Alderfer ERG theory:
An approach to meet retailer's need to motivate consumers

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Abstract: Retailers in Indian retail industry are trying to motivate their consumers by several motivational strategies. In this paper, we efforts to relate outcomes of two different fields, organizational behavior and consumer behavior to study and draw a model for future scope of research. A framework from retailer's perspective to motivate consumers by using factors based on Alderfer model. Firstly, a theoretical and development of Alderfer theory is done and on the basis of it certain significant factors find out. And then a research model is framed based on various researcher views for those associating consumer's motivation from retailer's. Lastly, suggested a way to retailer's strategy to motivate consumers.

Key words: Retialer, Motivation, Alderfer, Consumers, Model, etc.

1. Introduction

At local, national and international levels, retail is significant to the economies of most countries. One of the biggest opportunities and challenges that characterize the Indian retail sector is its structure. Entry of several new players in Indian retail industry has developed as one of the most vibrant and fast-growing industries. Almost 10 % of Gross Domestic Product (GDP) and around 8 % employment of the country are favored by it. Indian retail space is the world's fifth-largest global destination.

Over the last decade Indian Retail sector with a visible shift towards organized retailing has come off age and has gone through major change. India is ranked as fourth most striking country for investment in retail among 30 attractive markets, by A T Kearney, a US Based global management consulting firm.

A study is reveal that the this year by 2016-17 the retail market reach upto Rs. 47 lakh crore, with a compounded annual growth rate of 15% expansion, expected by 'Yes Bank - Assocham'. The organised retail is expected to grow at a CAGR of 24 % and by 2016-17 reach 10.2 % share of the total retail sector, which comprised just 7 % of the overall retail market in 2011-12. DS Rawat, Assocham Secretary General said, "Consumption of Indian retail will be driven by managing demographics, modernization, families nuclearism, rising material comfort among consumers, increasing brand preference and higher aspirations.

Drawing on literature from multiple streams of research including retailer psychology, their learning and theory, we develop an integrated theoretical model and uncover three sets of critical needs that are believed to influence consumer behaviors. We draw upon Alderfer's existence, relatedness, and growth (ERG) theory of human needs Alderfer, C.P.(1969) to propose, operationalize and validate our research model. Study results provide significant empirical support for the research model. Our study contributes to the existing literature in two ways. First, it establishes a research framework for deepening our understanding of the essential role of retailers need in motivating consumers. To our knowledge, very rare or may be no studies have investigated the role of retailer need in consumer context (Barachini, F. (2009)). The empirical evidence is still sparse. Second, our empirical results reveal the relative importance among different types of needs, and highlight the interplay between the need and consumer motivation.

The rest of the paper proceeds as follows. We will first review the literature on Retailing and Alderfer's ERG theory that facilitates the development of research model (Alderfer, C.P.(1969)). Next, we will present the research model which identifies a set of important retailer needs that are believed to influence consumer behaviors. This will followed by discussion and

research implications summary. At last it concludes the research limitations and prospects for future research.

2. Retailing

The history of modern retailing was initiated more than 150 years ago when the first retail format, the department store, began to compete with the traditional small and independent shops. Then the emergence of variety stores in the USA and later in Europe (France, UK, Germany and Italy) and also in Japan. These retail formats are in declining stage after generating success for long period in many countries like these (Cliquet, 2000).

At the 1960s beginning, Hypermarket: a new retailing format in the French territory. It changed the retail pattern in French and a big part of the world was covered by French, making France one of the most powerful countries in the retail sector. Yet, even some countries like China still developing, in France it face some difficulties (Cliquet, 2000) and in other countries like Spain (Cuesta Valiño, 2004).

3. Alderfer's theory of Motivation

This Literature review is subject to ERG, the theory of existence, resistance, and growth. The factors constitute to understanding of individual human behavior which draw a motivation assemble. Among four content approaches of motivation, it is one that considers the inherent factors that reasons a person to take actions (Ivancevich, Konopaske, & Matteson, 2008). To predict/explain workplace issues, relationship management, and individual development choices, this ERG may be used, in result of Maslow's Hierarchy of Needs. "There is less information available for ERG, as it is not inspired a great researches," (Ivancevich, Konopaske, and Matteson, 2008) (p. 116). According to Ivancevich, et al., 2008, Human experience is validated by ERG, as a model of human need. This construct is included with other content theories of motivation and has been discussed in philosophical and empirical studies.

Theory Development

According to Alderfer (1989), during the period of empirical tested data major doctrine and academic materials are published, the ERG Theory was developed between 1961 and 1978. At an Easton, Pennsylvania, factory, ERG was conducted by an empirical study and measurements were improved and presented in a dissertation further development at a larger facility with another empirical study.

In support of ERG categories integration a study was conducted by Wanous and Zany (1977). They found that satisfaction and importance is generated from need fulfillment by assessing the relationship between them. Instance, need significance is based on the way it is fulfilled. The categories of ERG subsist this more than between them.

To measure continuing desires the study ERG plays vital role, Alderfer and Guzzo (1979). For testing these continuing desires an instrument is presented the author. The psychological and sociological factors of ERG were explained, based on the educational backgrounds of parents, gender, and race.

For technological advancement even ERG has been used. A synthetic model combining ERG with the Markov Chain model to determine customer interaction with a web-based project that forecast, a series of interrelated points build by Chang and Yuan (2008). This model suggested the user behavior expected interaction. It includes 40 points based on behavior based on motivation levels of ERG and Maslow. The model exactly forecasted real time customer needs as concluded the researcher. The study initiate that ERG superior to Maslow in measurements of accuracy, remind, and F1 measure.

Needs in the Theory

Arnold & Feldman, 1986; Oosthuizen, 2001; Spector, 2000, said, both the theories are similar; Alderfer's ERG theory and Maslow's need hierarchy theory as they are based on the need fulfillment. Nevertheless, the fulfillment of three basic needs in this theory in opposite to the five stages of basic needs identified by Maslow (Greenberg & Baron, 2003; Spector, 2000). Researchers Armstrong (1991); Greenberg and Baron (2003); Muchinsky (1990); Oosthuizen (2001); Robbins, (1998) and Spector (2000), the needs mentioned in ERG theory are:

Existence needs includes all forms of safety, physiological and material needs required for existence. Safety needs include taking care for fear, anxiety, threat, danger, tension, etc. Physiological needs include individual's pursuit of satisfaction at the vitality level, like leisure, exercise, sleep. Whereas, material needs refer to living resources requirement, including food and clothing. In a philosophical argument, Agarwal (2010) suggests that, as people fulfill their growth need, they regress to the lower existence need, which can only be satisfied with money.

Maslow's social needs and security needs are corresponding to relatedness needs. Those are significant to individual relationships with their colleagues, family members, society members and friends those necessary to maintain satisfactory relations with others and sense of security involves the mutual trust of humanity. Relatedness needs include senses of security, belonging, and respect, popularity, social status, superiority, importance and compliment.

Growth needs refers to the need of certain individuals to be creative and productive while desiring opportunities for personal development and achievement. Muchinsky (1990) considers these growth needs to correspond to Maslow's self-

esteem and self-actualisation needs. Growth needs involve needs for self esteem and self actualization. The need for self esteem refers to self productive effects such as the ability to pursue, to seek knowledge, to achieve, to control, to build confidence, to be independent and to feel competent. Self actualization refers to self accomplishments including achieving an individual's goals and developing his or her personality. The abilities to realize one's potentials and to support the growth of others are also included

According to Oosthuizen (2001), Maslow's need hierarchy is a static system based on fulfilment-progression, whereas the ERG theory presents flexibility to three-need system based on a frustration-progression process. In addition, Greenberg and Baron (2003), Robbins (1993) and Swanepoel (1998) indicate that a major deviation from Maslow's theory is that individuals can only move from the first factor to the fifth factor; whilst, ERG theory allows for movement in any direction between levels of need and also accommodates the needs of individuals on different levels, simultaneously.

There are numerous types of techniques used by retailers to motivate their consumers; so, it is important to summarize them according to the categories in needs of ERG theory. After selected categorization, the relationships between the needs and desires can be identified. This study summarizes two objectives, mainly:

(1) To classify needs, according to the three major needs in ERG theory, various types of services provided by retailers.

(2) To validate the Research Model using empirical data of the retailer consumer's selections of motivational services.

The ERG theory is like Maslow's hierarchical theory, the hierarchy is not rigid between the three needs. Instance, to achieve one need it is not compulsory to acquire other two also. Moreover, the theory hypothesizes that at a time more than one need can be operated by individuals. Handling single need at one moment does not motivate change consumer behavior, by Alderfer. A theory of frustration-regression was added in this theory, which refers to individual's satisfaction level for lower needs than higher needs those are easy to satisfy. The theory principle includes motivation in the place of work. In other words, if there is no opportunities for growth for employees, they come back to lower level need i.e; needs of existence or relatedness.

4. Categorization and Model Development

In this study variables are chosen according to categories of needs presented earlier. They are arranged into categories of existence needs, relatedness needs and growth needs. Existence needs include safety needs and materials needs. Thus, the variables are managed in corresponding to needs for existence into two categories, i.e; "shopping environment" and "Material Support". Relatedness needs refer to people's desire to maintain interpersonal relations as the acts of interaction and sharing with others to earn their interest and respect. Therefore, this study has arranged the variables corresponding to relatedness needs into two categories: "Reciprocity" and "Enjoyment". Whereas, the desire for self actualization, such as the ability to grow and to publicize personal achievements refers growth needs. Therefore, this study has arranged the variables corresponding to growth needs into two categories: "Recognition" and "Innovativeness. The needs and services categorizes are listed in Table 1.

Alderfer ERG Needs	Motivating Variables of Retailer
Existence Needs	Shopping Environment
	Privacy
Relatedness Needs	Reciprocity
	Shopping Enjoyment
Growth Needs	Recognition
	Innovativeness

Table 1: *Mapping of Alderfer's ERG needs to motivating variables*

Development of a Research Model

The three needs are different in its concreteness, according to Alderfer (1969), as existence needs are most realistic needs those are highly concrete and the lowest concrete are growth needs. Hence, in support of factors associated to consumers existence needs; shopping environment and privacy, need desire will be decreased with less effort for searching products to satisfy those needs. Similarly for social reciprocity in relatedness needs, people get back that which they give. As a result, energy generated will drive more individual for relatedness needs (for example; enjoyment). In support of factors in growth needs, when there is no lacking of social needs to an individual, they try to focus towards growing themselves (for example: Innovativeness). Growth needs are to be essentially satisfying, when retailers grow, then they want to grow more and more, according to Alderfer, (1969).

A Research Model:
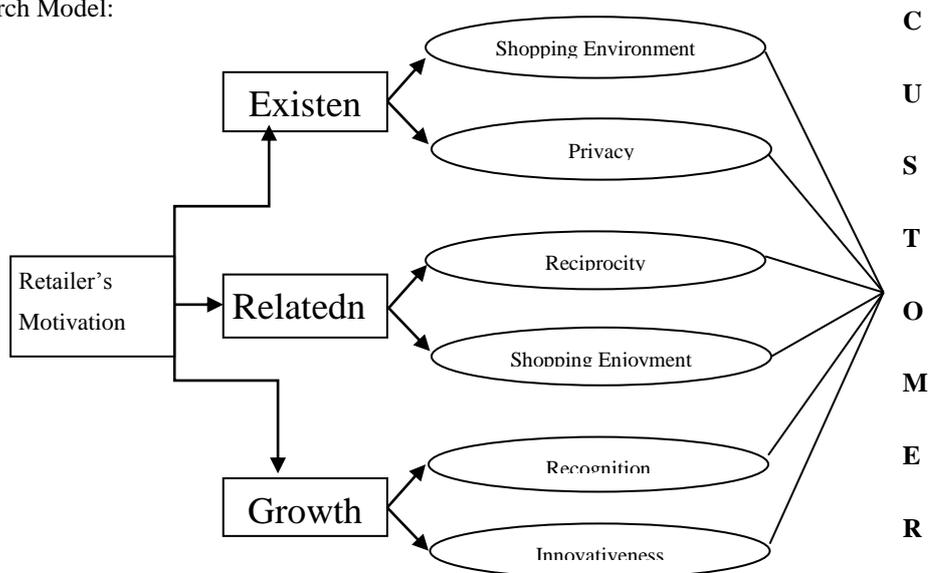
5. Implication of Alderfer's Theory by retailers

Existence needs

It includes all forms of safety, physiological and material needs required for existence. In respect of this study, shopping environment and privacy measures are taken into consideration, as key elements for consumer's behavior motivating factors by retailers.

Shopping environment

Shopping Environment refers to values of the organization, styles and working conditions, according to Pearson (1991). Kruger (1996) and Oosthuizen (2001), Equipments and tools, electric supplies, exposure for air and shopping space, i.e; resources availability and quantity purchase that refers to physical working conditions. Moreover, conditions of the climate plays vital role to create differences in behavior, as per Singleton (1989).

Shopping environment is an influencing factor in estimating complete satisfaction for managers in Chinese restaurants, in the research of Lam's et al. (2000). They explain that satisfaction and retention can be improved by focusing on this factor strategically.

Privacy

Lallmahamood, 2008 states that, privacy refers as an individual capability to control personal information. Consumer provides to retailer complete personal information but they think that their information can be violated by them (Suki et al., 2001). Consumers need privacy while shopping as they are concerned about their product decision, the feel of violation by the external environment exists while shopping. Suki et al., (2001), they are also concern about "the credit card, debit card, information unauthorized use", "their information

can be sold without concerned", and "product decision can be merged with other people".

According to Vijayasarathy, 2004, the consumers in other view called practically privacy are way of providing individual information related to advantages and risk management. They consider that privacies will not be compromised while shopping. Moreover, Shopping is more concern about privacy. A researcher Suki et al. (2001) in his study suggested that factors are considered by consumers' while shopping and on result it shows that the most important factor considered is privacy.

Relatedness needs

Relatedness needs refers to level of security, belonging, and respect. Reciprocity in behavior and enjoyment while shopping are key factors associated to relatedness needs to study consumer behavior.

Reciprocity

Societal reciprocity is essential to work with others, stated in Social Exchange theory. To get future reciprocity returns people engage themselves socially with feelings of getting obliged, appreciation and trustworthiness. Chiu, C. et al (1872-88), Bock, G. W. et al (2005), Kankanhalli et al. and Wasko, M. M., and Faraj, S. (2000) they all explains that reciprocity is a vital motivator that is compliance to individual for flexibility, knowledge, reciprocal relationship management and sharing of knowledge. Various researches also recommends that individuals involves in such activities reciprocate growth they gathered and carry forward it to others, the feelings of joy and satisfaction (Lin, H.F(2007), Wasko, M. M., and Faraj, S (2000) and Wasko, M.M. and Faraj, S (2005)). Hence, we can estimate that reciprocity in retailing store can increase consumer buying behavior by maintaining

relations, taking feedback and better after sales services.

Shopping Enjoyment

According to Wells & Tigert (1971), People are interested in areas related to their job, family, fashion, home, culture, food, achievements and media. Consumers those shop frequently enjoy social events and keep their family and friends in touch, as per Crask and Reynolds (1978). They visits museums, art galleries and exhibitions to show their interests in cultures. Crask & Reynolds, (1978) explains that, people enjoy by reading magazines related to fashion, to listen music and get informed themselves about western cultures. Customers in departmental stores are more concerned to hygiene, visual effect and health. According to Wells & Tigert, (1971), Activities refers to socially associated events, hobbies and interest, work, entertainment, membership clubs, vacation, societal associations, sports, and shopping. Researchers found that consumers had participated in sports events, entertained their friends, went on vacations frequently and participated on societal projects (Crask and Reynolds (1978)). Those people who are attached with their societies emotionally shop locally, founded by Miller, Schofield-Tomschin, and Kim (1998). Bellenger et al., (1976), Female consumers participate more actively in organizations related to social, society, clubs, somewhat organizations related to business. It was founded that those are not enjoying shopping they indulge themselves in other activities like sewing, cooking food and reading (Bellenger, Robertson, and Greenberg (1977)). Bellenger et al., (1977) said that various researches featured that in spare time consumers enjoy shopping and entertain guests in their home.

Growth needs

Needs related to Maslow's highest needs, self esteem and self actualization are included in growth. Retailers prefer growth factors to motivate consumers such as recognition and adapting innovativeness among their retailing unit.

Recognition

According to the study of Oosthuizen, 2001, Recognition refers to reward for involvement and appreciation for task completion or getting gratitude for performing better. Recognition as an variable should present while appraising performance, Ströh (2001).

At the same time as researcher Fox's (n.d.) found that to perform good, recognition is desired by individuals and organizations. It is not recognized generally to work better and performance in good quality, as per Analoui (2000). This may be outcome of technical structures of organization, traditional concept of management working, and/or inadequate skills of people in top management, as found by Analoui (2000).

Innovativeness

McEvily, S. K. et al. (2004) said that for the development of the organizations, innovation is very essential. Apply adequate technologies, provide new goods and services by the organization and cop up with the latest fashion and trends of the market scenario is important for existence and to build healthy competitive boundary both. Bock, G. W. et al. (2005) and Ruppel, C. P., & Harrington, S. J. (2001), they found that stressed innovation developed from culture of the organization, found to train supposed costs and promotion of knowledge sharing. Development in skills, increasing competency by encouraging knowledge and to share it with others enhance innovation. Thus innovation in organization is simply related to share the knowledge, according to Bock, G. W. et al. (2005), Collins, C. J. and Smith, K. G. (2006).

Various studies relevant to ERG theory and other content theories has been reviewed for supporting change in different environments and circumstances. ERG with Maslow needs and Herzberg are used to support Indian advocacy for compensation regarding cash instead of benefits, in a theoretical argument, Agarwal (2010). It was proved through empirical data that in place of perquisites and benefits cash compensation is needed. He expressed that growth need fulfillment people go back to existence need.

6.   Conclusion

The study explores theoretical principle on retailer's effort for motivating consumers by providing broad literature review. It includes the use of Alderfer ERG theory needs and their selected factors to motivate consumers in a grocery and foods retailing unit. Though productive researches already conducted on theories of motivation, but the major studies conducted on employees of industries, education institutions, hospitals etc. Through guidance internally buying behavior is influenced. Kotler in 2000 states that the single way of understanding consumer's behviour is to find consumer needs and factors associated to their motivation to develop marketing strategy.

Various issues related to sociology, psychology and organizations were covered in the research and founded areas to develop use of ERG for the study. This reveals the creation of existence, relatedness, and growth needs through qualitative studies to know factors that affect retailer's motivation theory towards consumer. The study used to look into the ERG and their factors shopping environment, privacy, reciprocity, shopping enjoyment, recognition and innovativeness. According to Wilcove (1978) categories are added to benefit military concerns. To support those want to make changes economic conditions in various fields, this theory has been used and even sometimes countries.

Existence needs in research took interest in human needs associated to psychological factors that influence consumer behavior. Maslow (1954) explains human needs as a force driving behavior of consumer and according to different needs consumers motivated differently. Whereas relatedness needs, shows sociology aspects of consumers that influence their decisions. Studies of recent years, expand to include the future scope for various factors like influence of society (Lu et al., 2008), confidence (Wong and Hsu, 2008), and use of framework (Mallat et al., 2009). In growth needs, factors affecting organization growth are considered in support of consumer motivation. Au et al., (2008) states, since human needs are well covered in ERG theory, in this study theoretical basis of human needs are used.

Despite the rareness of this research is based on role of motivation in industries of retail sector, and for literature, research findings are based on other industries reviews. This comprises of a future research based on retailers and their effort on motivating consumers. Bellingan-Timmer, (2004) and Huddleston & Good, (1999) said that, the vitality of motivation is showed in different literature. According to Lam et al., (2001), it was further proved also that significance of motivation is presented in various research literatures.

7. **Further Scope of the study**
   1. *Quantitative Data can be used.*
      In spite of the identified problems, a lack of quantitative data exists in applicability of consumer needs and retailer's motivation approach. Both qualitative and quantitative investigation can move practice in right direction, said by Marginson and Ramsden (2002).

2. *Customer perspective on factors selected.*
   Current research is especially emphasizing on retailer's perspective towards motivation. Further it can emphasized on customer's view point also to study the factors those motivate them. For which store atmosphere elements; in Annexure 1 can be summarized, by using **Store Atmosphere Model** given by **Donovan & Rossiter's** (1982) as a preliminary point.

3. *Use of other content theories of motivation to study consumer behaviour.*
   It is hypothesized in theories of needs unsatisfied needs motivate humans and they try to explain it as basis of motivation. Theories of need give positive attention towards individual's motivation and development of the people. So, further other content need theories of motivation, for instance Maslow's need hierarchy theory, three factor theory of McCelland, two factor theory of Herzberg can be taken into consideration to study their role.

4. *Finding other factors of ERG theory to study different approach.*
   ERG theory is also used to improve technology. A researcher draw synthetic model by merging ERG and Markov Chain model together, for showing interrelation between customers interaction and web projects (Chang and Yuan (2008)). This included codes based on ERG theory and Maslow theory in 40 behavioral points. This shows that there are many factors those still can affect motivational behavior of individuals.

Annexure: 1

A model of store atmosphere
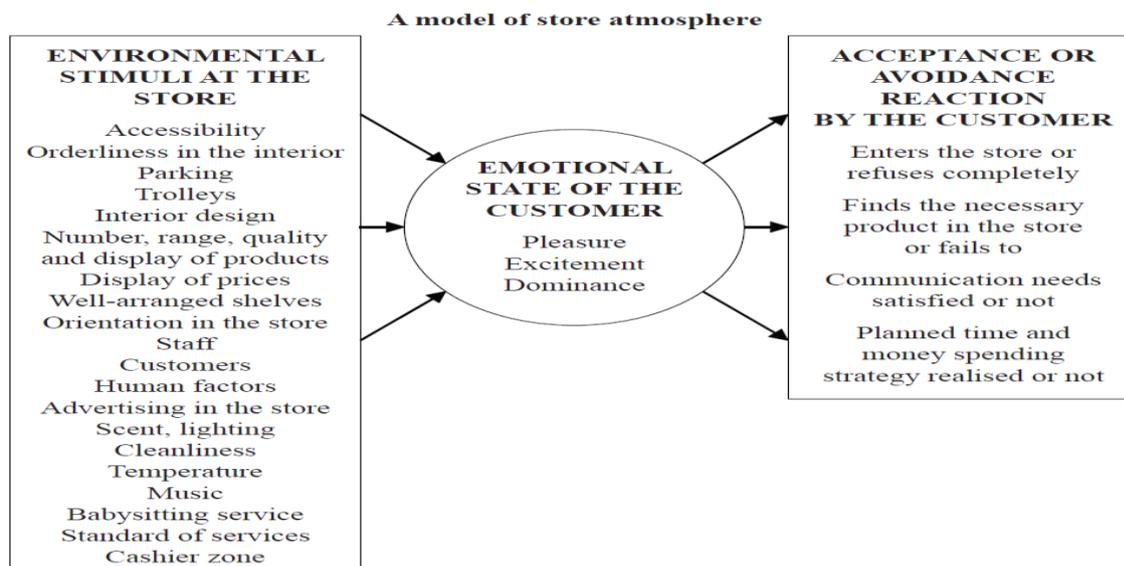
Source: Donovan & Rossiter (1982)

References

Agarwal, A. S. (2010). Motivation and executive compensation. *IUP Journal of Corporate Governance*, *9*(1), 27-46. Retrieved from http://vlex.in/source/iup-journal-corporate-governance-5174

Alderfer, C.P. "An empirical test of a new theory of human needs," *Organizational Behavior & Human Performance*, Volume 4, Number 2, 1969, pp.142– 175.

Alderfer, C. (1989). Theories reflecting my personal experience and life dent. *The Journal of Applied Behavioral Science*, *25*(4), 351-351/ Retrieved from http://jab.sagepub.com/

Alderfer, C., & Guzzo, R. (1979, September). Life experiences and adults' enduring strength of desires in organizations. *Administrative Science Quarterly*, *24*(3), 347-361. Retrieved from http://www2.johnson.cornell.edu/publications/asq/

Analoui, F. (2000). What motivates senior managers? The case of Romania. Journal of Managerial Psychology, 15(4), 324-340.

Armstrong, M. (1991). A handbook of personnel management (4th ed.). Kogan Page, London.

Arnold, H.J., & Feldman, D.C. (1986). Organisational behaviour. McGraw-Hill International, Singapore.

Au N, Ngai EWT, Cheng TCE (2008). Extending the understanding of end user information systems satisfaction formation: an equitable needs fulfillment model approach. MIS Q.*,* 32(1): 43-66.

Barachini, F. "Cultural and social issues for knowledge sharing", *Journal of Knowledge Management,* Volume 13, Number 1, 2009, pp. 98-110.

Bellenger DN, Steinberg E, Stanton WW. The congruence of store image and self image. J. Retail. 1976;52(1):17 – 32.

Bellenger, Danny E., Robertson, Dan H., and Greenburg, Barnett A. (1977), "Shopping Center Patronage Motives," Journal of Retailing, 53, 29-38.

Bellingan-Timmer, R. (2004). Job satisfaction: An analysis of middle managers in the South African Police Service. Acta Commercii, 4, 29-36.

Bock, G. W. et al., "Behavioural Intention Formation in Knowledge Sharing: Examining the Roles of Extrinsic Motivators, Social-Psychological Forces, and Organizational Climate," *MIS Quarterly*, Volume 29, Number 1, 2005, pp.87-111.

Chandra, A.K., (2011). Consumer Perception andAwareness about Consumer Rights and Consumer Protection Act: A study in District Raipur (C.G.). The International Journals Research journal of Social Science and Management. Vol. 1 | No. 8, 59-69.

Chang, W., & Yuan, S. (2008). A synthesized model of Markov chain and ERG theory for behavior forecast in collaborative prototyping. *Journal of Information Technology Theory and Application*, *9*(2), 45-63. Retrieved from http://aisel.aisnet.org/jitta/

Chiu, C. et al., "Understanding knowledge sharing in virtual communities: an integration of social capital and social cognitive theories," *Decision Support Systems,* Volume 42, Number 3, 2006, pp. 1872- 1888

Cliquet G. (2000), Large format retailers: a French tradition despite reactions, *Journal of Retailing and Consumer Services*, 7, 3, 183-195.

Cuesta Valiño P. (2004), Treinta años de hipermercados en España ¿ Saturacion o renovacion ?, *Distribución y Consumo*, Marzo-Abril, 46-56.

Collins, C. J. and Smith, K. G. "Knowledge exchange and combination: The role of human resource practices in the performance of hightechnology firms," *Academy of Management Journal*, Volume 49, Number 3, 2006, pp.544−560.

Crask, M.R., and Reynolds, F.D. (1978). An In-depth profile of the department store shopper. *Journal of Retailing,* 54 :23-32

Donovan, R. J. – Rossiter, J. R. (1982): „Store Atmosphere: An Environmental Psychology Approach", Journal of Retailing (Spring), p. 42.

Fox, K. (n.d.). An investigation of factors affecting job satisfaction and career motivation of on-air radio personalities. Journal of Radio Studies, 4, 30-44.

Greenberg, J., & Baron, R.A. (2003). Behaviour in organisations (8th ed.). Pearson Education International, New Jersey.

Huddleston, P., & Good, L. (1999). Job motivators in Russian and Polish retail firms. International Journal of Retail and Distribution Management, 27(9), 383-393.

Ivancevich, dkk. 2008. Perilaku dan Manajemen Organisasi. Jakarta : Erlangga

Ivancevich, J., Konopaske, R., & Matteson, M. T. (2007). *Organizational Behavior and Management* (8th ed.). New York: McGraw-Hill Higher Education.

Kankanhalli et al., "Contributing knowledge to electronic knowledge repositories:an empirical investigation," *MIS Quarterly*, Volume 29, Number 1, pp.113– 145.

Kotler P (2000). Marketing management: analysis, planning, implementation and control. New York: Prentice-Hall.

Kruger, S.J., Smit, E., & Le Roux, W.L. (1996). Basic Psychology for human resource practitioners. Kenwyn: Juta & Co.

Lallmahamood, M. (2008). Privacy over the internet in Malaysia: A survey of general concerns and preferences among private individuals. *Malaysian Management Review*, *43*(1), 77–108.

Lam, J. (2000). All Bets are On. Harvard Business School Press.

Lin, H.F. "Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions," *Journal of Information Science,* Volume 33, Number 2, 2007, pp.135-149.

Lu J, Liu C, Yu C, Wang K (2008). Determinants of accepting wireless mobile data services in China. Inform. Manage., 45*:* 52-64.

Mallat N, Rossi M, Tuunainen VK, O¨o¨ rni A (2009). The impact of use context on mobile services acceptance: the case of mobile ticketing. Inform. Manag., 46*:* 190-195.

Marginson, S. & Ramsden, P. (2000). Revision of papers delivered at the "Reworking the University" conference held at Griffith University in Queensland, Australia, Journal of Higher Education Policy and Management, 22 (1), pp. 5-7.

Maslow AH (1954). Motivation and personality. New York: Harper and Row.

McEvily, S. K. et al., "The Global Acquisition, Leverage, and Protection of Technological Competencies," *Strategic Management Journal.* Volume 25 Number 8-9, 2004, pp.713-722.

Muchinsky, P.M. (1990). Psychology applied to work. Brooks-Cole, California.

Oosthuizen, T.F.J. (2001). Motivation influencing worker performance in a technical division of Telkom SA, Acta Commercii, 1, 19-30.

Pearson, R. (1991). The human resource: Managing people and work in the 1990s Berkshire: McGraw-Hill.

Robbins, S.P. (1998). Organisational behaviour (8th ed.). Prentice Hall, New Jersey.

Robbins, S.P. (1993). Organization Behaviour. London: Prentice Hall.

Ruppel, C. P., & Harrington, S. J. "Sharing knowledge through intranets: A study of organizational culture and intranet implementation," *IEEE Transactions on Professional Communication*, Volume 44, Number 1, 2001, pp.37−52

Singleton, W.T. (1989). The mind at work. Cambridge: Cambridge University Press.

Spector, P.E. (2000). Organisational Psychology. Research and practice, John Wiley & Sons, New York.

Ströh, E.C. (2001). Personnel motivation: Strategies to stimulate employees to increase performance. Politeia, 20(2), 59-74.

Suki, N. B. M., Ahmad M. I., & Thyagarajan, V. (2002). Motivation and concern factors for internet shopping: A Malaysian perspective. *The Electronic Journal for Ecommerce Tools and Applications*, *1*, 1–18.

Swanepoel, B.J. (Ed.), Erasmus, B.J., Van Wyk, M.W. & Schenk, H.W. (1998). Human Resource Management: Theory & Practice. Cape Town: Juta

Wanous. J.P.; and Zwany, A., "A Cross-Sectional Test of Need Hierarchy Theory," *Organizational Behavior and Human Performance.* Vol. 18, No.1, February 1977, pp. 78-97.

Wasko, M. M., and Faraj, S., "It is what one does: why people participate and help others in electronic communities of practice," *Journal of Strategic Information Systems,* Volume 9, Number 2, 2000, pp.155-173

Wasko, M.M. and Faraj, S., "Why should I share? Examining knowledge contribution in networks of Practice," MIS Quarterly, Volume 29, Number 1. 2005, pp.35–57.

Wells, W.D., Tigert, D., 1971. Activities, interests, opinions. Journal of Advertising Research 11(August), 27-35.

Wilcove, G. L. (1978). The ERG model: Expansion and application to Navy personnel. *Journal of Vocational Behavior*, *13*(3), 305-316. doi: 10.1016/0001-8791(78)90057-X

Wong YK, Hsu CJ (2008). A confidence-based framework for business to consumer (B2C) mobile commerce adoption. Pers. Ubiq. Comp., 12: 77-84.

Vijayasarathy, L. R. (2004). Predicting consumer intentions to use on-line shopping: The case for an augmented technology acceptance model. *Information & Management, 41*(6), 747–762.

http://www.thehindu.com/business/Industry/indian-retail-market-to-reach-47-lakh-crore-by 201617 study/article 5677176.ece.