interaction, whereas explicit knowledge can be codified, transmitted and captured easily. Hence the tacit knowledge sharing are the capabilities and willingness of individuals to share what they know and to use what they learn. In organisations, employees as per their willingness can share their explicit knowledge through the mechanisms introduced by management such as handbook, procedures, formal language and information system within the organisation.

### ***Knowledge Sharing and Performance***

Teece (2007) have proposed that knowledge establishes significant intangible resources for creating and supporting long term competitive advantage. The assets determine a firm's success to a great extent (tangible & intangible resources) it possesses and how it manages (Rezaei et al., 2017). The resource-based view (RBV) of the organisation indicates that how knowledge might help to develop a competitive advantage of an organisation. The resource-based view (RBV) is applied by Hsu (2008) to investigate the connection between Knowledge sharing and organisation performance. Knowledge sharing includes both tacit (skill) and explicit (institutional) knowledge and is essential to improve organisation performance (Dell & Gray, 2014). Knowledge sharing and learning practices prompted better execution by improving the business services, processes and products contributions to the performance of the firm. Research conducted by Chuang, Chen, and Tsai (2015), examines the individual's observations about other employee's expectations to manage and share knowledge is beneficial for organisation performance. From the organisational perspective, individuals can learn, not just from their direct personal experiences, however, additionally from the experiences of others. Due to the fact personal interaction with each other, the knowledge amassed by way of one person may transfer to his/her colleagues through advice, explanation, help or feedback. In the organisations' new knowledge systems, procedures or structures establishes when knowledge resources unite together as a result of the exchange of knowledge between individuals and play a vital role in the superior performance. Based on the above details, we propose the following hypotheses.

- H4a.** Tacit Knowledge sharing (KS) positively affects organisational performance.
- H4b.** Explicit Knowledge sharing (KS) positively affects organisational performance.



### ***Knowledge Sharing, Innovation and Performance***

#### ***Relationship between Knowledge Sharing to Innovation***

The organisation's capacity to transform and apply knowledge may decide its level of innovation on process innovation and product innovation for fast responses to the market demands (Plessis & Africa, 2003). However, to perform innovative tasks in a better way, employees consistently need to get from tacit knowledge (experience or skills) of their associates or quest for explicit knowledge (institutionalised methodologies) existing in the organisation. In this manner both tacit and explicit components of organisational KS practices assume a significant role in innovation. Employees can learn by knowledge sharing and by combining a different kind of knowledge, they become more capable of interpreting new ideas into innovations. Jantunen (2005) affirmed that knowledge sharing behaviours among workers might help firms to have predominant product innovation and process innovation capability. Hence an organisation with powerful KS components can contend more viably in terms of innovation against others that have not effective KS mechanisms. Many scholars have empirically tested the relationship between knowledge sharing and different aspects of innovation in details (Brockman, 2006; Leiponen, 2006; Lee, Ooi, Tan, & Chong, 2010).

#### ***Relationship between Innovation and Performance***

Innovation can affect the business performance of a company because the companies with a higher level of innovation can develop and sell new products faster as compared to its competitors, hence increasing the market share and operational efficiency (Wang & Wang, 2012). In order to achieve the organisational performance generating new ideas in term of innovation (Product & Process) through knowledge sharing among the employees will be more effective.

#### ***Impact of Innovation towards the Relationship between KS to Performance***

Knowledge sharing behaviours among workers may help firms to have predominant product innovation and process innovation capability (Jantunen, 2005). Process innovation is involved with all operational and functional activities that help to reduce the manufacturing cost, enhance the delivery mechanism, quality, gain market share, achieving superior performance and competitive advantage. Researchers and scholars regarded product innovation as a risk and significant attempt that can create fruitful results and superior performance in enterprises (Cormican & O'Sullivan, 2004). We propose the following hypotheses.

**H3.** Innovation has a positive mediating effect on the relationship between Knowledge sharing (KS) and performance.

**H3a.** Product innovation has a positive mediating effect on the relationship between Tacit Knowledge sharing (KS) and performance.

**H3b.** Process innovation has a positive mediating effect on the relationship between Tacit Knowledge sharing (KS) and performance.

**H3c.** Product innovation has a positive mediating effect on the relationship between Explicit Knowledge sharing (KS) and performance.

**H3d.** Process innovation has a positive mediating effect on the relationship between Explicit Knowledge sharing (KS) and performance.

## **Methodology**

This research work proposes a quantitative research design. A self-administered questionnaire survey is the primary research instrument used for the measurement of the proposed construct/variables. The population of this study consist of mobile service providers of Pakistan, which consist of four cellular mobile companies Mobilink (Jazz), Cmpak (Zong), Ufone and Telenor. The sample size consist of 170 managerial respondents including general managers, senior managers, managers and line managers selected across the country, because the performance through mediating role of innovation better reflected among the positions like general manager strategy and innovation, senior manager and manager products development, manager technology, manager planning, manager innovations, manager business intelligence and senior manager marketing under simple random sampling strategy. For data analysis, this study proposes demographic analysis and SEM modelling techniques using SMART PLS software.

## **Conclusion**

This study attempts to contribute to the literature by validating the concept of Innovation (product and process) by keeping in consideration of current digitization era of changing technological advancement in the business of mobile cellular organisations. The main aim of this research work attempts to contribute in the existing theoretical body of knowledge as many of past research studies on Transformational leadership, Knowledge Sharing and Market Orientation have emphasized on one or a few of their specific dimensions. This study is one of the earlier research studies that have explored the effects of transformational leadership, knowledge sharing and market orientation on performance through the mediating role of Innovation (Product and Process) among the cellular mobile companies of Pakistan. In past research, innovation use as an independent variable or dependent variable; in a few kinds of research, uses it as a mediator. Also, knowledge sharing uses as a mediator or moderator in most of the researches. The contribution of this research study is also evident with the fact



that it explores the mediating effect of Innovation (product and process) among Transformational Leadership, Knowledge Sharing, Market Orientation and Performance together in a proposed model that have not been previously empirically tested.

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