Impact of High Performance Work Systems on Innovation and Firm's Performance

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Abstract:

This study examined the relationship of Top Management Commitment (TMC) with High Performance Work Systems (HPWS) comprised Strategic Talent Management Practices (STMP) and Job Design (JD), HPWS with Innovation, moderating relationship of JD with STMP and Innovation, Innovation with Firm's financial performance, synergistic relationship of HPWS and Innovation with Firm's financial performance. Results based on 725 samples collected from Employees and Interviews of Top Management and HR Heads of 14 small and medium scale equipment manufacturing industries situated in India, revealed that; (1) STMP were positively and highly correlated with JD. STMP were also positively and highly correlated with Innovation. The magnitude of relationship of STMP with JD and Innovation was smaller on Autonomy, Job enlargement, Skill multiplicity, and overall JD for low committed Top Management in comparisons to high committed Top Management. The magnitude of relationship of STMP with Innovation was smaller on Idea Management, Innovation Culture, Innovation Technology, and overall Innovation for low committed Top Management in comparisons to high committed Top Management. (2) STMP and JD are significant predictors of Innovation in case of both high and low committed Top Management. (3) The result confirms that there was no moderating effect of interaction of STMP and JD on Innovation in case of high and low committed Top Management. (4) Job Characteristics, Task Identity and JD influenced the innovation ability of employees. A customised scale consisting of 86 items with overall Cronbach's Alpha of 0.94 and construct

validity of 60.11 was developed and deployed. Quentitive and qualititive research methods were deployed for triangulation.

Key Words: *Strategic Human Resources Management, Strategic Talent Management Practices, High Performance Work Systems, Job Design, Innovation, Top Management Commitment, Firm's performance*

Introduction:

Economic environment is changing rapidly and this change is characterized by such phenomena as the globalization, changing customer and investor demands, ever-increasing product-market competition. To compete successfully in this environment, organization continually need to improve their performance by reducing costs, innovating products & processes and improving quality, productivity and speed to market. The people who make up an organization – "*Human Resources*" - are considered to be one of the most important resources of today's firms. People and how they are managed are becoming more important because many other sources of competitive success are less powerful than they used to. Recognizing that the basis for competitive advantage has changed, it is essential to develop a different frame of reference for considering issues of human resource management and strategy. Traditional sources of success such as product and process technology, protected markets, economies of scale, etc. can still provide competitive leverage but an organization's "*Human Resources"* are more vital for its sustainability.

Organizations are always looking for a way to gain competitive advantage in their markets and an HPWS is one of the ways to achieve this advantage. If an organization can design, implement and change their architecture quickly to react to internal and external environments, they will create a successful business environment, which is difficult to copy. In addition, an HPWS can provide an organization a way to create "higher productivity, lower costs, and better responsiveness to customers, greater flexibility and higher profitability" (Bohlander & Snell, 2004).

Theoretical background:

The nature and pace of recent changes in the economic environment has motivated both managers and scholars to look for new sources of competitive advantage and profitability. As many of traditional sources of competitive advantage (technology, economies of scale, patents, etc.) have diminished in value, the role of a skilled, motivated and flexible workforce has become more prominent (Pfeffer J. , 1994). In the field of SHRM, researchers have examined the potential benefits of using HPWS as a means to maximize firms' competitive advantage (A. Huselid M. (1995); A.Huselid, Brian, & Mark (1998); Bae & Lawler (2000)). One of the fundamental principles of SHRM research is that the impact of HR practices on individual and organizations is best understood by examining the bundle, configuration, or system of HR practices in place. The rationale for this perspective is fairly straightforward. Considering that HR practices are rarely, if ever, used in isolation, failure to consider all of the HR practices that are in use neglects potential important explanatory value of unmeasured HR practices. As a result, while some studies have documented the organizational benefits that are associated with specific HR practices, the general perspective in this area of research is that a systems view is more appropriate.

Wright & McMahan (1992) noted that SHRM is primarily focused on "the pattern of planned HR deployments and activities" that are intended to help organizations to achieve their objectives. Delery.J.E (1998) noted, "The basic assumption is that the effectiveness of any practice depends on the other practices in place. If all of the practices fit into a coherent system, the effect of that system on performance should be greater than the sum of the individual effects from each practice alone." While researchers may agree that a systems perspective is more appropriate than a perspective that focuses on the role of individual HR practices in isolation, adopting a systems perspective introduces a host of issues and problems that remain to be addressed in the literature. For instance, inconsistencies abound regarding what constitutes a system and multiple

conceptualizations of HR systems have come in light in the literature (e.g., High Performance Work Systems (HPWS), Human Capital Enhancing HR Systems, Commitment HR systems, High-Involvement HR Systems, etc.). A lack of consistency regarding these systems limits our ability to truly understand the form and function of these systems in organizations.

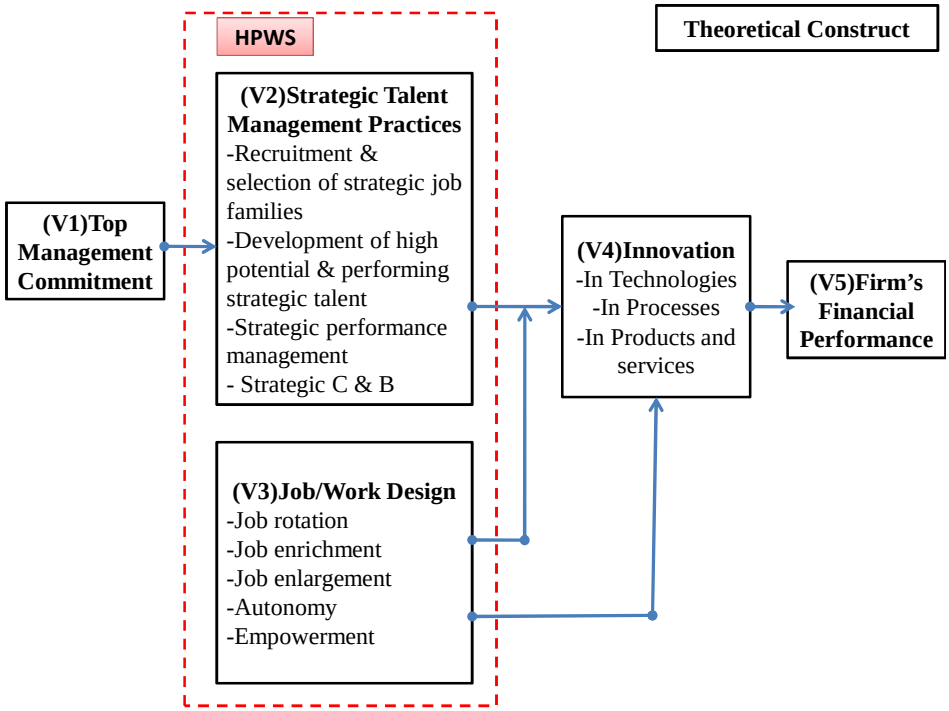
Batt (2002), J.D, Delery. J. E & Shaw (2001), Huselid. M. A (1995) and MacDuffie. J.P (1995) argued that HR system consist of three distinct HR policy domains that are originated towards (a) influencing employee knowledge, skills and abilities, (b) employee motivation and efforts, and (c) opportunities allowing employees to contribute.

At this juncture, we need to understand difference between HR practices, HR policies, and HR systems. Backer.B.E & Gerhart.B (1996) and Schuler.R. (1992) noted that HR activities may be conceptualized along several levels of analysis. At the lowest level, an HR practice reflects specific organizational actions designed to some specific outcome. At the higher level of abstraction are HR policies, which reflect on employee focused program that influences the choice of HR practices. HR system may operate at an even higher level of analysis and reflect a program of multiple HR policies that are espoused to be internally consistent and reinforcing to achieve some overarching results.

There are two ways to conceptualize the HR systems. First it is implied that HR systems span a continuum of two extremes ranging from high performance or Commitment oriented to control oriented HR systems. Arther.J.B (1992 & 1994), Doty.D.H (1996), Guthrie (2001); Huselid.M.A (1995) noted that essentially, HR systems are either oriented towards high performance through investment in employee or towards a more administrative or controlling approach to managing employees.

Areas explored and conceptual model:

Although the body of literature regarding HPWS exists and continues to grow, there has been limited examination about Commitment of Top Management to HPWS (STMP and JD). Thus, there was a need to examine impact of and effectiveness of TMC on implementation of HPWS (STMP and JD). Moreover, the literature is addressed inadequately about impact of HPWS (STMP and JD) on Innovation in terms of technologies, processes, products and services. Further, there was a need to carry out adequate research on mediating effect of JD on Innovation. Further, during literature search, we could not lay our hands on studies exploring synergistic impact of TMC, HPWS (STMP in combination with JD) on Innovation and in turn impact of all these variables on firm's Financial Performance. Therefore, the researchers had conducted the research on this issue as there was a clear gap in the available literature. As a result of exploration in literature, the researcher has developed a Theoretical Framework which can be seen in figure No. 1



Source: Researcher's own construct from literature review and gap analysis. Figure – 1

Research Questions:

Is there a significant relationship between TMC and HPWS (STMP and JD)? Is there a significant relationship between STMP and Innovation? Is there a significant and mediating relationship of JD with Innovation? Is there a significant impact of Innovation on firm's financial performance? Is there a significant and synergistic net end effect of TMC, STMP, JD, and Innovation on firm's financial performance? Having understood relationships of various variables under consideration, which interventions will help firms to enhance their financial performance?

Significance of the study:

This research study has added value to literature in following two ways; firstly, the research outcome has bridged the perceived gap with respect to impact of TMC on HPWS and thus on Innovation and the mediating effect of JD on Innovation. Further, most importantly, this research has added value to literature in terms of synergistic net effect of TMC, STMP, JD and Innovation on Firm's Financial Performance. Secondly, the research outcome had also assisted the practicing managers to understand the correlations amongst various variables and helped them to design appropriate interventions to improve firm's financial performance and create sustainable competitive advantage by differentiating HR systems, policies and practices.

Description of industries:

This study was carried out in manufacturing sector. Initially, thirty-two industries were identified. These industries are situated in Gujarat and Madhya Pradesh States of India. After interviewing their HR Heads about HR systems, policies and practices they follow, twenty equipments/machineries manufacturing companies were selected to carry out the research but, the

Management of six companies did not agree to participate in the research because of various reasons. Most of the selected companies are small to medium scale industries with sales revenue in the range of Rupees 20Cr to 2000Cr with workforce strength in the range of 80 to 2000 employees.

Operational definitions:

Top Management Commitment:

Top management Commitment means that managers are involved throughout the development process (Song, Montoya-Weiss, & Schmidt, 1997) and fully support innovation activities (Llorens, Ruiza, & Molina, 2004). Previous studies highlight the key role of such Commitment in new product success (Cooper & Kleinschmidt, 1987 & 1995). Basically, empirical research notes two basic dimensions of TMC: *top management support* and *top management attitude toward risk*. Top management support results in appropriate funds and resources for each innovation project (Cooper & Edgett, 2004). Top managers provide teams with encouragement and help them overcome problems, and fosters cross functional cooperation and communication.

High Performance Work System (HPWS):

The HPWS is an organizational architecture that brings together work, people, technology and information in a manner that optimizes the congruence of fit among them in order to produce high performance in terms of the effective response to customer requirements and other environmental demands and opportunities (Nadler, DAGerstein, M.S, Shaw, & R.B.C, 1992).

Strategic Talent Management Practices:

Strategic talent management is defined as activities and processes that involve the systematic identification of key positions which differentially contribute to the organization's sustainable competitive advantage, the development of a talent pool of high potential and high performing

incumbents to fill these roles, and the development of a differentiated human resource architecture to facilitate filling these positions with competent incumbents and to ensure their continued Commitment to the organization. In this regard, it is important to note that key positions are not necessarily restricted to the top management team (TMT) but also include key positions at levels lower than the TMT and may vary between operating units and indeed over time. (Collings, DG, Mellahi, & K, 2009).

Job Design:

The process of JD has been defined as, "...specification of the contents, methods, and relationships of jobs in order to satisfy technological and organizational requirements as well as the social and personal requirements of the job holder." (Buchanan, 1979).

Innovation:

The process of translating an idea or invention into a good or service that creates value or for which customers will pay. To be called an innovation, an idea must be replicable at an economical cost and must satisfy a specific need. Innovation involves deliberate application of information, imagination and initiative in deriving greater or different values from resources, and includes all processes by which new ideas are generated and converted into useful products. Innovations are divided into two broad categories: (1) Evolutionary innovations (continuous or dynamic evolutionary innovation) that are brought about by many incremental advances in technology or processes and (2) *Revolutionary innovations* (also called discontinuous innovations) which are often disruptive and new.

Firm's Financial Performance:

Firm's financial performance is the measure of its financial performance in terms of revenue growth (sales), EBITDA (profit), number of new product launch and revenue earned from new products

Variables in the Study:

There are five variables each having seven dimensions under study: *(1) TMC* – (V1). *(2) STMP* – (V2). (Dimension X1 – Talent Acquisition, Dimension X2 – Performance Management, Dimension X3 – Compensation, Dimension X4 – Training and Development, Dimension X5 – Strategic Benefits, Dimension X6 – Skill Variety, Dimension X7 – STMP total (overall)). *(3) JD* – (V3) (Dimension X8 – Job Characteristics, Dimension X9 – Task Identity, Dimension X10 – Autonomy, Dimension X11 – Job Empowerment, Dimension X12 – Job Enlargement, Dimension X13 – Skill Multiplicity, Dimension X14 – JD total (Overall)). *(4) Innovation (INN)* – (V4) (Dimension X15 – Thinking Space, Dimension X16 – Innovation Entrepreneurship, Dimension X17 – Idea Management, Dimension X18 – Innovation Culture, Dimension X19 – Innovation Technology, Dimension X20 – Inbuilt Innovation, Dimension X21 – Innovation total (Overall)). *(5) Firm's financial performance* – (V5).

Hypotheses:

In the direction of available literature concerning the relationship and predictability of Innovation on the basis of major predictors (STMP & JD) under study, following null hypotheses were formulated: H1: There is no relationship between Talent Acquisition and Innovation. H2: There is no relationship between Performance Management and Innovation. H3: There is no relationship between Compensation and Innovation. H4: There is no relationship between Training & Development and Innovation. H5: There is no relationship between Strategic Benefits and Innovation. H6: There is no relationship between Skill Variety and Innovation. H7: There is no

relationship between STMP and Innovation. H8: There is no relationship between Job Characteristics and Innovation. H9: There is no relationship between Task Identity and Innovation. H10: There is no relationship between Autonomy and Innovation. H11: There is no relationship between Job Empowerment and Innovation. H12: There is no relationship between Job Enlargement and Innovation. H13: There is no relationship between Skill Multiplicity and Innovation. H14: There is no relationship between Thinking Space and Innovation. H15: There is no relationship between JD and Innovation. H16: The slope (β) of the regression model is zero while predicting Innovation on the basis of STMP. H17: The slope (β) of the regression model is zero while predicting Innovation on the basis of JD. H18: The slope (β) of the regression model is zero while predicting Innovation on the basis of STMP and JD. H19: There is no moderating effect of the JD while predicting Innovation on the basis of STMP.

Research Methodology:

Method

A combine research methodology of qualitative and quantitative research was deployed for triangulation.

Source of data and level of analysis

725 employees of middle level working in different functions of fourteen companies responded the survey questionnaire. Interviews with survey questionnaire were conducted for Top Management and HR Heads. Financial data were collected in the prescribed format. Observation method was used to find evidences of HR systems, policies and practices in use.

Sampling method and size

Three sampling methods were used; judgmental sampling, organization strata based, random samples from different strata of the organizations. For adequacy of samples and reliability, 144 samples were collected for pilot study and 725 samples were collected for overall research study.

Data Collection

The respondents were contacted at their workplace and purpose of the study was discussed with them. After receiving their consent for participation in the study they were given appointments at the individual level for filling the questionnaires.

Instructions

The participants were told to feel free and be honest while replying and that this information shall be used for research work only. It may help in having a thought-provoking look at various HRD programmes in Industries. Responses shall be kept fully confidential and identity will not be disclosed at any stage. They were asked not to mention any identification mark on the answer sheet thereby ensuring anonymity.

Scale development and measurements:

Scale Development

Pilot study was carried out with 144 samples and Cronbach's Alpha (Construct Reliability and Validity), mean, standard deviation and correlation matrix were worked out. Two scales were designed. One for taking response from Top Management along with structured interviews and second was designed to measure various dimensions of variables like STMP, JD and Innovation by taking responses from the employees of various companies. While designing the scale, theoretical foundation for HPWS (STMP, JD) and Innovation were used. In the initial stage of scale development, there were 93 items. Face validity was conducted with 20 respondents and time taken to response was 20 minutes. The face validity was conducted to find out whether items in

the scale contains double meaning, duplication of items, misinterpretation of some words, and syntax. The other purpose of face validity was also to see the comfort level and proper understanding of items by the respondents. On the basis of face validity, 7 items were eliminated and the scale was frozen at total 86 items. The HPWS scale comprised two variables; STMP and JD. STMP subscale consists of 24 items, whereas JD consists of 28 items and Innovation scale consist of 34 items. The scale for measuring TMC consists of 10 items.

Measures

The details of the scale along with psychometric properties are as follows:

Strategic Talent Management Practices (STMP) Scale

This scale comprised 24 items measuring six dimensions of STMP. The dimensions were Talent Acquisition, Performance Management, Compensation, Training & Development, Strategic Benefits and Skill Variety. It was 5-point Likert scale with anchors labeled (5= Strongly agree and 1= Strongly disagree). There was no negatively worded item. The responses of the identified items were added to generate respective dimension's score and all 24 items were added to generate overall STMP score. Thus, the possible score for STMP scale varies from 24 to 120. High score indicates high STMP and low score indicates low STMP. The Cronbach's Alpha for this scale was 0.89. The reliability of the scale is significant at 0.001 level of significance. The construct/factorial validity of the scale was determined using the Exploratory Factor Analysis (EFA) with Principal Component Analysis Extraction Method and Varimax Rotation. Six factors emerged (the criterion with initial Eigen values greater than 1) with rotation sum of squared loadings varying from 12.30 to 6.37% variance and cumulative 58.44%. It can be inferred that; the factorial validity of the scale is very high.

Job/Work design Scale

This scale comprised 26 items measuring six dimensions were job characteristics, task identity, autonomy, job empowerment, job enlargement and skill multiplicity. It was 5-point Likert scale with anchors labelled (5= Strongly agree and 1= Strongly disagree). There was no negatively worded item. The responses of the identified items were added to generate respective dimension's score and all 26 items were added to generate overall JD score. Thus, the possible score for JD scale varies from 26 to 130. High score indicates high JD and low score indicates low JD. The Cronbach's Alpha for this scale was 0.86. The reliability of the scale is significant at 0.001 level of significance. The construct/factorial validity of the scale was determined using the Exploratory Factor Analysis (EFA) with Principal Component Analysis Extraction Method and Varimax Rotation. Six factors emerged (the criterion with initial Eigen values greater than 1) with rotation sum of squared loadings varying from 11.65 to 5.87% variance and cumulative 52.95%. It can be inferred that; the factorial validity of the scale is very high.

Innovation Scale

This scale comprised 32 items measuring six dimensions were thinking space, innovation entrepreneurship, idea management, innovation culture, innovation technology and inbuilt innovation. It was 5-point Likert scale with anchors labeled (5= Strongly agree and 1= Strongly disagree). There was no negatively worded item. The responses of the identified items were added to generate respective dimension's score and all 32 items were added to generate overall Innovation score. Thus, the possible score for Innovation scale varies from 32 to 160. High score indicates high Innovation and low score indicates low Innovation practices. The Cronbach's Alpha for this scale was 0.86. The reliability of the scale is very high and significant at 0.001 level of significance. The construct/factorial validity of the scale was determined using the Exploratory

Factor Analysis (EFA) with Principal Component Analysis Extraction Method and Varimax Rotation. Six factors emerged (the criterion with initial Eigen values greater than 1) with rotation sum of squared loadings varying from 15.93 to 4.79% variance and cumulative 52.00%. It can be inferred that; the factorial validity of the scale is very satisfactory.

Statistical methods for data analysis

The Pearson Product Moment Correlation (zero order) was deployed to examine impact and correlations between variables STMP and Innovation. *Multiple Liner Regression analysis* was applied to summarize the data as well as to study relationship between single criterion variable (STMP) and many predictor variable (JD) and goodness of fit of model. *Hierarchical (moderator) Multiple Regression analysis* was applied to examine mediating role of JD on the relationships of STMP and Innovation. *Structural Equation Modeling (SEM)* was deployed to examine confirmatory and exploratory model fit to proposed theoretical model.

Descriptive Statistic

The descriptive statistic was deployed for the analysis of gender, age group, experience, qualification for high and low Top Management Committed companies.

Results:

The companies were classified into High and Low TMC on the basis of their total score out of 50. The companies which scored less than and equal to 35 fallen under the category of Low TMC companies and rest of the companies fallen under High TMC companies. Out of fourteen companies three companies were identified as Low and eleven as High Top Management Committed companies.

In context to above mentioned theoretical model (Fig.1), the different dimensions identified for each variable were: *HPWS* – talent acquisition, performance management, compensation, training

and development, strategic benefits, skill variety for the variable of *Strategic Talent Management Practices*: Job characteristics, task identity, autonomy, job empowerment, job enlargement, skill multiplicity for the variable of *Job/Work design*: thinking space, innovation entrepreneurship, idea management, innovation culture, innovation technology, inbuilt innovation for the variable of *Innovation* from the view point of Multicollinearity. Descriptive statistic was deployed for the analysis of gender, age group, experience, and qualification. The Pearson Product Moment Correlation (zero order) was deployed to examine impact and correlations between variables. Multiple Liner Regression analysis was applied to summarize the data as well as to study relationship between single criterion variable and many predictor variable and goodness of fit of model. Hierarchical (moderator) Multiple Regression analysis was applied to examine moderating effect of JD on the relationships of STMP and Innovation. Structural Equation Modeling (SEM) was deployed to examine confirmatory and exploratory model fit to proposed theoretical model.

The outcomes of research in brief were: (1) STMP were positively and highly correlated with JD and all its dimensions (Job Characteristics, Task Identity, Autonomy, Job Empowerment, Job enlargement, Skill multiplicity). STMP were also positively and highly correlated with Innovation and all its dimensions (Thinking Space, Innovation Entrepreneurship, Idea Management, Innovation Culture, Innovation Technology, and Inbuilt Innovation). The magnitude of relationship of STMP was studied with JD and Innovation in reference to High and Low Committed Top Management. It was observed that, the magnitude was smaller on Autonomy, Job enlargement, Skill multiplicity, and overall Job Design for low committed Top Management in comparisons to high committed Top Management. The magnitude of relationship of STMP with Innovation was smaller on Idea Management, Innovation Culture, Innovation Technology, and overall Innovation for low committed Top Management in comparisons to high committed Top

Management. (2) The multiple linear regression analysis revealed that proposed variables are significant predictors of Innovation in case of both high and low committed Top Management. (3) The result confirms that there was no overall moderating effect of interaction of STMP and JD on Innovation. There was no moderating effect of interaction of STMP and JD on Innovation in case of high and low committed Top Management. Howerver, the probability to reject the hypothesis was lesser in case of high committed Top Management in comparisons to low committed Top Management. This leads us to infer that there is a low moderating effect of interaction of STMP and JD on Innovation. (4) Job Characteristics, Task Identity and Job Design (in combination with Skill Variety & STMP) influenced the innovation ability of employees. At the same time, many other factors/variables of even greater influence were clearly operating to determine the innovation and resulting financial performance and were beyond the scope of the study.

Discussions:

In twentieth century, one of the major challenges faced by practicing HRD managers is to understand business strategy of the organization. As a result, it limits their ability to design and execute an appropriate people strategy and bring alignment with business strategy to create synergies. Appropriately designed SHRM system creates an environment for improving productivity, creativity, and innovation by the people of an organization for developing business models, strategies, processes, technologies, services and products. The long-term success and sustainability of the organization can be attributed to improved productivity, creativity and innovation carried out by the people within an organization on continuous basis. *Synergized people and business strategies enhance resilience power of organization in global economic conditions of "VUCA" (volatile, uncertainty, complexity and ambiguity).* While business managers design and execute business strategy to create sustainable competitive advantage for the organization to

win the battle of fierce competition, the role of practicing HRD manager is to design and execute people strategies in alignment with business strategy to achieve sustainable competitive advantage through people. Usually, business strategy contains the elements of product and service differentiation, unique positioning of organization in market place and identifying target groups for their products and services etc. Since people have taken central role in the organization, the practicing HRD managers have to design and execute people strategy covering following elements;

1. The Human Resources must be of value: people are a source of competitive advantage when they improve efficiency and effectiveness of organization. Customer value proposition is enhanced when people find ways to reduce cost, provide something unique to customers or combination of both.
2. The Human Resources must be rare: people are a source of competitive advantage when their skills, knowledge and abilities are not equally available to competitors.
3. The Human Resources must be difficult to copy: people are a source of competitive advantage when people's capabilities, contribution and teamwork cannot be copied by competitors.
4. The Human Resources must be organized: people are a source of competitive advantage when the *Talents* of people can be combined and deployed to work on new assignments at short notice.

Becker and Gerhart (1996) and Schuler (1992) observed that strategic HR activities may be conceptualized along several levels of analysis. At the lowest level, HR practices reflect specific organizational actions designed to achieve some specific outcomes. At a higher level of abstraction, HR policies reflect an employee-focused program that influences the choice of HR

practices. An HR system operates even at higher level of analysis and reflects a program of multiple HR policies that are espoused to be internally consistent and reinforced to achieve some overarching results. For example, any business conglomerate comprised of various businesses which are in to different stages of their life cycle, like some SBUs (strategic business units) in their incubation phase, stable and matured phase, growth and expansion phase and/or in their decay phase. In such a wide-ranging situation, the practicing HRD managers have to design and implement comprehensive strategic HR systems at corporate level, which is the highest level in the organization. Whereas, at the SBU level, the practicing HRD managers have to design and implement an appropriate HR policy to drive various employee-focused programs that influence the choice of various HR practices. Further, the practicing HRD managers have to design and implement appropriate HR practices at departmental and at employee levels to achieve specific outcome in each SBU. (E.g. cost reduction skills of people working in SBU which is in decay phase, merger and acquisition competencies of people working in SBU which is in growth and expansion phase etc.). The practicing HRD managers have to measure effectiveness of HR systems, policies and practices periodically to re-align people strategy with business strategy on continuous basis. Let us take another example. An organization engaged in designing, manufacturing and selling stand-alone engineering equipments for a long time and now, the organization changes its business strategy to re-position itself in market place as a total solution provider. This change in business strategy calls for reviewing its people strategy in terms of vision, mission, culture, mindset of people, skills and competencies of people, business systems and processes. The practicing HRD managers have to re-align people strategy (e.g. new skills for solution designing, selling skills for solution providing, project management capability etc.) of the organization in view of new business strategy. Let us take one more example. An engineering

business conglomerate, knowing the market potential and core competency of organization, now decides to launch a new venture in the space of renewable energies as a part of their inorganic growth strategy by acquisition. The question to the practicing HRD managers is that the cultures of two different organizations need amalgamation or stay as two different cultures. The practicing HRD managers will have to re-align people strategy from the view point of multiple cultures of existing and newly acquired organizations that the people will now live their lives under one umbrella. (E.g. induction program, sensitize the people of newly acquired company about values systems and culture of existing organization etc.). One other example worth taking note of is of a business conglomerate operating in the space of B to B (business to business), B to C (business to consumer) and C to C (consumer to consumer) through various SBUs altogether. This business conglomerate would have offerings of engineering products, consumer products, banking, financial and insurance services, health care, hospitality, pharmaceuticals, IT and ITES, buying and selling on internet, infrastructure and power, steel and mining, automobile etc. under just one umbrella. For such business conglomerate, vision, mission and culture would also be different for each SBU. In addition to this, their corporate strategy, business models and business strategy would be different for each SBU. In such a wide-ranging business environment, the practicing HRD manager working at corporate level will have to take a bird's eye view to design and execute people strategy in alignment with corporate business strategy at corporate level. Not only would this, but the chief of the HRM will have to design broad level SHRM systems at corporate level. Followed by this, the practicing HRD managers working at various SBU level, will have to customize HR policies most appropriate to their SBU along with various HR practices at departmental and individual employee level. Thus, the HPWS is one of the elements of people

strategy and the practicing HRD managers will have to focus on conceptualization of HPWS depending on their business situation.

Limitations of Study:

This research was carried out in manufacturing sector only. Thus, generalization of results across various sectors is difficult. The number of companies in which research was carried out was limited to fourteen companies and that too these companies are small to medium scale industries where certain HR practices like HPWS might not have been implemented effectively, although results are very encouraging. Therefore, there is a need to carry out the research in large scale companies where in the HR systems like HPWS are more effectively implemented and matured. Also, it is a bit difficult to measure the TMC and establish accurate relationship with HPWS, Innovation and firm's Financial Performance as lots of other variables like company strategy, external environment, market condition, company's culture, value systems, operational strategy etc. influence the correlation amongst various variables.

Moreover, this research was carried out in Indian context and not global context. Therefore, it creates further opportunities to carry out the research on global scale.

The numbers of useful respondents who fall into manufacturing industry sector are too small and uneven, and it is therefore difficult to get a further general conclusion for each sector if we control for industry type. A further cross-sectional study should make efforts to improve the response rate. Further, limitation of this research is also a suggestion for further research, as innovation is multidimensional and influenced by both internal and external factors. Some of the large innovative projects will achieve payoffs a long time after investment. This study defined innovation by the proportion of total sales coming from products or services introduced within the previous three years. It is not long enough for a firm to evaluate the effects of HR systems on

Innovation. Longitudinal studies for Innovation should be introduced in further research. Moreover, many companies do not have account tracking system to capture the revenue from new products introduced in the market.

Conclusion:

The selection, custom design and successful implementation of *HPWS* is largely dependent on *TMC*. Design and implementation of appropriate *HPWS* at various levels in the companies and *JD* for *high potential people* accelarate the speed of innovation in companies. Accelarted innovation in terms of new products, processes and technologies helps the companies to sustain their market share, revenue growth and profitability. The synergistic effect of *TMC*, *HPWS* and *Innovation* creates sustainability of companies in the *VUCA* (Volatile, Uncertain, Complex, Ambiguious) enviornment. Therefore, it has become inevitable to ensure *TMC*, adopting right *HPWS* practices for the sustainibility and growth of the companies.

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