

# Strategic advantage through social inclusivity: An empirical study on resource based view in health insurance firms in India

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## ARTICLE INFO

### Article history:

Received 23 June 2020

Received in revised form

7 March 2021

Accepted 20 March 2021

Available online 23 March 2021

Zhifu Mi: handling editor

### Keywords:

Strategic social advantage  
Social inclusivity  
Inclusive emerging technologies  
Health insurance  
Inclusive service delivery  
People orientation  
Inclusive product innovation  
Knowledge management  
Technical expertise  
Managerial experience

## ABSTRACT

Strategic social advantage in firms has emerged as a concept that balances the social and fiscal goals of firms. Towards this end, restructuring organizational designs to reduce societal inequalities is gaining prominence. Disruptive technologies are transforming the social and economic context of businesses. Given this background of altered technological, social and economic contexts, a strategic social advantage framework, based on managerial perceptions, has been proposed in this study by integrating the theories of competitive advantage and social orientation of firms. The goal of this study was to develop a social strategic advantage model for firms in the context of micro health insurance business in India. Using Structural Equation Modeling supported by Hayes' multiple mediation model a socially embedded strategic advantage framework was developed. The study methodology was based on the perceptions of 565 managers in health insurance services. The results indicated that inclusive emerging technologies, product innovation, knowledge management practices, and socio-technical expertise formed the multiple mediators that connected inclusive service delivery and people orientation in firms to strategic social advantage of firms. Managerial experience had a moderating effect on the relationship between management of inclusive emerging technologies and knowledge management practices of firms. This finding implied that with higher experience, firm managers perceived that effective management of inclusive emerging technologies leads to robust knowledge management practices in firms. While younger managers were expected to be passionate about modern-day technologies, this counterintuitive outcome entailed that with more experience regarding market dynamics, managers would ardently drive implementation of emerging technologies to achieve strategic social advantage.

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## 1. Introduction

*"The problem of social organization is how to set up an arrangement under which greed will do the least harm; capitalism is that kind of a system" (Friedman and Allen, 1983).*

Strategic advantage has emerged as a concept that balances the social and fiscal goals of firms (Porter and Kramer, 2019). The exploitation of resources for higher profits while maintaining social

inclusivity has broadened the competitive landscape of firms (McKenna, 2015; Oliver, 1997). Strategic advantage stimulates firms to move from a myopic view of the market forces to a more inclusive approach to growth that is both financially and socially rewarding (Jayashankar et al., 2020; Russo, 2010). While temporary advantages could be achieved with novel strategies, sustaining them over a considerable period requires a strategy formulation process to remain socially motivated (Falkenberg and Brunsøel, 2011).

The need for organizations to play an active role in reducing societal inequalities has recently gained prominence (Bapuji et al., 2020). Social orientation signifies the aptitude of firms to evaluate business strategies in the perspective of creating social good (Smith et al., 2001, 2004). Analyzing business practices to examine

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its impact on individuals and society at large determines the extent to which firms are socially oriented (Kang and James, 2007). Managers with a social orientation are able to view futuristic interplay of market forces in a manner that enables them to tweak the firm strategies to meet long-term societal challenges (Weber, 2017). While numerous studies have placed explicit attention on competitive advantage and superior financial performance in firms, an emerging stream of research has taken an integrative social view of what constitutes superior firm performance (Martinez-Conesa et al., 2017).

Firms create social value either as a result of conscious business strategies pursued by non-profit organizations or as a by-product of business activities of profit-oriented firms (Kuratko et al., 2017). Formulation of strategies through a social lens allows firms to strike a balance between the economic and social objectives of its business (Bapuji et al., 2020). The emergence of such 'firms of endearment' signifies that firm managers have realized that they must not seek to benefit any specific stakeholder by compromising the interests of another (Sisodia et al., 2007). Similar to financial value that has been the traditional goal for businesses, social value is also dynamic, and it varies with changes in the external environment (Kuratko et al., 2017).

Social representation of a firm has been considered as the canvas on which the world outside views and forms an opinion about it (Chambers and Serra, 2018). In the pursuit of financial leadership and consumer choice, firm managers are vigilant of the social representation that they exhibit to their consumers (Bartels and Johnson, 2015). Compared to the perspective of dynamic capabilities, which envisages an inward-looking view of the firm focused on internal resources (Zhou and Li, 2010; Winter 2003), the strategic advantage perspective adopts an outward-looking view, which envisions the firm as a constituent of the social environment (Cantone et al., 2019). More importantly, this assumes significance due to the societal expectations from social sector firms (Ansoff et al., 2019). Thus, firms need to achieve an alignment between the social processes that determine consumer choices and their resource utilization strategies (Holloway, 2018). Therefore, viewing the attainment of competitive leadership through a social context lens is expected to help firms gain "true" competitive advantage; "this has been termed by Bettencourt et al. (2014) as strategic advantage.

The sustainable development goals (SDGs) espoused by the United Nations focuses on 17 areas aimed at achieving global peace and prosperity (Salvia et al., 2019). The SDGs were adopted by the global community to ensure healthy life and well-being for everyone (SDG3), promoting inclusive sustainable industrialization and innovation (SDG9) and reducing inequalities across countries (SDG10). Emerging technologies play an important role in achieving the SDGs through improved collaboration and innovative analytical capabilities (Salvia et al., 2019). Business strategies that enhance social performance and drive sustainability practices also influence competitive advantage in firms (Cantele and Zardini, 2018).

While employing the social context is necessary to make developmental goals more socially inclusive, the role of emerging cutting-edge technologies to ensure the realization of these roles is undeniable. Utilization of emerging technologies has been found to extend the duration of competitive advantage in firms (Stratopoulos, 2016). While emerging technologies are significant drivers of economic growth (Kapoor and Klueter, 2020), they have also altered the social context for firms (Agarwal et al., 2020). Blockchain, cloud computing, wearables, geofencing techniques, Internet of Things (IoT) and such 'disruptive technologies' have armed firms with deeper insights from the marketplace that enable them to formulate strategies around value-centered marketing

(Agarwal et al., 2020).

In the background of these inclusive social development and emerging technological contexts, through this study, we propose a strategic advantage framework by integrating the theories of competitive advantage and social resource orientation of firms. The study focuses on creating a strategic advantage model for firms that integrated the economic and social aspects of businesses. Major findings emerging from this study indicate that an alignment of multiple firm resources is necessary from a strategic as well as a social perspective to develop strategic social advantage. Besides, the role of managerial experience in managing emerging technologies and developing an inclusive technology strategy is also an important finding of this study. This model has extended the knowledge on resource-based view of competitive advantage using a social context lens. Using Structural Equation Modeling (SEM) supported by Hayes' multiple mediation model, a socially embedded strategic social advantage framework was developed based on the perceptions of 565 managers from the Indian health insurance services, regarding firm competencies.

This article has been organized in different sections: the theoretical aspects of competitive advantage and its relationship with the social orientation of firms have been examined in the next section. Next is the development of the conceptual framework, research methodology and analysis of the data. Subsequently, the findings and a discussion of the results are presented. The last section includes the theoretical and managerial implications of the socially embedded model of strategic advantage and concludes the study.

In addition to humanizing the economic goals of competitive advantage, this study has developed a model for the simultaneous creation of shareholder and social value for firms.

## 2. Theoretical background and hypothesis development

Establishing an emotive relationship between customers and the firm, which circumvents commercial interests and creates value, leads to strategic advantage for the firm (Butz Jr and Goodstein, 1996). Chaharbaghi and Lynch (1999) defined 'strategic advantage' in firms as a state in which the organization was able to utilize its dynamic and inimitable resources for constant renewal of its competitive market position. They conceptualized strategic advantage as an enhanced form of competitive advantage which balanced the strain between resource management (for the present) and resource development (for the future). Integration of social and economic goals of firms to produce competitive advantage has been a relatively uncharted territory in management research (Muñoz and Kimmitt, 2019). Also, engaging in socially responsible business practices and gaining a respectable reputation amongst stakeholders have been considered as indicators of corporate social performance (Byron and Post, 2016). Combining these perspectives, this study employs strategic social advantage in the context of firms developing, sustaining and renewing competitive advantage with a social orientation.

'Strategic social advantage' for this study has been conceptualized as an extended form of competitive advantage (Chaharbaghi and Lynch, 1999), which blends the economic and social goals for an organization (Byron and Post, 2016; Muñoz and Kimmitt, 2019). While 'strategic advantage' has been studied extensively as the representation of competitive edge in firms (Butz Jr and Goodstein, 1996; Fader, 2012), adding the 'social' element to it expands the boundaries of competitive advantage to include society as a significant stakeholder (Muñoz and Kimmitt, 2019).

Gaining market share through innovative competitive strategies has dominated market dynamics for a long time (Jones et al., 2018; Pfeffer, 1994). Traditionally, firm performance has been associated

with increased profits and economic prosperity (Nireesh and Thirunavukkarasu, 2014). Tao et al. (2019) observed that firms need to be conscious of the social framework in which they operate to be able to appreciate the impact that the resource utilization would have on society at large. The coronavirus pandemic in the year 2020 has made firms appreciate the need to comprehend the societal realities in which it exists (Bapuji et al., 2020). An integrative view of internal and external firm environments has allowed firms to obtain a macro view of resources being oriented in a social context and utilized in a manner which is not detrimental to society (Kortmann and Piller, 2016).

This study has been carried out in India, where almost 85% of the population does not have health insurance cover, and more than 55 million persons are below the poverty line due to high healthcare expenditure (Nayak, Bhattacharyya and Krishnamoorthy, 2019a). In this setting, both the aspects of growing health insurance profitably and preventing the bottom of the pyramid population from healthcare expenditure shocks are important for achieving strategic social advantage.

### 2.1. Social artifacts of strategic advantage

Over the last decade, researchers have extensively delved into the relationship between competitive advantage and superior firm performance (Hinterhuber, 2013; Khan et al., 2019). While this view largely persisted with studies focusing on firm resources that enhanced economic rents, the humane facet of the competitive advantage models simultaneously gained limited prominence (Caldwell et al., 2014; Fish and Wood, 2017). The prominence of the financial benefit perspective in firms has prevented open discussions on the social impact of businesses during organizational director-level deliberations (Rao and Tilt, 2016). Recent research indicates that social inequalities have a consequential effect on organizational strategies and the competitive environment of firms (Bapuji et al., 2020). The resource-based view as well as the dynamic capabilities perspective of firms advocated that resources must be used in a manner that it created a niche for firms in the market (Eisenhardt and Martin, 2000; Kim et al., 2015; Teece et al., 1997).

The stakeholder perceptions about sustainability strategies influence the adoption of business practices which balance social and financial performance of firms (Cantele and Zardini, 2018). Previous studies have explored the social extension of the resource-based view of firms to understand firm performance in a social context (Mishra and Yadav, 2020; Tate and Bals, 2018). In emerging economies, governments have focussed on the business sector to facilitate their journey towards achieving the sustainable development goals (Khattak, 2020). Sustainability as a possible driver of competitive advantage is also making firms explore new forms of social frameworks for achieving an equilibrium between its economic and social objectives (Cantele and Zardini, 2018).

However, the probability of realization of competitive advantage leading to greater social good along with superior financial performance has received less research attention (Herrera, 2015). This limited view of firm strategy formulation created short-term advantages that pushed firms into a cycle of searching for newer ways to attract customers (Gupta et al., 2018). Gradually, firms have realized that a more encompassing view of competitive advantage is required, which is not limited to a profitability motive (Bettencourt et al., 2014). The opinion has steadily changed from viewing customers as mere buyers of products and services to one that recognizes them as stakeholders in co-creating the firm strategy (Dai et al., 2020; Saarijärvi, 2012). Bapuji, Ertug and Shaw (2020a) recommended that research in the area of organizational practices and societal economic inequalities required emphasis.

### 2.2. Organizational people orientation

Culture emanates from people, and hence, it cannot exist without them (Jansson, 2002). Organizational culture has been extensively studied as an antecedent to firm performance (Almuslamani and Daud, 2018; Barney, 1986). That finer facades of firm culture can have an enhanced impact on performance has received mixed attention from researchers and academicians. While researchers have examined market orientation (Deshpandé and Farley, 2004) and customer orientation (Deshpandé et al., 1993), people orientation has been sparsely studied (Naranjo-Valencia et al., 2016). People orientation is a subtle component of the organizational culture of firms (Ortega-Parra and Sastre-Castillo, 2013).

Social capital is a critical dimension of culture (Tang et al., 2015). Firms can empathize with social expectations if they develop inward connectivity with the people who build the organization (Ind and Bjerke, 2007). With a social orientation emphasis, this study focused on the people orientation culture in firms. For this study, people orientation has been conceptualized as the respect for the employees in the firm and enabling them to perform at their peak potential.

The direct and indirect effect of people orientation on the strategic advantage of the firm was the subject of interest of this research. Since Hayes' multiple mediation model is used to test the associations, the direct relationship between people orientation and strategic social advantage was proposed as the first hypothesis:

**H1.** Organizational People Orientation is positively associated with Strategic Social Advantage.

### 2.3. Inclusive service delivery capabilities

'Servitization' of firms is moving the core of businesses from products to services (Kamp and Parry, 2017). Service delivery capability has been positioned as a key firm resource for accomplishing competitive advantage in firms (Chen et al., 2009; Evans, 2016; Lusch, Vargo and O'brien, 2007). Firms are exploring service-based models to increase their efficiency and strengthen customer relationships (Saarijärvi et al., 2014). Firm managers have been challenged with the reality of product-related advantages being short-term in nature (Lee et al., 2000). Merging service innovations with product features enables firms to enhance their value proposition to customers (Nylén and Holmström, 2015; Vargo and Lusch, 2010). Simultaneous development of firm capabilities along with the quality of services leads to reinforcement of service delivery capabilities (Baines et al., 2009).

Previous studies have provided credence to the positive relationship between service delivery capabilities and business performance (Tian et al., 2012). However, the behavior of service delivery capabilities in socially interactive environments has not been examined adequately (Hon 2012; Orfila-Sintes and Mattsson 2009). Tang, Wang and Tang (2015) studied the influence of social capital on the service delivery capability of firms. Customer relationships that are enveloped in social capital are not easily imitable, thus providing a distinctive advantage to firms in a dynamic environment (Wu, 2008). Firms competing in the market based on superior service have been found to perform better than those competing based on technology, innovation and products (Gebauer, 2009; Tian et al., 2012). Combining the knowledge of previous studies, and aiming to understand the relationship between inclusive service capabilities with strategic advantage, the second hypothesis is posited as:

**H2.** Inclusive Service Delivery Capability is positively associated with Strategic Social Advantage.



#### 2.4. Dissecting the relationship of organizational people orientation with strategic advantage

People-oriented values are a vital component of organizational culture (Jogaratnam, 2017; Ortega-Parra and Sastre-Castillo, 2013). The direct relationship of culture with firm performance has been outlined in many studies (Almuslamani and Daud, 2018; O'Reilly III, Chatman and Caldwell, 1991). However, Jardon and Martos (2012) have recommended the inclusion of additional factors which can improve this relationship.

People orientation is manifested in the focus on human capital in firms and the investments made to enhance the quality of human resources (Naranjo-Valencia et al., 2019). This cultural aspect transforms human capital from an individualistic to a group perspective, thus resulting in higher collaboration and improved social connect (Groysberg et al., 2018). With a motivated human capital, creating new knowledge and managing it becomes essential for firms (Jardon and Martos, 2012). Similarly, cross-functional collaboration, which results from people focus, enables firms to manage the technological environment more efficiently (Khanagha et al., 2017). To achieve competitive advantage, technology management is a critical component of business processes (Mao et al., 2016; Pavlou and El Sawy, 2010). With the advent of diverse new technologies like blockchain, cloud computing, wearables, geofencing techniques and Internet of Things, the traditional ways of managing technology need to be renewed to suit the complexity and sophistication of such emerging innovations (Porter and Heppelmann, 2014; Rotolo et al., 2015; Zhou et al., 2019). The risks associated with the use of emerging technologies demand the development of suitable knowledge and technical expertise to understand and manage its implementation and integrate them in the business model (Khanagha et al., 2013; Lichtenthaler, 2020; Porter and Heppelmann, 2014; Tian, 2017).

Particularly in a social context, management of emerging technologies by firms assumes significance due to the pervasiveness of newer technologies in the society (Pallot et al., 2010). Deploying disruptive modern technology augments the product innovation strategies (Magistretti and Dell'Era, 2019), technical expertise (Heimstädt and Ziewitz, 2019) and knowledge bank (Becerra-Fernandez and Sabherwal, 2014) of the firm. Individually, product innovation and technical expertise have been found to be significant contributors to strategic advantage (Bartlett and Ghoshal, 2002; Kuncoro and Suriani, 2018).

In the social orientation context of firms, where collaborative and sharing activities are encouraged, knowledge management is viewed as complementary to 'expertise sharing' (Volker, 2003). While studies have related knowledge management to competitive advantage (Torres et al., 2018), the mediating role of product innovation (Al-Sa'di, Abdallah and Dahiyat, 2017) and technical skills and training (Sánchez et al., 2015) have also been reported in this relationship. Pavlou and El Sawy (2010) studied the role of technology-induced competitive advantage in creating reconfiguration capabilities in firms. Tomes, Erol and Armstrong (2000) observed that although the direct relationship between technology and competitive advantage was strong, integrating product innovation and expertise of specialists in the relationship increased the strength of the association.

The above studies suggested that knowledge management practices, inclusive product innovation and emerging technologies, and socio-technical expertise have a relationship with strategic competitive advantage of firms. Simultaneously, the evidence also justified the mediating role played by these factors in the relationship between organizational people orientation and strategic

social advantage. Accordingly, it was hypothesized that:

**H1#.** : Organizational People Orientation and Strategic Social Advantage are mediated rather than being directly related.

#### 2.5. Explicating the relationship of Inclusive Service Delivery Capability with strategic social advantage

Service Delivery Capability as a firm competence has been examined in previous studies (Tian et al., 2012; Valtakoski and Witell, 2018). Although studies have highlighted the direct relationship of service delivery capability with strategic competitive advantage (Evans, 2016; Gebauer, 2009), the presence of other firm competencies in the framework has also been suggested (Kindström, 2010).

Service Delivery Capabilities leading to competitive advantage has been studied previously (Evans, 2016). Froehle and Roth (2004) studied the mediating role of technology in the relationship between customer service operations and performance of the firm. Technology-mediated service delivery has been found to increase the social acceptance of processes with direct involvement of customers in the service design (Nayak, Bhattacharyya and Krishnamoorthy, 2019a; Schumann et al., 2012). Researchers have reported that knowledge management and sharing play a mediating role between customer service technology and customer service success (Garrido-Moreno et al., 2014). Especially in healthcare services, a detailed understanding of service delivery capabilities was necessary to implement knowledge management practices (Bordoloi and Islam, 2012). Including consumers in the service development process has been considered as the key to formulating socially-inclusive service delivery capabilities (Pollock, 2020).

Based on previous literature on the interrelationships between knowledge management practices, inclusive product innovation, emerging technologies management, and socio-technical expertise, it was hypothesized that:

**H2#.** : Inclusive Service Delivery Capabilities and Strategic Social Advantage are mediated rather than being directly related.

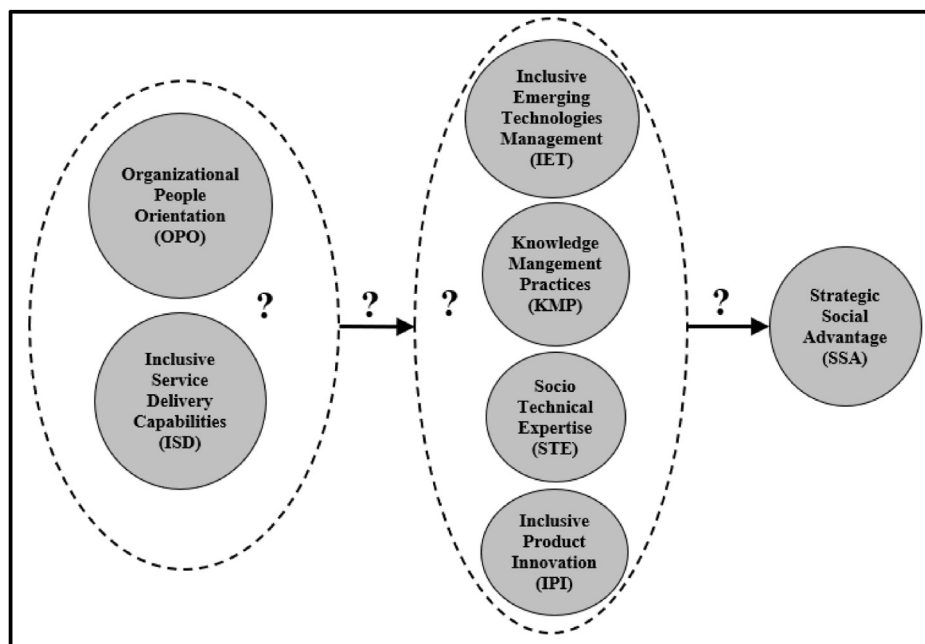
#### 2.6. Conceptual framework: mediating factors in the strategic social advantage model of firm competencies

For this study, Organizational People Orientation and Inclusive Service Delivery Capabilities have been considered as the antecedent factors for the conceptual framework based on the theoretical background discussion. While the direct relationship of the antecedents with strategic advantage has been found in various studies, evidence of other factors mediating this relationship was also found in the literature. Following this reasoning and placing the factors in a social context, the following conceptual framework (Fig. 1) was proposed for further testing:

Table 1 displays the hypothesized relationships based on different pathways created by the multiple mediating factors in the conceptual framework:

### 3. Research methodology

Consistent with previous research in the area of competitive advantage and competitive firm strategies, this study adopted a quantitative approach (Mikalef and Pateli, 2017). This study was conducted in the social context of health insurance firms in middle-income countries, which provide protection to the bottom of the pyramid population against health crises (Schneider, 2004). A



**Fig. 1.** Conceptual framework for socially embedded strategic advantage in firms.

**Table 1**  
Hypothesized paths in the conceptual framework.

H1	OPO	->	SSA							
H1a	OPO	->	IET	->	SSA					
H1b	OPO	->	KMP	->	SSA					
H1c	OPO	->	STE	->	SSA					
H1d	OPO	->	IPI	->	SSA					
H1e	OPO	->	IET	->	KMP	->	SSA			
H1f	OPO	->	IET	->	STE	->	SSA			
H1g	OPO	->	IET	->	IPI	->	SSA			
H1h	OPO	->	KMP	->	STE	->	SSA			
H1i	OPO	->	KMP	->	IPI	->	SSA			
H1j	OPO	->	STE	->	IPI	->	SSA			
H1k	OPO	->	IET	->	KMP	->	STE	->	SSA	
H1l	OPO	->	IET	->	KMP	->	IPI	->	SSA	
H1m	OPO	->	IET	->	STE	->	IPI	->	SSA	
H1n	OPO	->	KMP	->	STE	->	IPI	->	SSA	
H1o	OPO	->	IET	->	KMP	->	STE	->	IPI	-> SSA
H2	ISD	->	SSA							
H2a	ISD	->	IET	->	SSA					
H2b	ISD	->	KMP	->	SSA					
H2c	ISD	->	STE	->	SSA					
H2d	ISD	->	IPI	->	SSA					
H2e	ISD	->	IET	->	KMP	->	SSA			
H2f	ISD	->	IET	->	STE	->	SSA			
H2g	ISD	->	IET	->	IPI	->	SSA			
H2h	ISD	->	KMP	->	STE	->	SSA			
H2i	ISD	->	KMP	->	IPI	->	SSA			
H2j	ISD	->	STE	->	IPI	->	SSA			
H2k	ISD	->	IET	->	KMP	->	STE	->	SSA	
H2l	ISD	->	IET	->	KMP	->	IPI	->	SSA	
H2m	ISD	->	IET	->	STE	->	IPI	->	SSA	
H2n	ISD	->	KMP	->	STE	->	IPI	->	SSA	
H2o	ISD	->	IET	->	KMP	->	STE	->	IPI	-> SSA

cross-sectional survey of health insurance managers in India was conducted for understanding their individual perceptions of the factors identified in the conceptual model (Panagiotou, 2006). The managers were asked to indicate their agreement to the survey statements on a Likert scale of 1–5 (1 being 'Strongly Disagree' and 5 being 'Strongly Agree').

### 3.1. Why study 'managerial perceptions'?

Brownlie and Spender (1995) argued that top managers in organizations shared a common understanding of market dynamics and factors, which determined the viability of the firms in the industry. They termed this common shared understanding as "industry recipe". Panagiotou (2006) found that the social and competitive industry environment influence managerial perceptions. Managerial representations have been found to have a strong correlation with relative financial performance of firms (Day and Nedungadi, 1994). The strategy implementation in firms by managers is dependent on their mental models, which also help in industry evolution (Brownlie and Spender, 1995; Reger and Huff, 1993). Generation of dynamic capabilities has been related to how managers perceive the business environment (Barrales-Molina, Benitez-Amado and Perez-Arostegui, 2010; Teece, 2018). Thus, comprehending and mapping managerial perceptions is essential for firms to formulate appropriate firm strategies in the context of the business environment (Panagiotou, 2006).

For this study, the managers answered the survey with the frame of reference as a "firm having attained strategic social advantage". We asked the managers to provide their response based on their experience in the health insurance industry and not as a representative of the firm they were working in. The response from each manager was thus a representation of the mental model of the manager for firms that have attained strategic social advantage (Day and Nedungadi, 1994). We considered this "managerial mental model" as the unit of analysis for the study (Hodgkinson and Johnson, 1994; Prussia et al., 2003).

### 3.2. Measures and variables in the study

We considered strategic social advantage as the dependent variable for the study. It has been conceptualized as an augmented form of competitive advantage (Chaharbaghi and Lynch, 1999) with a social orientation (Byron and Post, 2016; Muñoz and Kimmitt, 2019). Table 2 provides the measures used for the variables and the associated studies from which the measures were adopted.

**Table 2**  
Items for measuring the study variables.

Dependent Variable	Measurement Items	Adapted From
Strategic Social Advantage (SSA)	Increase in market share of premium in social health insurance relative to competitors	Rodriguez-Melo and Mansouri (2011)
	Investment in socially responsible product innovation	Iyer and Soberman (2016)
	Increase in number of customers in the micro health insurance sector	Butz Jr and Goodstein (1996)
<i>Independent Variables</i>		
Organizational People Orientation (OPO)	Loyalty of employees rewarded	Berson et al. (2008)
	Employee motivation for innovation	
	Work life balance of employees	
Inclusive Service Delivery Capabilities (ISD)	Simplicity of customer communication	Tian et al. (2012)
	Control on vendor service quality	
	Priority assistance to social sector customers	
	Transparency in sales process	
	Service timelines for BoP customers	
	Transparency in services	
Inclusive Emerging Technologies Management (IET)	Implement new technologies before competitors	Pavlou and El Sawy (2010)
	Investments in social sector technology initiatives	
	Micro health insurance products considering future tech developments	
	Simplified processes considering future tech developments	
Inclusive Product Innovation (IPI)	unique features for social sector products	Kuncoro and Suriani (2018)
	introduce new micro health insurance products before their competitors	
	improve performance through product innovation	
Knowledge Management Practices (KMP)	Organizational learning systems	Torres et al. (2018)
	Digitized knowledge management system	
	IT enabled knowledge management systems	
	Continuously upgradation of KM systems	
	Knowledge sharing systems on social sector within the organization	
	Knowledge sharing on social sector across all levels	
	KM systems to improve organizational processes	
	Growth of employees with technology aptitude	
Socio Technical Expertise (STE)	Experienced technical resources in social sector portfolio	Bartlett and Ghoshal (2002)
	Skilled technical resources in social sector portfolio	
	Robust technical expertise in social sector portfolio	
<i>Marker Variable</i>		
Firm Practices (MAR)	focus on life insurance business	Chin et al. (2013)
	timely reports to the regulator	
	monitoring strategic initiatives of their competitors	
<i>Control Variables</i>		
Gender (Gen)	Codes	Drory and Beaty (1991)
	1 = Male, 2 = Female	
Age	Continuous variable entered as number of years completed on the date of the survey	Shore et al. (2003)
	response	
Qualification (Qual)	1 = Graduate, 2 = Post Graduate, 3 = PhD, 4 = Medical Professional	Rakhmayil and Yuce (2013)
Department (Dept)	1 = Claims, 2 = Marketing, 3 = Operations, 4 = Underwriting, 5 = Others	Richardson and Vandenberg (2005)
Experience (Exp)	Continuous variable entered as number of years completed in the health insurance industry	Soltwisch (2015)

All constructs have been measured on a Likert scale of 1–5 (1 being 'Strongly Disagree' and 5 being 'Strongly Agree').

### 3.3. Instrument validity and pilot study

First, the validity of the questionnaire items was determined to evaluate the linguistic simplicity of the items (Taherdoost, 2016). Face validity of the questionnaire was established by sending the questionnaire to 8 health insurance agents. Impact scores were found to be above the acceptable range of 1.5 for all items (Zamanzadeh et al., 2014). Next, content validity was ascertained by sending the questionnaire to 10 experts (8 accepted to review the content). Content validity ratio was above the cut-off value of 0.75 (Zamanzadeh et al., 2014) and content validity index was above 0.79 for all the scale items (Nikbakht, 2018).

Next, a pilot study was conducted using the validated questionnaire amongst 70 managers (independent from the main sample for the study) from the Indian health insurance industry. Using SPSS 26, the pilot survey data was analyzed and the scale reliability determined by measuring Cronbach's Alpha ( $\alpha$ ) for each construct (Table 3) and % of variance explained by the items for each construct.

The rotated component matrix from exploratory factor analysis (EFA) showed that all the items loaded on their respective constructs with loading values over 0.5 and there were no cross-

loadings, thus indicating unidimensionality (Norris et al., 2015). The total variance explained by the constructs was 69.39%, which was above the cut-off value of 60% (Effendi et al., 2019). Further, EFA conducted for each construct separately also yielded values greater than 50%.

A 3-item marker variable, not theoretically related to the constructs, was added to the questionnaire to evaluate the effect of common method bias (Chin et al., 2013).

### 3.4. Sample and data collection

Data was collected from health insurance managers working in different units of health insurance - viz, operations, claims, sales, marketing, underwriting and CXOs. Buchanan (1974) observed that firm managers gained a better understanding of the business environment only after the second year of their career. Therefore, managers with more than 5 years of experience in the health insurance industry were selected using convenience sampling.

Authors such as Collins (2010) and Viitanen and Konu (2009) opine that health insurance managers can be considered to have sufficient understanding of how firms could attain strategic social advantage, given the length of their experience in the domain. This

**Table 3**  
Cronbach's alpha ( $\alpha$ ) for constructs.

Construct	No. of Items	Cronbach's Alpha ( $\alpha$ )
Organizational People Orientation (OPO)	3	0.912
Inclusive Emerging Technologies (IET)	4	0.853
Inclusive Product Innovation (IPI)	3	0.73
Inclusive Service Delivery Capabilities (ISD)	6	0.805
Socio Technical Expertise (STE)	3	0.889
Knowledge Management Practices (KMP)	8	0.907
Strategic Social Advantage (SSA)	3	0.754

Values between 0.7 and 0.9 are acceptable for Cronbach's alpha (Nunnally, 1994).

is buttressed by the fact that health insurance is a significant form of health financing and constitutes an important block of the social framework of a nation (Saltman, 2004). Also, experienced managers do understand the impact of health insurance services on the financial health of the underprivileged sections of the society (Basaza et al., 2010).

For covariance based-structural equation modeling (CB-SEM), a sample size of 150 (rule of 5) or 300 (rule of 10) was considered adequate for this study (Jannoo et al., 2014). The final questionnaire was mailed to 766 health insurance managers in the first week of the study with the option of answering using a web link or excel version of the survey instrument. A reminder was sent to the non-respondents after four weeks. All responses received till 8 weeks from the start of the survey were considered for the analysis. Responses received from 608 professionals were complete and usable, thus achieving a completion rate of 79.4%, which provided further support to the validity and generalizability of the findings (Kellerman and Herold, 2001).

#### 4. Analysis and results

Table 4 exhibits the profile of the respondents:

Majority of the respondents were males (86.6%). While 75.4% of the health insurance managers were below the age of 40 years, only 1.9% possessed experience above 20 years in the health insurance industry. Managers in the marketing function comprised 42.1% of

**Table 4**  
Characteristics of managers.

Characteristic	Count	Percentage
<i>Gender</i>		
Female	76	13.45%
Male	489	86.55%
<i>Age (Years)</i>		
20–29	102	18.05%
30–39	324	57.35%
40–49	123	21.77%
50–59	16	2.83%
<i>Qualification</i>		
Post Graduate	293	51.86%
Graduate	166	29.38%
Medical Professional	91	16.11%
Others	11	1.95%
PhD	4	0.71%
<i>Experience (Years)</i>		
5–9	385	68.14%
10–14	130	23.01%
15–19	39	6.90%
20–24	6	1.06%
=>25	5	0.88%
<i>Function</i>		
Claims	112	19.82%
Marketing	238	42.12%
Operations	54	9.56%
Underwriting	85	15.04%
Others	76	13.45%

the surveyed population, with the least representation from operations (9.6%), which also indicates the proximity of the sales force in interacting with the social health segment. Fig. 2 indicates the respondent profile outlining the percentage of health insurance managers in each demographic segment.

##### 4.1. Tests for assumptions of multivariate analysis

The CB-SEM model estimation used in this study must satisfy assumptions like the multivariate normality of data (Jannoo et al., 2014). Table 5 summarizes the tests applied to the data.

##### 4.2. Measurement model

AMOS 26 was used to conduct confirmatory factor analysis (CFA) on the constructs. All the item loadings on their respective constructs were significant. Further, factor loadings of the items on their constructs were above 0.6, which was well above the cut-off value of 0.5 (Hair et al., 2005).

##### 4.2.1. Construct validity and reliability

Convergent validity was tested using the average variance extracted (AVE) values, which were more than the desired limit of 0.50 for all the constructs (Fornell and Larcker, 1981). Further, the significance of all the path coefficients in the CFA model was significant, with p values < 0.001 (Hair et al., 2005).

For confirming discriminant validity, firstly, all the correlations between the constructs were below the cut-off value of 0.85 (Kline, 2011). Secondly, using the Fornell–Larcker criterion, the average variance extracted (AVE) of each latent construct was compared with the latent construct's highest squared correlation with any other latent construct. Table 6 provides the reliability and validity measures for the constructs.

The correlation between the constructs is depicted graphically in Fig. 3. KMP has a high correlation with all constructs except for IPI. SSA has a moderately high correlation with the other constructs and the highest correlation with IPI. The correlation between IPI and STE is low compared to that of IPI with other constructs. Strategic Social Advantage was, thus, most closely and positively related to inclusive product innovation and socio-technical expertise.

Lastly, the Heterotrait - Monotrait (HTMT) Ratio test was used for discriminant validity as it reduces the probability of detecting false-positive rates (Voorhees et al., 2016). HTMT ratio values for all pairs of constructs were below the cut-off value of 0.85 (Kline, 2011).

The standardized regression weights of all the items on their respective constructs were above 0.7 (Hair et al., 2011) except for three items (IPI3: 0.690, IET1: 0.658, IET2: 0.672), which were at the borderline level, and hence retained. The Hoelter .05 and Hoelter .01 index were 247 and 259, respectively, which supported the adequacy of a sample size of 565 for accepting that the model was accurate (Schreiber et al., 2006).

The model fit measures for the CFA model ( $\chi^2/df = 2.563$ ,  $NFI = 0.910$ ;  $TLI = 0.935$ ;  $CFI = 0.943$ ;  $IFI = 0.943$ ;  $RMSEA = 0.053$ ;  $PCLOSE = 0.139$ ;  $SRMR = 0.40$ ) were found to be satisfactory (Hair et al., 2005).

##### 4.3. Structural model

The Maximum Likelihood (ML) method of parameter estimation was used to analyze the normally distributed data; besides, this method also yields unbiased estimates (Jannoo et al., 2014).

Table 7 shows the unstandardized and standardized structural path coefficients.



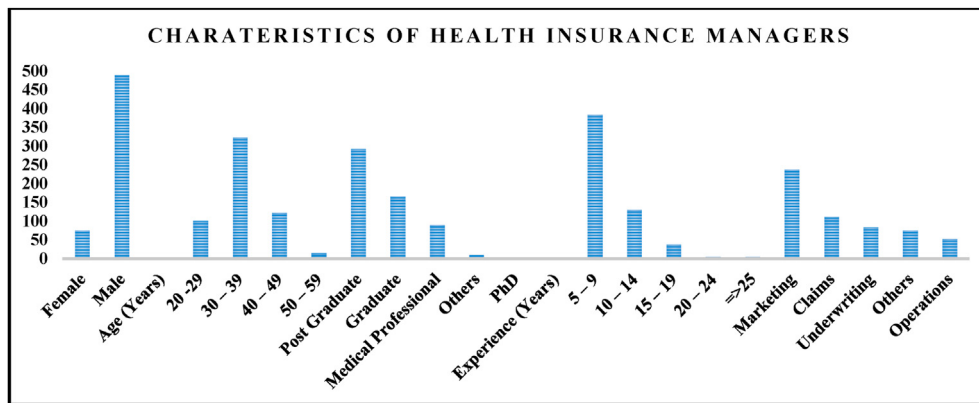


Fig. 2. Health insurance managers' profile.

Table 5

Summary of tests conducted.

Assumption	Test Name	Desired Value	Test Result	Reference
Outlier Analysis	Residual Statistics	Minimum Value > -3.29 & Maximum Value < 3.29	Satisfied after removing 43 observations	(Hair et al., 2005)
Homoscedasticity	Mahalanobis Distance	Minimum distance from centroid		
	Scatter Plot of Standardized Residuals	Variances of the residuals are constant	Satisfied	
	Breusch-Pagan	Sig > 0.05	0.430	(Hashimzade et al., 2016)
Independent Errors	Koenker Test		0.525	
	Durbin Watson	1 < Value < 3 (as close to 2)	1.999	(King and Evans (1985)
Normality	Histogram and normal P-P Plot of standardized residuals	Histogram - normally distributed errors P-P plot - points on or close to the line	Satisfied	(Hair et al., 2005)
Non-Zero Variances	Examination of variances in descriptive statistics	> 0	Satisfied	
Non-Response Bias (1st and 2nd Wave Respondents)	Welch Test and Brown Forsythe Test	Sig > 0.05	Not Present	Brown and Forsythe (1974)
Response Method Bias (E Mail and Web Link)		Sig > 0.05	Not Present	Delacre et al. (2017)
Common Method Variance	Harman's Single Factor Test	< 50%	35.208%	Podsakoff & Organ (1986)
	Common Latent Factor Method		12.890%	Podsakoff et al. (2003)
	Marker Variable Technique		11.420%	Williams et al. (2010)
Multicollinearity	VIF	< 10	Satisfied	(Hair et al., 2005)

Table 6

Assessment of Reliability, Convergent and Discriminant Validity of constructs.

	CR	AVE	MSV	MaxR(H)	OPO	ISD	IPI	IET	KMP	STE	SSA
OPO	0.88	0.71	0.623	0.879	0.84						
ISD	0.88	0.55	0.51	0.88	0.709***	0.739					
IPI	0.78	0.54	0.418	0.782	0.501***	0.502***	0.732				
IET	0.85	0.58	0.504	0.873	0.596***	0.590***	0.633***	0.764			
KMP	0.93	0.63	0.623	0.934	0.790***	0.714***	0.606***	0.710***	0.796		
STE	0.87	0.68	0.401	0.878	0.525***	0.523***	0.475***	0.543***	0.633***	0.83	
SSA	0.78	0.54	0.418	0.779	0.522	0.503	0.647	0.533	0.606	0.618	0.74
Mean					4.404	4.546	4.41	4.315	4.338	4.293	4.257
SD					0.693	0.537	0.572	0.631	0.597	0.592	0.562
C-Alpha					0.874	0.876	0.768	0.842	0.931	0.861	0.774

\*\*\*p &lt; 0.001; \*\*p &lt; 0.01.

Diagonal values in bold depict the square root of the AVE for the main constructs.

All diagonal values are above the paired intercorrelations (Fornell and Larcker 1981).

Values between 0.7 and 0.9 are acceptable for Cronbach's alpha (C-Alpha) (Nunnally, 1994).

Composite Reliability (CR) values are above the desired cut-off value of 0.7 (Nunnally and Bernstein, 1994).

MaxR(H) values are higher than CR (El-Adly, 2019).

Maximum Shared Variance (MSV) values less than the AVE for constructs (Farrell, 2010).



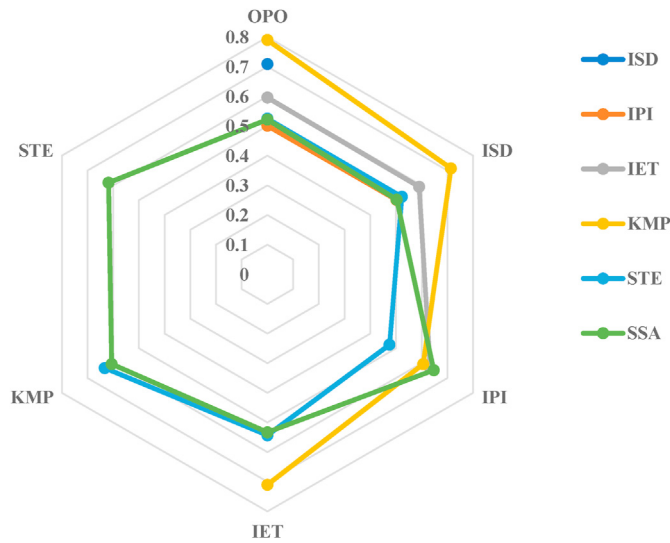


Fig. 3. Correlation coefficient between the constructs.

All path coefficients were significant at  $p \leq 0.001$  level, except for the paths between OPO, KMP, ISD, and IET with the dependent variable SSA. Since the model had multiple mediators operating parallelly, the multiple mediation paths were examined before deleting non-significant paths. Table 10 shows the model fit measures for this structural model (Model 1) based on the hypothesized paths. Hayes' PROCESS macro was ideal for analyzing the data because it allowed exploration of parallel, moderated, and serial mediation models (Preacher and Hayes, 2008).

Also, the five control variables were regressed against the endogenous constructs in the SEM model. All the path estimates were insignificant except for that between managerial experience and IET (Exp  $\rightarrow$  IET: Estimate:  $-0.012$ , SE:  $0.006$ ; C.R.:  $-2.098$ ;  $p$ :  $0.036$ ), which was further explored in Hayes' Process Macro.

#### 4.3.1. Analysis of multiple mediation paths

The multiple mediation paths were tested using bootstrapping procedures in Hayes Model 6 to estimate the direct and indirect paths and test their significance using confidence intervals. Bootstrapping follow up analysis was conducted using 5000 bootstrap samples and 95% bias-corrected confidence intervals for all indirect effects. Absence of zero in the 95% confidence interval indicated the

significance of the relationship (Preacher and Hayes, 2008). Table 8 provides the total, direct and indirect path estimates for the hypothesized paths and their significance for OPO and ISD. The multiple mediation analysis indicated that both OPO and ISD did not have a direct significant relationship with SSA but were fully mediated by IET, KMP, IPI and STE, although with different combinations in each path.

The effect of 'managerial experience (Exp)' on Inclusive Emerging Technologies (IET) was tested using Hayes' Model 14 (Hayes, 2015). Moderated mediation was confirmed by the index of moderated mediation (Table 9), which was significant and positive.

Results indicated a second stage moderation (Hayes, 2015) wherein 'managerial experience' moderated the mediating effect of IET on the relationship between OPO/ISD and KMP, such that the indirect effect of OPO/ISD on KMP via IET was stronger for higher managerial experience. Fig. 4 shows the interaction effects of IET and 'Exp' on KMP for the indirect effects of OPO and ISD on KMP.

This indicated that more experienced managers perceived the positive relationship between IET and KMP more strongly. The rate of increase of KMP with higher levels of IET was greater for the indirect effect of ISD  $\rightarrow$  KMP (Index =  $0.0064$ ) than that of OPO  $\rightarrow$  KMP (Index =  $0.0052$ ). Managers thus perceived that management of inclusive emerging technologies resulting from inclusive service delivery capabilities led to more robust knowledge management practices than that arising from organizational people orientation.

#### 4.3.2. Model Re-specification

Based on the results of Hayes' analysis, non-significant paths were deleted and the model was re-specified to estimate the model fit (Model 2). All the path coefficients were significant at the  $0.05$  level. Table 10 provides the model fit measures for the measurement and the two structural models (Models 1 and 2).

Model 2 fit indices showed considerable improvement over Model 1 in terms of the parsimonious fit indices (Mulaik et al., 1989). Moreover, for key indices like  $\chi^2/df$ , TLI, RMSEA and PCLOSE, the values for Model 2 showed improvement over Model 1 (Kenny, 2011). Further, all the model fit indices in the structural Model 2 satisfied the cut-off requirements and were almost same as the measurement model (Hair et al., 2005). The loading estimates of the items on the constructs remained the same for Model 2 compared to the measurement model, with a maximum variation of  $0.002$ . Hence, it was safely assumed that a good model fit was achieved for the structural model with Model 2. Fig. 5 depicts the final structural model with the path coefficients.

Table 7

Unstandardized and standardized structural path coefficients.

			Unstandardized Parameter Estimate	Standard Error	C.R.	Standardized Parameter Estimate	p-value
IET	$\leftarrow$	OPO	0.374	0.067	5.598	0.354	***
IET	$\leftarrow$	ISD	0.493	0.091	5.395	0.345	***
KMP	$\leftarrow$	OPO	0.409	0.046	8.852	0.454	***
KMP	$\leftarrow$	ISD	0.253	0.058	4.335	0.208	***
KMP	$\leftarrow$	IET	0.269	0.036	7.549	0.316	***
IPI	$\leftarrow$	IET	0.318	0.053	6.047	0.412	***
STE	$\leftarrow$	IET	0.165	0.051	3.215	0.195	0.001
IPI	$\leftarrow$	KMP	0.286	0.059	4.839	0.317	***
STE	$\leftarrow$	KMP	0.497	0.063	7.862	0.5	***
SSA	$\leftarrow$	IPI	0.391	0.067	5.85	0.403	***
SSA	$\leftarrow$	STE	0.301	0.052	5.81	0.341	***
SSA	$\leftarrow$	OPO	0.05	0.062	0.793	0.063	0.428
SSA	$\leftarrow$	KMP	0.08	0.084	0.956	0.091	0.339
SSA	$\leftarrow$	ISD	0.043	0.072	0.593	0.04	0.553
SSA	$\leftarrow$	IET	-0.023	0.053	-0.439	-0.031	0.661

\*\*\* $p < 0.001$ ; \*\* $p < 0.01$ .

**Table 8**

Total, direct and indirect path estimates for hypothesized paths.

										Effect	BootSE	BootLLCI	BootULCI	Result		
TOTAL effect of OPO on SSA																
OPO	->	SSA								0.2229	0.0388	0.1467	0.2991	S		
DIRECT effect of OPO on SSA																
H1	OPO	->	SSA								0.043	0.0403	-0.0362	0.1223	NS	
INDIRECT effects of OPO on SSA																
H1a	OPO	->	IET	->	SSA					0.0168	0.0159	-0.0111	0.0510	NS		
H1b	OPO	->	KMP	->	SSA					0.0388	0.0207	-0.0007	0.0807	NS		
H1c	OPO	->	STE	->	SSA					0.0014	0.0147	-0.0268	0.0310	NS		
H1d	OPO	->	IPI	->	SSA					0.0035	0.0119	-0.0204	0.0274	NS		
H1e	OPO	->	IET	->	KMP	->	SSA			0.0103	0.0056	-0.0002	0.0220	NS		
H1f	OPO	->	IET	->	STE	->	SSA			0.0151	0.0051	0.0064	0.0264	S		
H1g	OPO	->	IET	->	IPI	->	SSA			0.0249	0.0071	0.0134	0.0410	S		
H1h	OPO	->	KMP	->	STE	->	SSA			0.0345	0.0095	0.0188	0.0555	S		
H1i	OPO	->	KMP	->	IPI	->	SSA			0.0169	0.0073	0.0036	0.0325	S		
H1j	OPO	->	STE	->	IPI	->	SSA			0.0001	0.0012	-0.0026	0.0025	NS		
H1k	OPO	->	IET	->	KMP	->	STE	->	SSA	0.0091	0.0031	0.0042	0.0163	S		
H1l	OPO	->	IET	->	KMP	->	IPI	->	SSA	0.0045	0.0020	0.0009	0.0089	S		
H1m	OPO	->	IET	->	STE	->	IPI	->	SSA	0.0011	0.0007	-0.0003	0.0027	NS		
H1n	OPO	->	KMP	->	STE	->	IPI	->	SSA	0.0024	0.0018	-0.0005	0.0066	NS		
H1o	OPO	->	IET	->	KMP	->	STE	->	IPI	->	SSA	0.0006	0.0005	-0.0001	0.0019	NS
TOTAL effect of ISD on SSA																
ISD	->	SSA								0.2495	0.0501	0.1511	0.3479	S		
DIRECT effect of ISD on SSA																
H2	ISD	->	SSA								0.0383	0.0480	-0.0559	0.1325	NS	
INDIRECT effects of ISD on SSA																
H2a	ISD	->	IET	->	SSA					0.0204	0.0186	-0.0162	0.0586	NS		
H2b	ISD	->	KMP	->	SSA					0.0264	0.0147	0.0004	0.0580	S		
H2c	ISD	->	STE	->	SSA					0.0303	0.0162	-0.0012	0.0624	NS		
H2d	ISD	->	IPI	->	SSA					0.0157	0.0144	-0.0105	0.0460	NS		
H2e	ISD	->	IET	->	KMP	->	SSA			0.0125	0.0068	0.0002	0.0266	S		
H2f	ISD	->	IET	->	STE	->	SSA			0.0183	0.0067	0.0078	0.0338	S		
H2g	ISD	->	IET	->	IPI	->	SSA			0.0303	0.0089	0.0156	0.0505	S		
H2h	ISD	->	KMP	->	STE	->	SSA			0.0235	0.0076	0.0111	0.0407	S		
H2i	ISD	->	KMP	->	IPI	->	SSA			0.0115	0.0053	0.0024	0.0232	S		
H2j	ISD	->	STE	->	IPI	->	SSA			0.0021	0.0019	-0.0006	0.0068	NS		
H2k	ISD	->	IET	->	KMP	->	STE	->	SSA	0.0111	0.0038	0.0052	0.0199	S		
H2l	ISD	->	IET	->	KMP	->	IPI	->	SSA	0.0054	0.0026	0.0011	0.0113	S		
H2m	ISD	->	IET	->	STE	->	IPI	->	SSA	0.0013	0.0009	-0.0003	0.0033	NS		
H2n	ISD	->	KMP	->	STE	->	IPI	->	SSA	0.0016	0.0013	-0.0003	0.0048	NS		
H2o	ISD	->	IET	->	KMP	->	STE	->	IPI	->	SSA	0.0008	0.0006	-0.0002	0.0022	NS

Hayes' Model 6 was used for multiple mediation analysis.

Level of confidence for all confidence intervals in output: 95.

Number of bootstrap samples for percentile bootstrap confidence intervals: 5000.

S = Supported; NS = Not Supported.

**Table 9**

Index of moderated mediation.

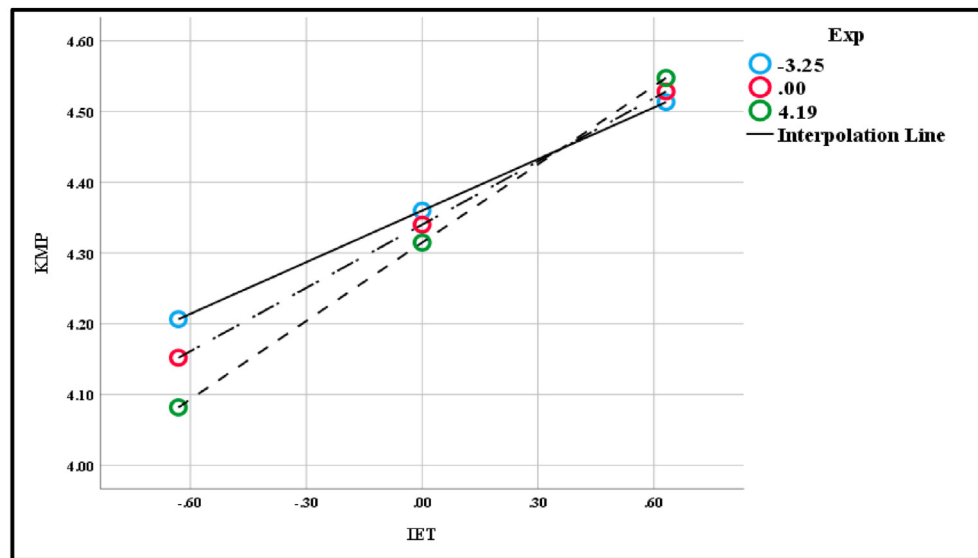
Indirect Effect					Moderator	Index	BootSE	BootLLCI	BootULCI	
ISD	->	IET	->(Exp)	KMP	Exp	0.0064	0.0029	0.0005	0.0119	Significant
OPO	->	IET	->(Exp)	KMP		0.0052	0.0023	0.0004	0.0097	

## 5. Discussion

The results of the study suggest that organizational people orientation (OPO) plays a significant role in creating strategic advantage in firms within a social context. People orientation has been considered as instrumental in firms being able to sustain and renew their advantages (Bartlett and Ghoshal, 2002; Bhat and Darzi, 2018). Also, the results indicated that inclusive service delivery capabilities (ISD) influenced strategic advantage of the firm, as reported in the study of Evans (2016). However, unlike previous studies, the results demonstrate that although the total effects were significant, the direct effect of people orientation (H1) as well as service delivery capabilities (H2) on strategic social advantage (SSA) was not significant in the presence of mediating factors like inclusive emerging technologies management (IET), knowledge management practices (KMP), inclusive product innovation (IPI)

and socio-technical expertise (STE). Thus, although previous research indicated that OPO and ISD had a direct positive relationship with SSA, it is found that in a social context, both OPO and ISD required support from other firm resources. One of the main findings of the study was that firms are required to have a holistic focus on multiple competencies for a robust, socially-embedded strategic advantage model and not depend on few isolated resources. Tate and Bals (2018) discussed how the blend of capabilities can aid the simultaneous attainment of the economic and social goals in the context of the triple bottom line. This finding is also supported by the study of Ratajczak (2021) affirming the amalgamation of resources for corporate social performance.

In the multiple mediation paths, individually, only KMP mediated the relationship between ISD and SSA (H2b). It has been found in previous studies that service delivery capabilities which are built upon customer expectations, also contribute to designing of



*Exp is measured as number of years of experience in the health insurance industry*

**Fig. 4.** Second-Stage Moderation - Interaction Effect of IET and Exp on KMP Exp is measured as number of years of experience in the health insurance industry.

**Table 10**

Model fit summary - structural equation modeling.

Model Parameter	Measurement Model	Structural Model 1	Structural Model 2	Desired Value
$\chi^2/df$	2.563	2.557	2.453	<5
GFI	0.895	0.895	0.893	>0.9
AGFI	0.873	0.874	0.874	>0.9
PGFI	0.740	0.741	0.755	>0.5
NFI	0.910	0.910	0.906	>0.9
PNFI	0.803	0.805	0.817	>0.5
IFI	0.943	0.943	0.942	>0.9
TLI	0.935	0.935	0.936	>0.9
CFI	0.943	0.943	0.942	>0.9
PCFI	0.832	0.834	0.849	>0.5
RMSEA	0.053	0.053	0.051	<0.06
RMSEA (LO 90)	0.049	0.048	0.047	<0.06
RMSEA (HI 90)	0.057	0.057	0.055	<0.06
PCLOSE	0.139	0.149	0.369	>0.05
SRMR	0.0403	0.0402	0.0407	<0.05

$\chi^2/df$  - Absolute/Predictive Fit Chi Square; GFI - Goodness of Fit Index; AGFI - Adjusted GFI; PGFI - Parsimonious GFI; NFI - Normed Fit Index; PNFI - Parsimonious NFI; IFI - Incremental Fit Index; TLI - Tucker Lewis Index; CFI - Comparative Fit Index; PCFI - Parsimonious CFI; RMSEA - Root Mean Square Error of Approximation; LO - Lower Bound; HI - Higher Bound; PCLOSE - significance of close fit; SRMR - Standardized Root Mean Square Residual.

socially informed knowledge management systems (Thomas et al., 2001). Except for this individual mediation of KMP between ISD and SSA (H2b), all other significant paths were similar for OPO and ISD. Another critical finding of this study was that amongst the 14 significant mediated relationships, IET was the primary mediator for 9 relationships with OPO (H1f, H1g, H1k, H1l) and ISD (H2e, H2f, H2g, H2l, H2m). This finding amplifies the cementing role that IET occupies in the proposed framework. Stahl (2011) positioned 'emerging technologies' as being socially relevant in the future. Typically, firms engage in training people to manage established technologies, while newer emerging technologies are not prioritized (Khanagha et al., 2013). Hughes (2010), in his study, opined that only having skilled people and not facilitating them to use the right technology will not lead to value creation. Integrating emerging technologies in service delivery models enhances the efficiency of customer service in firms and also facilitates social collaboration (Kajewski, 2007).

Social interaction between human resources involved in services leads to the creation of knowledge-intensive service delivery networks (Dong et al., 2011). Critical ideas on product innovation

are best obtained from the knowledge captured from service delivery-related unmet customer needs and competitor information (De Jong and Vermeulen, 2006). This study supported previous findings that knowledge created through nurturing such ideas can be channelized to develop socially inclusive products (Xie et al., 2016).

Amongst the multiple mediation relationships of OPO and SSA, the effect of KMP and STE as mediators (H1h) was the strongest (effect: 0.0345), followed by IET and IPI (H1g) (effect: 0.0249). Interestingly, when KMP, IET and IPI (excluding STE) were the mediating factors between OPO and SSA (H1l), the effect was the weakest (effect: 0.0045). Thus, the exclusion of socio-technical expertise was found to reduce the effect of other firm resources on SSA. Technical expertise is a natural corollary of a people orientation culture in firms (Bartlett and Ghoshal, 2002; Marchand et al., 2000). Fostering competencies like knowledge creation (Morris and Empson, 1998) and technology management (Gillard, 2009) yields better technical expertise in firms. Bartlett and Ghoshal (2002) linked people orientation and their associated technical expertise to competitive advantage in firms. Further, they

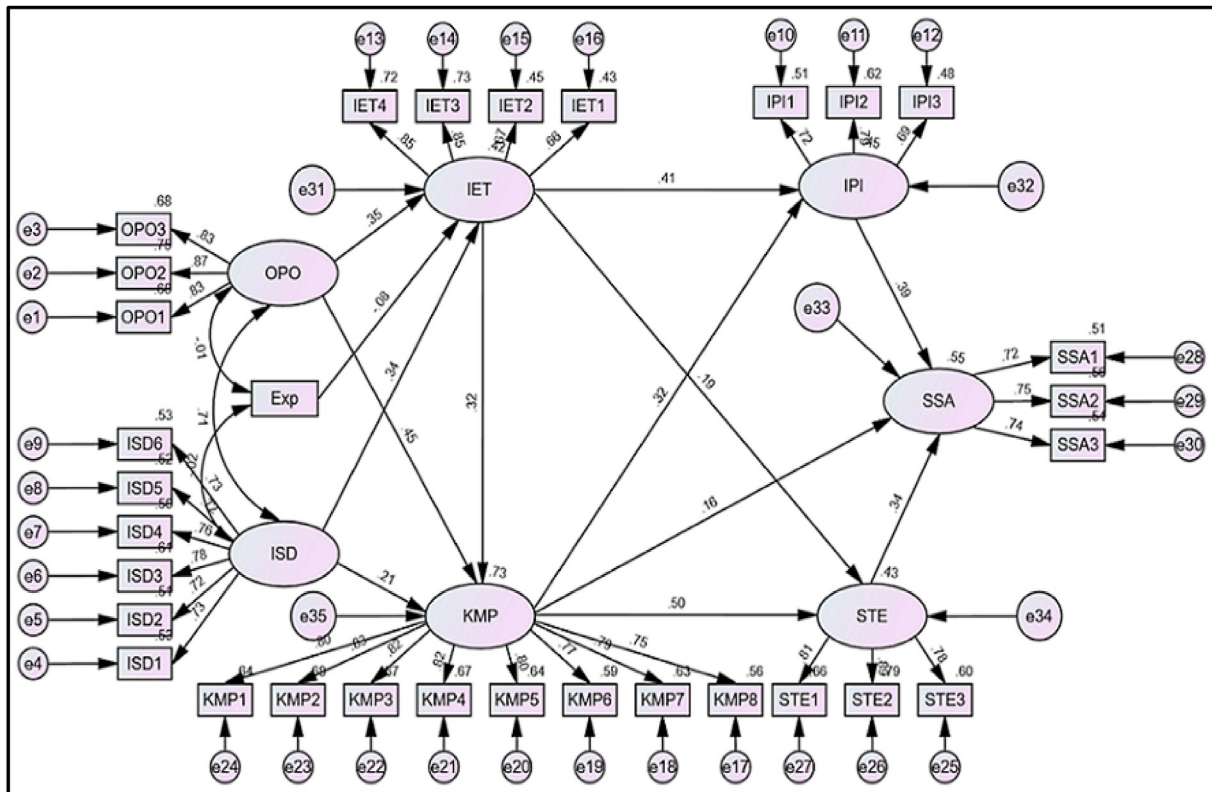


Fig. 5. Structural model for socially embedded strategic advantage in firms.

observed that dynamic social networks are essential for developing a suitable knowledge base and technical expertise. Adapting to the dynamic social environment and the challenge of newer technologies requires firms to develop robust technical expertise (Appelbaum, 1997). Thus, this study supports previous research which positions socio-technical expertise as a critical component of the strategic social advantage framework for firms (Davies et al., 2017).

For the multiple mediation paths of ISD and SSA, the strongest effect was in the path with IET and IPI (H2g) as mediators (effect: 0.0303), followed by KMP and STE (H2h) (effect: 0.0235). Again, exclusion of socio-technical expertise from the set of mediators IET, KMP and IPI (H2i) reduced the effect of ISD on SSA (effect: 0.0054). Thus, STE again emerged as a critical component of mediators between ISD and SSA.

Managerial experience emerged as a key factor in reinforcing the influence of IET on KMP. Moreover, this influence was stronger when IET mediated the path between ISD and KMP than the impact observed between OPO and KMP. This outcome entailed that while managers believed that IET was an important constituent of the strategic social advantage framework, those with a higher experience perceived that IET emerging from ISD can drive higher knowledge creation than IET emerging from OPO. Technology-mediated services encourage the participation of customers in the service delivery process, thereby increasing the social acceptance of the services (Nayak, Bhattacharyya and Krishnamoorthy, 2019b; Schumann et al., 2012). Vargo (2018) advocated that technology and humans are inseparable, and service is a result of technology being used beneficially for value creation. The ability of technology to empower customers facilitates the process of value co-creation (Zhang et al., 2020), thus enabling social inclusivity.

The structural model that emerged from this study fulfills the goal of this research to develop a strategic social advantage model

in the context of the health insurance business. Fig. 6 depicts the strategic social advantage model reflecting the paths which emerged as significant in the study along with the constructs and their related items.

## 6. Conclusion

The health status of a country is linked to synergies amongst the sources of healthcare financing (Lim, 2017). In the Indian scenario, financing of healthcare through health insurance has been growing while there has been moderate growth in the quality of health infrastructure of the country (Purohit, 2019). The Indian population has consumers at both ends of the economic spectrum (Sardana et al., 2020). While the public health policies strive to enhance financial inclusion and reduce social inequality (Narain, 2016), the health insurance industry needs to adopt business strategies to support this policy. A certain section of the population can afford to buy high levels of health insurance coverage while the bottom of pyramid population does not have adequate access to basic healthcare (Nayak, Bhattacharyya and Krishnamoorthy, 2019b). This study lays down a framework for health insurance firms to formulate business strategies for all economic sections and balance its social and economic goals. While the government is focussed on reducing public health risks related to air pollution, substance abuse and communicable diseases (Adapa, 2018), this study outlines the roadmap for health insurance firms to supplement the public health policy through emerging technologies and products to manage health issues arising from such risks. This also facilitates achievement of SDGs in the context of healthy lives and well-being of the population.

The COVID-19 health crisis has revived the debate on the interaction between organizations and societies (Bapuji et al., 2020). Socially-conscious firms strive to pursue the dual



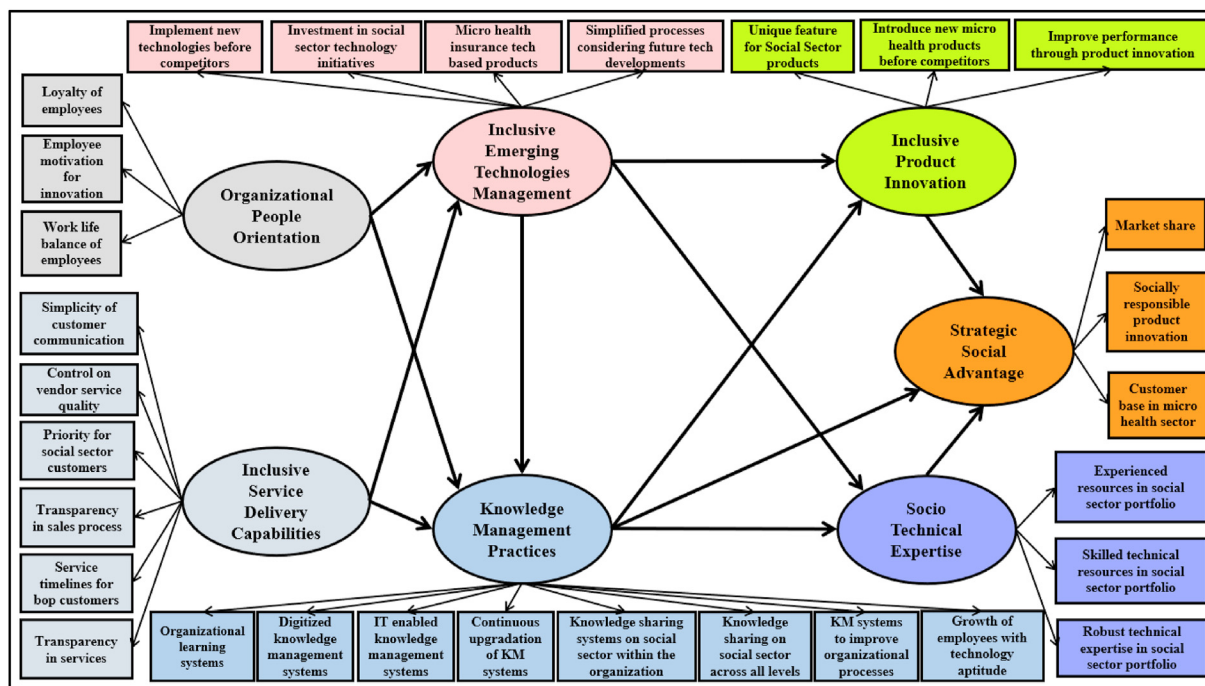


Fig. 6. Research model with constructs and related items for strategic social advantage model for health insurance.

objectives of simultaneously creating shareholder value as well as social value (Tu, 2016). Creating a nimble organization is the focus of socially-conscious firms (Sprinkle and Maines, 2010). Firms have increasingly realized that they operate in a marketplace which coexists within a social milieu (Brennan and Merkl-Davies, 2018). With an increased focus on creating value for customers, firm managers have been compelled to place the customer at the center of their strategy formulation process (Ocasio and Joseph, 2018; Sánchez-Gutiérrez et al., 2019).

Competitive advantage has been conventionally positioned as an armor for firms, which shields them from the competitive tactics of peers (Ma, 2000). Researchers have contended that attainment of competitive advantage puts a firm on a pedestal, which prevents imitation of firm strategies (Corona et al., 2019). This study provides firms with an approach where firm resources can be utilized to achieve a socially acceptable form of competitive advantage – 'strategic social advantage'. Donaldson (2001) discussed how 'ethical advantage' creates benefits which are beyond economic gains and extends to societal gains. This is one of the first studies which place firm competencies in a social framework for strategic advantage. It theoretically extends the resource-based view of competitive advantage from a social perspective (Tate and Bals, 2018). This study also depicts dynamic firm capabilities in a social envelope while affirming the importance of the resource-based view of the firm (Ratajczak, 2021). While previous studies have explored the significance of firm resources in contributing to competitive advantage, the outcome of this study describes the mechanism of weaving these resources to create social value (Ratajczak, 2021; Tate and Bals, 2018). Thus, both the resource-based view and dynamic capabilities approach are explicated in this study in a social context. It adds to the studies which advocate the need for firms to adopt purpose beyond profits (Goodson et al., 2020).

The study also highlights the importance of managerial experience in a specific industry sector, it being critical to bring together the necessary firm resources in the right proportion to create strategic social advantage. The multiple mediating factors related to

managing emerging technologies and knowledge from a social perspective along with the socio-technical expertise and inclusive product innovation provided the pathways to the development of strategic social advantage built upon the foundation of organizational people orientation and inclusive service delivery. This supports the need for firm resources to be strategically and socially aligned to facilitate socially embedded competitive advantage (Haseeb et al., 2019). Industry-specific managerial experience has been found to be useful in knowledge creation and formulating innovation strategies for firms (Balsmeier and Czarnitzki, 2013). Further, the study highlights the importance of utilizing managerial perceptions in driving strategic decision-making in firms. The practical implication of this study is entailed in the results which indicate that firms need to consider the managerial mental models as powerhouses of innovation, which can create the real competitive advantage – 'strategic social advantage' for firms.

This study was conducted amongst health insurance managers in India using managerial perceptions as the unit of analysis. Further studies correlating firm performance with investments in resources identified in this study would help validate the relationships identified in this study. Also, future studies can examine the differences and strengths of the relationships between the firm competencies in other emerging economies.

#### CRedit authorship contribution statement

**Bishwajit Nayak:** Conceptualization, Methodology, Data curation, Formal analysis, Writing – original draft, Visualization, Investigation, Validation. **Som Sekhar Bhattacharyya:** Writing – review & editing. **Bala Krishnamoorthy:** Writing – review & editing.

#### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jclepro.2021.126805>.

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