

Factors Portraying Knowledge Vision : An Analysis of Textile Industry of Punjab

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Abstract

Concept of knowledge management has gained immense importance in recent years. Knowledge orientation of a company is closely linked with its knowledge vision. This knowledge vision helps an organization to define its knowledge needs, and thus creation and dissemination of same among its knowledge workers. This paper aims to study knowledge vision of various textile units across Punjab. The study concludes that customer related knowledge is considered to be most important by majority of the units. External knowledge focus is emphasized more instead of creating knowledge from within.

INTRODUCTION

The concept of knowledge has become highly popular ever since industrialized economics induced a shift in importance from (natural) resources towards intellectual assets (Hansen et al., 1999). The awareness of the importance of knowledge as a key driver of economic growth has led to the development of knowledge-based theory of the firm. For being able to create value, a firm has to possess knowledge with certain characteristics, e.g., transferability, capacity of aggregation and appropriability (Grant, 1996; Teece et al., 1997; Warnerfelt, 1984). Only those organizations are able to do well that have competitive advantage and are increasingly differentiating themselves by knowing where they are, where they are going and how to get there, in other words, an organization needs to know what knowledge to seek and create (Von Krogh et al., 2000). This is called knowledge

vision of an organization. A knowledge vision is connected to an advancement strategy, one that emphasizes a company's future performance and success (Ichijo et al., 2000). Knowledge vision gives corporate planners a shared mental map of (a) the world they live in, (b) the world they desire to live in, and (c) the knowledge they need to seek and create to bring that world about.

Knowledge vision may take the form of mission statement, a set of corporate values, management philosophy or a strategic plan. Ichijo et al. (2000) have identified seven criteria for a quality knowledge vision: commitment to action, generativity, specific style, a focus on restructuring the current knowledge system, a focus on restructuring the current task system, external communication of values and a commitment to shape competition. It is a view of the past, the present, and the desired future that is constructed by the community, itself, and it is more of an ongoing, iterative process than a static statement. Authors argue that knowledge vision helps the organization to become knowledge organization and treat all employees as knowledge workers.

OBJECTIVES & METHODOLOGY

The study focuses on knowledge vision of various textile units of Punjab and examines whether the customer related knowledge is considered vital or not. In the present study, an attempt has been made to understand the factors portraying knowledge vision of 24 textile units in Punjab. The units have been classified into three categories, namely, G1 (with turnover up to Rs. 200 crore), G2 (with turnover from Rs. 201 crore to Rs. 500 crore) and G3 (with turnover of more than Rs. 500 crore). Data has been collected from people concerned with top management. The sample size is 240. Well structured questionnaire has been used to collect the data which was designed after extensive study of literature and discussions with experts.

There are total 5 items in the questionnaire with each item having sub headings that sums up to 22 statements. Each statement has been rated on five-point Likert scale ranging from (5) 'strongly agree', (4) 'agree', (3) 'neither agree nor disagree', (2) 'disagree' and (1) 'strongly disagree'. All statements have been tested with one-way ANOVA.

FINDINGS AND DISCUSSIONS

The study shows the following outcomes:

Driving Forces for Knowledge Creation

Firms are venue for generation of knowledge, as well as for the application and integration of existing knowledge into firm's products, processes, procedures and routines (Grant, 1996). Knowledge generation is highly dependent upon environmental turbulence. Emphasis and frequency of knowledge generation is

higher in firms which operate in more turbulent environment as compared to those which operate in placid one. It has been seen that competitive advantage is the most important driving force for knowledge creation (Table 1). The textile industry has undergone drastic change during recent years and the influx of multinational companies has resulted into fierce competition. This has been the compelling factor for the continuous innovation and knowledge creation to have competitive edge over others so as to make survival easier for the enterprise.

Table 1
Driving Forces for Knowledge Creation in Different Sized Categories of Textile Industry

Driving Forces for Knowledge Creation	G1		G2		G3		Overall		F-ratio
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	
Changes in market	4.20	1.10	3.51	1.34	3.35	1.12	3.86	1.23	2.49*
Competitive advantage	3.89	1.00	4.46	0.74	4.50	0.72	4.16	0.93	1.87
Drive from top management	3.78	1.11	4.40	0.94	3.63	1.33	3.94	1.14	2.11
Total	11.88	1.85	12.37	1.58	11.48	2.24	11.95	1.86	1.99

*Significant at 10%

The knowledge based view of firms proposes that firms are heterogeneous with respect to knowledge resources (DeCarolis and Deeds, 1999), and this heterogeneity is prerequisite for competitive advantage. Further, competitive advantage in today's economy stems neither from market position (Porter, 1980), nor from institutional or cultural context (Oliver, 1997) but from creation and application of difficult to imitate knowledge resources (Teece, 1998). Firms can obtain a competitive advantage over other firms when they possess knowledge which is firm specific and if they manage knowledge in a way that is difficult to imitate (Earl, 2001). Teece et al. (1997) suggest a 'dynamic capabilities' approach to a firm level advantage describing that a firm's ability to continually learn, adapt and upgrade its capabilities is the key to its competitive success.

The second most compelling factor for knowledge creation is drive from top management (Table 1). Apart from providing financial resources, top management plays a significant role in designing mission, vision and strategies for the firm. Organizational culture is also dependent on top management philosophy to a great extent. In the knowledge management literature, there is convergence around social relationships, managerial practices and technological solutions as key knowledge

management enablers that support knowledge processes (Gold et al., 2001; Lee and Choi, 2003; Van den Brink, 2003; Chuang, 2004). This finding highlights the importance of role of management and declares it a key enabler in knowledge management practices which is in agreement with this finding of the study.

Role of top management has been observed to be encouraging and supportive during the study. Majority of the respondents had positive opinions about top officials. Companies like Duke, Vinayak Textiles, Sheetal Group and Bhandari Hosiery were very open to learning and the management was big force behind all new things happening at the workplace. Although majority of the firms lacked organized set-up to manage knowledge, many were sure that the management would encourage the setting-up of the same. Pressure to innovate is very high in firms like OCM, Vardhman and Trident. OCM is the market leader in tweeds. To maintain a competitive edge, it becomes very important to launch new product every season with some unique aspects. Under such circumstances, innovation becomes mandatory.

Changes in markets are the third most important factor responsible for knowledge creation and innovation (Table 1). Knowledge once created tends to become redundant with the passage of time. This is especially true for technology, products and ever changing economic conditions.

This fact is supported by Galbraith (1982) as he states that knowledge can be time sensitive, potentially losing its relevance as environments change. In such settings, knowledge known today may lose its relevance in the future (Carley and Lin, 1997; Markus, 2001). These challenges impede the success of any knowledge management strategy, particularly when confronted with environmental turbulence. Hitt et al. (2000) argue that sudden and unpredictable changes in technological environments can decrease the value of a firm's existing knowledge and even render it obsolete. The pace and nature of technological turbulence in different industries explain why different patterns of knowledge creation and applied knowledge exist (Appleyard, 1996), when a firm faces changes in technologies, the firms' attention is focused on solving new problems through new knowledge creation and application (Nonaka, 1994). Firms that operate in less turbulent environments may become complacent and not learn as quickly as firms facing technological turbulence. In textile industry, market conditions as well as requirements of customers are constantly on change. Various forces like globalization and increasing competition from various countries like China forces the companies to make high quality products which are reasonably priced. Changing fashion trends coupled with factors like recession change the customer needs from high priced fabrics to low priced, good quality and trendy designs. This has pushed the need of innovation or knowledge creation in the organizations.

Role of Knowledge Envisaged by Top Management

Top management of majority of the units aims on capturing and leveraging customer knowledge for having better edge in the industry (Table 2).

This finding highlights the importance of customer and related knowledge. Customer is one of the core assets of the firm and customer knowledge is recognized

Table 2
Role of Knowledge Envisaged by Top Management in Different Sized Categories of Textile Industries

Role of Knowledge Envisaged by Top Management	G1		G2		G3		Overall		F-ratio
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	
Driving total strategy	2.88	1.31	2.67	1.41	3.60	1.43	2.94	1.39	3.04**
To create an interactive/learning environment	2.95	0.99	3.26	0.90	3.25	1.10	3.09	0.99	0.69
Capturing & leveraging customer knowledge	4.08	0.92	4.29	0.70	4.70	0.56	4.24	0.84	1.13
Capturing & leveraging competitor knowledge	2.51	1.37	3.86	1.16	3.40	1.28	3.05	1.43	4.37**
Total	12.40	1.79	14.07	2.07	14.95	2.36	13.22	2.22	4.52**

**Significant at 5%

as a source of innovation and a key strategic resource. Effective management of customer knowledge helps organizations to understand customer needs, increase customer satisfaction and loyalty, as well as maintain competitive advantages. As customer knowledge of all types and sources is crucial to a company's present and future position on the success ladder, the onus of most of units is to take positive action to harness and leverage customer knowledge in the interest of building and sustaining their competitive advantage.

Many studies have also shown the importance of customer knowledge. Customer-driven companies need to harness their capabilities to manage the knowledge of those who buy their products (Baker, 2000). Hippel (1977) found that most product innovations come not from within the company that produces the product but from end-users of the product. Customers possess knowledge about the

products and services they use as well as about how they perceive the offerings they purchased. This "knowledge from customers" is valuable as it feeds into measures to improve products and services. Efforts need to be made to channel this knowledge back into the enterprise (Bueren et al., 2004). In other words, if a company does not 'know' its customers it cannot put their valuable knowledge to the best use.

The finding further shows that top management does not lay much emphasis on creating an interactive and learning environment (Table 2). Though organizational learning contributes to organizational performance and highlights the knowledge flow and penetration in the firm, this is not on the priority list. This leads to the conclusion that for these firms external knowledge focus is more important and they are not much willing to invest on learning aspect of employees.

Learning from competitors and driving total strategy or second order change required to become a knowledge intensive company is also not important for majority of the units (Table 2). Focus on capturing and leveraging competitor knowledge is low except for G2 (Table 2). Companies like Bhandari Hosiery, Malwa Cotton, Aarti International and Classic Wear in G2; and JCT, Vardhman Textiles, Oswal Group, Trident and Nahar Group in G3 operate at larger scale as compared to G1 and invest more in R & D for product improvements and designing than to imitate from others. These companies are, therefore, more keen in keeping competitors knowledge update.

Driving total strategy is considered important factor by G3 only (Table 2). As G3 companies operate on large scale, enjoy established brands and cater to domestic as well as international market, these are professionally managed companies and have pro change outlook. Emphasis on driving total strategy is a reflection of open culture prevailing in these units.

Knowledge Focus Adopted by the Organizations

For a firm it is important to continually manage knowledge, internally and externally (Marqués and Simon, 2006; Darroch, 2005; Kalling, 2003; Chesbrough, 2003; Bierly et al., 2009). The companies having external focus of knowledge believe that most information of key relevance to business resides outside the boundaries of the organization. Hence, the challenge of the organization lies in keeping the (internal) theories of business aligned with external 'reality of business.' It is realistic, however, that firms cannot create all the knowledge they need internally. Therefore, external knowledge needs to be acquired. Whereas companies having internal focus of knowledge believe that most information of key relevance to a business resides 'within' the boundaries of the organization. Hence, the challenge of the organization lies in keeping the 'external' theories of business aligned with internal reality of business.

The study shows that external knowledge focus is more important for majority as compared to internal focus (Table 3). This means that majority of units

Table 3
Knowledge Focus Adopted by the Organizations in Different Sized Categories of Textile Industry

Knowledge Focus Adopted by Organization	G1		G2		G3		Overall		F-ratio
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	
External	3.72	1.09	2.67	0.97	4.45	0.93	3.54	1.20	5.19***
Internal	3.42	1.15	3.29	1.11	3.30	1.29	3.36	1.16	0.38
Total	7.14	1.49	5.96	1.51	7.75	1.48	6.90	1.62	4.97***

***Significant at 1%

seek much help from outside and emphasis on knowledge acquisition is more rather than on knowledge creation.

Chesbrough (2004) indicates the importance of open innovation where external sources of knowledge and external channels to the market need to be added to the internal knowledge to generate additional value. Overall mean score for internal focus is relatively low (3.36).

External knowledge generation can be done via acquisition of external knowledge resources or through co-operation with external agents, such as consumers, suppliers, competitors, research institutions and consultants. In this context, it is important that the firm maintains the necessary absorptive capacity (Cohen and Levinthal, 1990) to optimize the appreciation and utilization by the employees of newly gained knowledge. It has been proved that the use of external knowledge has a significant and positive effect on product innovation (Czarnitzki and Wastyn, 2009). Menon and Pfeffer (2003) conducted case studies and used survey data for discussing the difference between the preferences of managers towards the value of internal versus external resources. They find that the firms do not only acquire external knowledge on a regular basis, but there also exists a frequent preference for outsiders' knowledge (Allen 1971, 1977; Brown and Eisenhardt, 1995).

As codified knowledge management typically involves the availability of manuals and databases documenting firm-specific knowledge which is mainly concerned with internal management practices and procedures (Czarnitzki and Wastyn, 2009), scope of creation of knowledge from within the firm is somewhat limited.

Knowledge Assets in the Organizations

Knowledge asset is the knowledge regarding markets, products, technologies and organizations, that a business owns or needs to own and which enable its business processes to generate profits and add value (Pilotti et al., 2005). In other

words these knowledge assets refer to that codified human expertise which is stored in digital/electronic format and is used to create organizational value. Knowledge assets are owned by the organization and these are not vulnerable to memory loss. It has been found that majority of units believe that customer information is their biggest knowledge asset (table 4). Earlier research also supports the fact that customer knowledge is an important asset for all businesses (Pilotti et al., 2005). It's at the origin of most improvements in customer value. Vendors of CRM and business intelligence solutions claim that the data collected at the customer interface can be translated into business intelligence.

Innovation is considered to be second important knowledge asset by textile industry (Table 4). Capacity to innovate is closely linked with research and development because a strong R & D base helps creating knowledge externally and internally and making a base for innovation. Resource-based view of the firm considers that knowledge management increases knowledge work performance and by this the

Table 4
Knowledge Assets in Different Sized Categories of Textile Industry

Knowledge Assets	G1		G2		G3		Overall		F-ratio
	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	
Brands	3.33	1.37	2.84	0.65	3.47	1.25	3.26	1.16	1.62
Customer Information	4.38	0.63	4.43	0.50	5.00	0.00	4.50	0.58	1.58
Distribution Network	3.18	0.95	3.04	1.10	3.38	1.31	3.18	1.06	0.37
Innovation	4.38	0.63	4.14	1.00	4.00	1.24	4.25	0.88	0.61
Website/Intranet/Internet	2.64	0.97	2.63	0.73	3.23	1.03	2.73	0.94	1.24
Total	20.89	2.70	19.93	1.94	21.68	4.17	20.74	2.87	3.55**

**Significant at 5%

innovative success of firms (Barney, 1991; Warnerfelt, 1984; Rumelt, 1984).

Liao and Chuang (2006) contend that knowledge management makes firms more receptive to innovation opportunities. Huergo (2006), by using a production function model, hints to the positive influence of technology management on the generation of both product and process innovation in Spanish manufacturing firms. On the basis of literature available it can be said that knowledge management positively influences the innovation. And as found during the present study, most

of textile units in Punjab have very strong R & D base and the top management encourages the experimentation while exerting pressure to innovate. Thus, capability to innovate is considered to be an asset by most of the units.

The brand is not considered much of a knowledge asset (Table 4). Every brand of a company is not an asset. The brands which are authentic, make an impact on the mind of a customer, aligned with the likes of the stakeholders, have the potential to become the source of innovation and enjoy the loyalty status at the hands of customers are the knowledge assets for the company. Although for many companies the brands are the identities, e.g., Monte Carlo (Oswal Woollen Mills), JCT (JCT Phagwara), Casa Blanca (Malwa Group), Duke (Duke Knitwears), Sportking (Classic Knitwears), Shital Mink Blankets (Shital Exports), OCM Tweeds (OCM), Essma shawls and quilts (Essma) and Trident terry towels (Trident). These are ranked low for being assets. The reason for this can be attributed to the fact that majority of the units have the presence in the middle of the textile value chain and supply the products to industrial buyers. All the business, thus, does not come from brands.

Distribution network plays a key role in controlling the cost of doing business. In highly competent business environment lower cost of doing business can put a company ahead of its competitors. An optimal distribution network is intelligently designed to minimize costs by providing the customer the right goods, in the right quantity, at the right place, and at right time. In most of the companies' distribution cost control involves striking a balance between warehousing and transportation. Distribution network is the link between company and the customer. As many companies (Vardhman Textiles, Trident Group, Nahar, JCT, Malwa, etc.) cater to both industrial as well as consumer markets, the distribution networks are maintained at large scale. The companies operating in international markets and export have large networks of distribution. But the study suggests that this arena is not given due importance by majority of units (Table 4).

Although a company needs to be techno savvy to have ready access to information, easy and time saving intra firm linkage/connectivity and should have well developed website to carry e-business, the study has shown that the textile units in Punjab are lagging behind on this aspect (Table 4). This substantiates the finding that most of the textile units are not techno savvy.

CONCLUSIONS

The following conclusions emerge from the above discussion :

1. Competitive advantage is the biggest factor responsible for knowledge creation. Drive from top management to innovate and changes in the markets are next important factors.

2. Most important role of knowledge as envisaged by top management for next five years is capturing and leveraging the knowledge of customers.
3. External knowledge focus is important for majority of the units.
4. Customer information is considered to be the biggest knowledge asset by all units. Innovation is next in terms of importance.

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