



THE ROLE OF SALES FORCE ENGAGEMENT AND LEVEL OF COMPETENCE ON IMPLEMENTATION OF MARKETING INTELLIGENCE SYSTEM

Sundaramoorthy Krishna Rao

Research Scholar, Department of Management Studies.

Abstract :

Marketing intelligence is amongst marketing and behavioral concepts that have received inconsiderable attention. Although, marketing intelligence may be regarded as peripheral duty of sales force, because of their boundary position, they can offer their company direct access to important information about competitors and customers. In this research, it has been paid to managerial (communication, participation in decision-making, feedback, recognition) factors that were influenced by individual factor such as organizational commitment. The revised proposed model shows that organizational commitment is the most important factors that motivating behavioral effort of sales force toward marketing intelligence activities and managerial communication and motivation toward marketing intelligence has more effectiveness to organizational commitment.

1. INTRODUCTION

Although, salespersons represent a unique and important channel of information, few of them contribute efficiently to marketing intelligence (Bon and Merunka, 2006). Marketing intelligence is the ability to fully understand, analyze and assess the internal and external environment related to a company's customers, competitors, markets and industry to enhance the tactical and strategic decision-making process. This is evidence of the fact that competitive intelligence officers play a pivotal role in the strategic intelligence decision-making process and can help facilitate knowledge sharing within the organization (Huster, 2005). Marketing information systems enable marketing and sales managers to identify, interpret and react to competitive signals and are key elements leading to efficient marketing strategies and actions. The marketing intelligence system is a set of

procedures and sources used to obtain everyday information about pertinent developments in the marketing environment (Kotler, 2002). This study focuses on customers' various shopping motives through Omni-channel adoption and level of attainment of shopping motives. Customers adopt different channels and integrate the evidence to reach the optimal shopping motives (Arumugama & Jayakrishnana, 2020). Therefore, marketing intelligence provides a continuous flow of information about very diverse market events that might affect the company's competitive position. Information is mainly descriptive, essentially based on observation and its goal is to provide managers with general enlightenment about an ongoing competitive market situation.

Salespeople have long been recognized as primary sources of marketing intelligence as their additional efforts to gather environmental information create few additional costs for the company. Because of their boundary position, salespeople can offer their company direct access to important information about competitors and customers. Due to their daily presence in the field and favored relationships with customers, salespeople can be exposed to rumors about their customers' or competitors' projects, learn about new product launches before they take place, discover new products in test market areas, gather information about the discount and pricing policies of competitors, note changes in customers' or distributors' policies and behavior, gather point-of-purchase information on promotional activities and effectiveness and so forth (Bon and Merunka, 2006). but, it seems difficult to mobilize the sales force to engage in marketing intelligence activities. The major focal point of

the present research is to recognize the effect of sports celebrity adson the purchase intention of the buyers. Both high involvement products and lowinvolvement products have included in the research(Arumugam, Thangaraja; Hameed, S. S; Madhavan, S, 2020)Salespeople do not always adequately communicate important information to marketing and sales managers and few salespersons transmit the information they observe or collect in the field; the information that is transmitted may also be biased (Darmon, 1992).

Nevertheless, the specified importance of intelligently participating salesforces in marketing affair and their vital role in collection and transfer the information, rarely researches have accomplished about understanding and clarifying salesforce behaviour. Because of regard to sales force marketing intelligence concept contributes worthy at marketing activates in organizations and corporations and it provides growth and sublimit of them in presenting vastly in market, so, main question of present research focuses on recognition of managerial and personal factors that can explain sales force behaviour shifts related on information collection and transfer.

Marketing intelligence and its importance for sales forces: A marketing intelligence system is a set of procedures and sources used by managers to obtain their everyday information about pertinent developments in the environment in which they operate. The marketing intelligence system supplies data about the market. And other definition of marketing intelligence system is that it is a system for capturing the necessary information for business marketing decision making (Mochtar and Arditi, 2001). According to Background Indian Pharmaceutical industry has significant growth in recent decades andfaces hyper competition in the local and international market. Aim The primary objective ofthis research is to explore the medical representatives' perception towards motivationalmeasures implemented by selected pharma companies, Chennai city (Arumugam, Subramani, Jan, & Goute, 2019). If a company utilizes marketing intelligence systems, the output can result in sound marketing decisions which can be one of the best sources of competitive advantage (Lackman *et al.*, 2000).

When a company is able to accurately assess the competition by gathering competitive information, it is in a better position to build differentiation for their company. It may be that one company in the competitive set is the low cost provider and the other company has a superior process for providing the service (Johns and Van Doren, 2010). Daily, customers, rivals, suppliers and employments provide benefit informational bits for business owners. Customers talk with firm labors, rivals enclose their programs with customers, employment seeks opportunities and experimental problems and suppliers discuss with people. Gathering systematical these free data and using it for powering commerce is the main challenge (Bon and Merunka, 2006). It is, therefore, essential for marketing intelligence officers to work with marketing strategists and develop appropriate marketing intelligence systems that allow customer relationships to be mapped, modeled and then translated into new buyer behavior models (Trim and Lee, 2006).

As a global concept, marketing information can best be understood by its decomposition into marketing research and marketing intelligence. Although, both activities aim at collecting and providing information to management for better and more timely decision-making purposes, marketing research and marketing intelligence differ in three key aspects: the flow of information, the type of information provided and the use of information (Bon and Merunka, 2006). Marketing intelligence is viewed in its totality as a continuing and interacting structure of people, equipment and procedures to gather, sort, analyze and distribute pertinent, timely and accurate information for use by marketing decision makers to improve their marketing planning, implementation and control (Tan and Ahmed, 1999). Employee engagement has been extensively researched lately as it delivers a positive business outcome. Due to the complex competition prevailing in the automotive industry, maintaining a high-level engagement among the employees is important for long term business performance. The level of employee engagement can be improved by identifying its drivers.

(Arumugam, Vimala, Khuan, & Rasu, 2019). In other word, marketing intelligence is the product of collection, evaluation, analysis, integration and interpretation of all available information that may affect the survival and success if the company (Trim and Lee, 2008).

Marketing research on the other hand is the systematic and objective identification, collection, analysis and dissemination of information for the purpose of assisting management in decision making related to the identification and solution of problems and opportunities in marketing (Tan and Ahmed, 1999) market research activities are devoted to the collection and analysis of data linked to precise research questions such as new product acceptance or advertising effectiveness.. Therefore, information is discontinuous and planned. A piece of market research information corresponds to a defined goal and focused objectives. Information collected needs to be precise, carefully measured, controlled and analyzed and the results obtained should enable managers to reduce decision-making uncertainty (Bon and Merunka, 2006). Marketing intelligence is area continuing and interacting structure of people, equipment and procedures that, in combination, gather, sort, analyse and distribute pertinent, timely and accurate information for use by marketing decision makers to improve their marketing planning, implementation and control. Although many professionals do much of their own information gathering and analysis, there still needs to be a clear focal point of the Marketing Intelligence System responsibility (Arumugam, Thangaraja, 2016) . Sales force of an organization is the most important factor that is responsible for entering data and information to marketing intelligence system while others responsible for staff role (Lee and Trim, 2006).

It is estimated that, between 70 and 80% of the intelligence a company typically needs resides with employees who collect it while dealing with the company's suppliers, customers and other industry contacts. The challenge for companies is to create a way of collecting and analyzing the useful information that resides with employees (Tan and Ahmed, 1999). Collecting and transmitting environmental

information is a specific and important assignment of the selling function. Salespeople may notice changes in customers' needs, the test or launch of a new product on the market or a price modification by competitors. They might be able to predict their customers' attitudes and behavior toward a new product or provide good estimations of how customers perceive products' attributes (Bon and Merunka, 2006).

Furthermore, in a digitalized economy in which online selling is growing, the sales organization must consider the new challenges of being a relevant information provider (to customers) and a sound information collector (for the company) rather than just an order taker (Neil and DeVincentis, 1999). Marketing intelligence officers need to look more closely at what influences customer demand. This means that adequate attention is paid to market dynamics and in particular, how change originates. the study is to examine the relationship between critical success factors of total quality management implementation and business performance. A survey method of data collection was adopted to collect primary data from small scale manufacturing organisations in a regional manufacturing cluster. The two-step structural equation modelling approach is followed to examine the relationship between critical success factors of total quality management implementation and business performance (Arumugam, Thangaraja; Jan, Akbar; Subramani, A. K, 2019). This means that various factors need to be evaluated and monitored such as the role of government, changes in government regulations that result in breakthroughs in technology and the emergence of consumer pressure groups that are concerned with environmental issues for example.

As a result, marketing intelligence officers need to think of intelligence gathering as an ongoing, multi-dimensional process that involves aspects of counterintelligence (Trim and Lee, 2006). But contrast of sales forces vital role in marketing intelligence system, practically, research suggest the poor reliability of the sales forces in collecting and transmitting market information; information gathered through salespersons is imprecise and may reach decision makers only after considerable delay. Also, information transmitted can be biased

because salespeople receive incorrect and incomplete information from their customers wish to transmit information that is favorable to them, do not adequately estimate their customers' expectations, or overestimate their sensitivity to price. Because of their own personal interests, salespeople also may have an incomplete or incorrect perception of the reality they observe. (Thangaraja, 2015) Neuromarketing focuses on relationship between consumer's subconscious mind and the behavior. Those are the factors that decide the brand preference. FMCG sector in India is highly brand oriented, so application of neuromarketing in FMCG sector would help the marketing experts to make better use of their brand decisions. Neuromarketing can consequently be defined as a new branch of marketing, based on the techniques resulted from neurosciences for a better identification and understanding of the cerebral mechanisms that fundament the consumer's behavior, in the perspective of increasing the efficiency of the commercial actions of companies. Finally, some information may never be communicated to marketing and sales managers and it appears that very few salespeople are truly committed to the diffusion of environmental information within their company. Scarcity in the communication of information from foreign markets has also been suggested (Bon and Merunka, 2006).

2. Review of literature :

Bon and Merunka (2006) have expressed impressible of marketing intelligence from personal factors (such as: organizational commitment, desire for upward mobility) and managerial factors (such as: control system, participation in decision making, feedback, recognition). The results of this study, that base on statistic data has been collected in 3 section-involved services, industrial and consumer goods indicate that desire for upward mobility is the only individual determinant of behavior. (Arumugam, Thangaraja, 2016), Distribution channels play a pivotal role in marketing by performing a number of vital distribution functions. Firms rely mostly on their marketing channels to generate customer satisfaction and to achieve differentiation over competition. There is seldom a clear-cut distinction between wholesalers and retailers,

particularly in the feeder markets where often retailers act as wholesalers and vice versa to sell to small retailers who come from surrounding villages.

Other than participation in decision-making, all the managerial factors play influential roles in structuring both motivation and behavioral effort toward marketing intelligence by salespeople. Through, the important positive impact of recognition, the results demonstrate that even a non-sales task such as marketing intelligence activities may imply some involvement from the Sales forces if the contributors are commended and thanked for their participation. It must also underline the importance of feedback and behavior-based control systems as means to influence sales representatives' motivation and effort. Salespeople need to know what happens to the information they transmit and be coached and controlled by their management (not left alone) when it comes to intelligence activities.

Lee and Trim (2006) explain why planners and retail marketing strategists need to develop long-term relationships capable of building business partnerships based on mutual trust. The results of this study show that, a successful retailing strategy will be embedded within a customer-driven general business strategy. (Arumugam, Thangaraja, 2016) Marketing intelligence will help the banks as well as the customers to use the technological innovations adopted by banks in an effective manner there by attracting customers. The study conclude that both the public and private sector banks compete each other in terms of attracting and retaining customers by providing comfort and luxury services such as mobile banking, online banking etc.

Marketing managers should plan to develop and sustain long-term trust-based working relationships which take into account organizational and national values. Successful partnership arrangements depend on mutuality and resilience, as well as trust. Marketing intelligence is a vital ingredient in the formulation and implementation of plans to achieve these goals. The "organizational resilience value system" framework proposed here can be

used by marketing planners to link organization learning to relationship marketing and thereby establish a customer relationship management policy that provides the organization with a sustainable competitive advantage.

Lackman *et al.* (2000) express the role of market intelligence in directing both strategy and success in the marketplace. In this order, added value of marketing intelligence and its importance in strategic decision making have been hyphenised and assayed between fifty industrial and services companies. Results reveal significant relationship between strategic planning and marketing intelligence. This subject was confirmed by remarkable usage by these companies and their tactical and strategic decisions impressible from marketing intelligence. These companies know that their target market sustainable position relies on their quality and update information. (Arumugam, Thangaraja, 2014) Applications and systems of supermarket towards marketing intelligence that becomes vital and many organizations recent times concentrate highly on this way.

Trim and Lee (2008) explain how competitive intelligence officers can participate more fully in strategy formulation and implementation and how they can contribute to the strategic intelligence process. The results reveal Competitive intelligence officers can contribute more fully to the strategic intelligence process and help establish an intelligence culture that incorporates counter-intelligence. By adopting a broader understanding of what strategic marketing represents, marketing managers can devise new approaches to managing customer relationships and can develop international/global brand positioning strategies that when implemented counter the actions of legitimate competitors and new entrants and disrupt the actions of counterfeiters and fraudsters.

Fleisher (2008) seeks to show how the increasingly popular use of data and information acquired from open sources

impacts competitive and marketing intelligence. Open sources are useful in marketing analyses because they can be easily accessible, inexpensive, quickly accessed and voluminous in availability. Marketing analysis increasingly feeds on open source data in plans, strategies and tactics. In this study, marketing intelligence concept has been considered as a relative variable that its development depends on analyzing and intellectual using data and information sources until organization achieves to suitable market advantage.

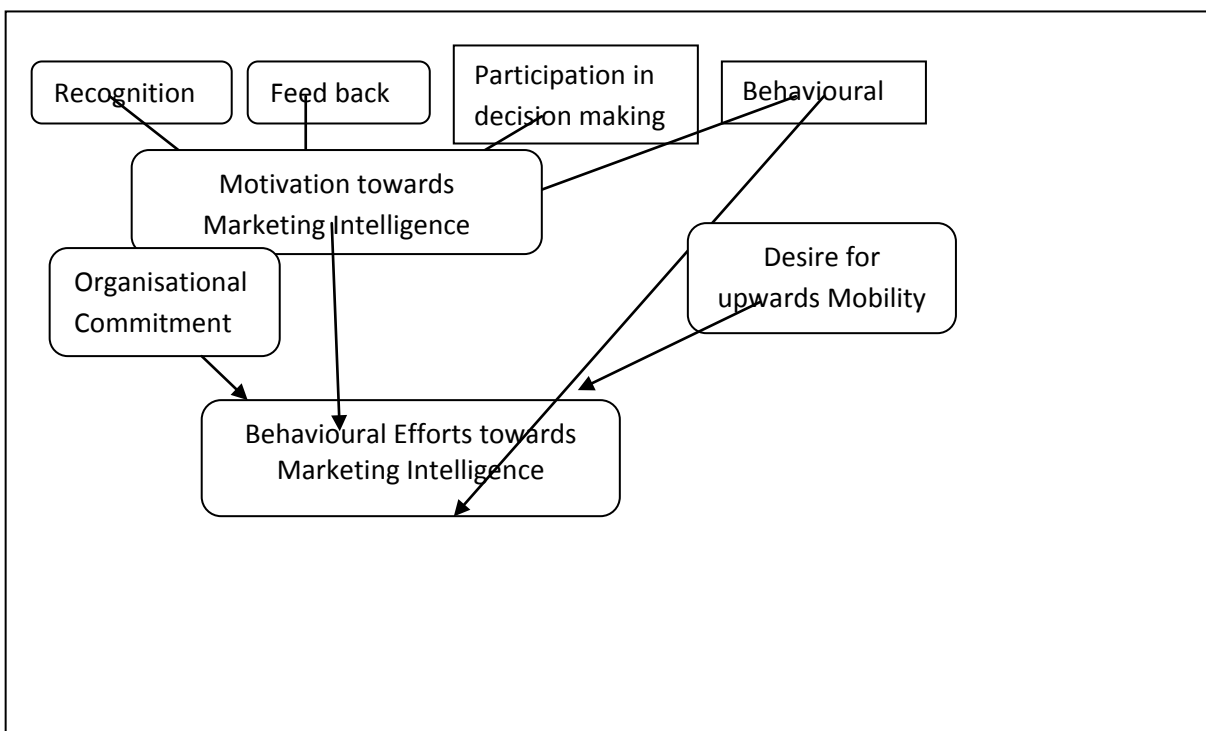
Nwokah and Ondukwu (2009) aimed to assess the impact of competitive intelligence on the marketing effectiveness of corporate organizations. 108 corporate organizations in Nigeria were selected from the gazette of Nigeria stock exchange as sample of this study. The results find strong association between competitive intelligence and marketing effectiveness of corporate organizations in the Nigerian context. These results propose that organizations should create a competitive intelligence unit to regularly monitor rivals activities and to evaluate organizational groups activities in line with that of rivals. Moreover, management must consistently motivate its intelligence teams so that it will analyze the customer's needs, seek to satisfy them and try to adapt the products to these needs, react to competitors' actions and responses. (Arumugam, Thangaraja, 2016) The impact of competition in the business environment has compelled many organizations to turn around and start scanning the environment for information, so as to have competitive edge over other similar organization within the industry. Understand the significance of marketing intelligence in terms of distributors. This marketing intelligence will support the distributors in act only as a delivery man whose task is to take orders and replenish the stock. Other promotional activities are undertaken by the organization itself.

Conceptual Model:

In order to explain and specify the influence factors of Sales force marketing intelligence behavior, based on Bon and Merunka model, these factors are divided personal and managerial dimensions. In this model, motivation is intermediate

effective factor which correlates managerial factors (except behavioral control system factor) to behavioral effort toward marketing intelligence. In this model as seen in Fig. 1, four factors such as behavioral control system, participation in decision-making, feedback and recognition for managerial dimension and two factors such as desire for upward mobility and organizational commitment for personal dimension have been regarded Behavioral effort toward marketing intelligence (BE): Intelligence marketing is not an easy duty for Sales force. He or she

must build strong relationships with customers to get proper and relevant information from them, gather information or evidence from the field and organize his or her negotiations with customers to obtain information without disturbing the selling process. Transmitting nonstandard, diverse information is time consuming and may be perceived as peripheral to the basic selling and reporting goals that, above all, must be achieved. Thus, intelligence activities require personal involvement and rely on the willingness of the salesperson to fulfill the mission



Motivation (Mot): The concept of motivation is useful for understanding why salespeople might exert effort. Extrinsic motivation is a key influential variable of sales representatives’ effort and work performance. Basically, expectancy theory states that a salesperson will exert a certain amount of effort toward a particular task if he or she estimates that the effort will lead to a specific performance (expectancy) which will imply a real reward (instrumentality) that he or she really desires (valence for reward) (Robbins, 2003). Then, Sales force are motivated for seeking information in his or her field: (1) if he or she feels that will collect suitable information from observation and or negotiation with customers (expectancy) and thereupon (2) will receive reward

related on information that he or she has transferred and (3) that reward is favorite for him/herself.

CONCLUSION

This research is an attempt to propose a general explanation of salespeople’s behavioral effort toward marketing intelligence activities. This research was done with the purpose of surveying the impact of individual and managerial factors on sales force’s contribution to marketing intelligence activities. According to revised model, we must to discuss about results from two viewpoints; managerial factors and individual factors. In this regard, managerial communication, participation in decision-making, feedback and managerial recognition as managerial factors influence indirectly behavioral

efforts toward marketing intelligence activities. These factors cause to increase commitment of sales force toward organization or corporation destiny.

In this study, although, managerial factors don't have direct relationship with behavioral efforts toward marketing intelligence activities but they influence individual factor such as organizational commitment that it have the most important in marketing intelligence. Anyway, in order to explain behavioral effort toward marketing intelligence activities, researchers should consider two viewpoints until acquaint sales force from their strategic role of marketing intelligence and motivate them for participating in marketing intelligence activities. As Trim and Lee (2006) discussed, the type of work undertaken by marketing intelligence officers is growing in importance and is likely to become more strategically oriented in the years ahead. It is essential, therefore, that marketing intelligence officers refocus part of their efforts on security work and develop their skill and knowledge base so that they are better able to assist marketing strategists.

REFERENCES

Hameed, S. S., Madhavan, S., & Arumugam, T.(2020). Is Consumer Behaviour Varying Towards Low And High Involvement Products Even Sports Celebrity Endorsed?.*International Journal of Scientific and Technology Research*, 2020, 9(3), pp. 4848-4852

DelVecchio, D. and Smith, D.C. (2005), "Brand-extension price premiums: the effects of perceived fit and extension product category risk", *Journal of the Academy of Marketing Science*, Vol. 33 No. 2, pp. 184-196.

Batra, R., Lenk, P. and Wedel, M. (2010), "Brand extension strategy planning: empirical estimation of brand-category personality fit and atypicality", *Journal of Marketing Research*, Vol. XLVII, pp. 335-347.

Bon, J.L. and D. Merunka, 2006. The impact of individual and managerial factors on salespeople's contribution to marketing intelligence activities. *Int. J. Res. Market.*, 23: 395-408

Chiang, H.H., T.S. Han and J.S. Chuang, 2011. The relationship between high-commitment HRM and knowledge-sharing

behavior and its mediators. *Int. J. Manpower*, 32: 604-622.

Arumugam, T. (2016). The Indispensability of Information Technology in Marketing Intelligence System: A Conceptual Approach. *IJSRD - International Journal for Scientific Research & Development/ Vol. 4, Issue 06,ISSN (online): 2321-0613* , 118-121.

Curtis, C.R., R.S. Upchurch and D.E. Severt, 2009. Employee motivation and organizational commitment: A comparison of tipped and nontipped restaurant employees. *Int. J. Hospitality Tourism Admin.*, 10: 253-269.

Darmon, R.Y., 1992. *Effective Human Resource Management in the Sales Force*. Quorum Books, Westport, CT., ISBN: 9780899306483, Pages: 312.

Arumugam, T., Hameed, S. S., & Madhavan, S. (2020). Consumer Behaviour Varying Towards Low And High Involvement Products Even Sports Celebrity Endorsed? *INTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH VOLUME 9, ISSUE 03,ISSN 2277-8616* , 4848- 4852.

[Employee engagement and retention in automotive industry in Malaysian context. Job stress as a moderator](#)TA Vimala Kadiresan *International Journal of Engineering and Advanced Technology* 8 (6S3), 2249 .

Fleisher, C.S., 2008. Using open source data in developing competitive and marketing intelligence. *Eur. J. Market.*, 42: 852-866.

Arumugam, T., Subramani, A. K., Jan, A., & Goute, A. K. (2019). "Exploring the Medical Representatives' Perception towards Motivational Measures Implemented by Selected Pharma Companies, Chennai City.". *Indian Journal of Public Health Research & Development* 10, no. 12 , 6-13.

Hatch, M.J., 2007. *Organization Theory: Modern, Symbolic and Postmodern Perspectives*. Afkar Publication, Tehran.

[HR practices and employee retention. Leader-member exchange \(LMX\) as a mediator](#) TA Vimala Kadiresan *International Journal of Engineering and Advanced Technology* 8 (6S3), 618-622

Arumugam, T., Vimala, K., Khuan, W. S., & Rasu, F. (2019). Employee Engagement and Retention in Automotive Industry in Malaysian Context. *Job Stress as a Moderator. International Journal of Engineering and Advanced Technology (IJEAT)* , 607-617.

[Human Resource Information System, Human Resource Performance And Moderating Effect Of National And International Banks Of Bank Employees In Qatart](#) Renju Mathai International

Journal Of Research In Commerce, It & Management 7 (10), 34-38

Huster, M., 2005. Marketing intelligence: A first mover advantage. *Competitive Intell. Mag.*, 8: 13-17

[Impact of Psycho-Social Factors on Suicidal Ideation Among Adolescent Girls](#) M Johns, P.

and D.C. van Doren, 2010. Competitive intelligence in service marketing: A new approach with practical application. *Market. Intell. Plann.*, 28: 551-570.

Boselin Prabhu, SR & Sophia, S, 2013, 'Capacity based clustering model for dense wireless sensor networks', *International Journal of Computer Science and Business Informatics*, vol. 5, no. 1, pp. 1-10, ISSN : 1694-2108.

Boselin Prabhu, SR & Sophia, S, 2013, 'Real-world applications of distributed clustering mechanism in dense wireless sensor networks', *International Journal of Computing Communications and Networking*, vol. 2, no. 4, pp. 99-105, ISSN : 2319-2720.

Boselin Prabhu, SR & Sophia, S, 2013, 'An integrated distributed clustering algorithm for dense WSNs', *International Journal of Computer Science and Business Informatics*, vol. 8, no. 1, pp. 1-12, ISSN : 1694-2108.

Boselin Prabhu, SR & Sophia, S, 2014, 'Modern cluster integration of advanced weapon system and wireless sensor based combat system', *Scholars Journal of Engineering and Technology*, vol. 2, no. 6A, pp. 786-794, ISSN : 2347-9523.

Arumugam, Thangaraja. (2016). "The Indispensability of Information Technology in Marketing Intelligence System: A Conceptual Approach." *IJSRD - International Journal for Scientific Research & Development/ Vol. 4, Issue 06* , 118-121.

Kalantari, K., 2010. *Process and Analyze the Data in Economic- Society Research*. Farhange Saba Publication, Tehran

Karim, N.H.A., 2010. The impact of work related variables on librarians organizational commitment and job satisfaction. *Malaysian J. Library Inform. Sci.*, 15: 149-163.

Arumugam, Thangaraja. (2016). An Evolution of Distributors' Marketing Intelligence System (DMIS) Among FMCG Distributors: A Conceptual Frame Work. *nternational Journal*

of Multidisciplinary Education and Research ISSN: 2455-4588; *Impact Factor: RJIF 5.12* [www.educationjournal.in](#) Volume 1; Issue 5 , 11-13.

Baker, J. J., Storbacka, K., & Brodie, R. J. (2019). Markets changing, changing markets: Institutional work as market shaping. *Marketing Theory*, 19(3), 301–328.

Frösén, J., Luoma, J., Jaakkola, M., Tikkanen, H., & Aspara, J. (2016). What counts versus what can be counted: The complex interplay of market orientation and marketing performance measurement. *Journal of Marketing*, 80(3), 60–78.

Hayati, B., Atefi, Y., & Ahearne, M. (2018). Sales force leadership during strategy implementation: A social network perspective. *Journal of the Academy of Marketing Science*, 46(4), 612–631.

Arumugam, Thangaraja. (2016). FAST MOVING CONSUMER GOODS DISTRIBUTORS' SOURCE OF INFORMATION AND MARKETING INTELLIGENCE SYSTEM ON CUSTOMER FEEDBACK. *IJARIE-ISSN(O)-2395-4396, Vol-2 Issue-1* , 833-837.

Lackman, C., K. Saban and J. Lanasa, 2000. The contribution of market intelligence to tactical and strategic business decisions. *Market. Intell. Plann.*, 18: 6-9.

Matin, H.Z., G. Jandaghi, F.H. Karimi and A. Hamidizadeh, 2010. Relationship between interpersonal communication skills and organizational commitment (case study: Jahad Keshavarzi and University of Qom, Iran). *Eur. J. Soc. Sci.*, 13: 387-398.

Mochtar, K. and D. Arditi, 2001. Role of marketing intelligence in making pricing policy in construction. *J. Manage. Eng.*, 17: 140-148.

Arumugam, Thangaraja. (2014). Marketing Intelligence System Among Supermarkets in Tirunelveli City: An Empirical Study. *International Journal of Current Research Vol. 6, Issue, 05* , pp.6668-6670.

Boselin Prabhu, SR & Sophia, S, 2015, 'Evaluation of clustering parameters in WSN fields using distributed zone-based approach', *ASTM Journal of Testing and Evaluation*, vol. 43, no. 06, pp. 01-13, ISSN : 0090-3973 (Annexure I) (Serial Number : 5410) IF – 0.279.

Boselin Prabhu, SR & Sophia, S, 2013, 'Variable power energy efficient clustering for wireless sensor networks', *Australian Journal of Basic and Applied Sciences*, vol. 7, no. 7, pp.

- 423-434, ISSN : 1991-8178 (Annexure II) (Serial Number: 2095).
- Boselin Prabhu, SR & Sophia, S, 2013, 'A review of energy efficient clustering algorithm for connecting wireless sensor network fields', *International Journal of Engineering Research and Technology*, vol. 2, no. 4, pp. 477-481, ISSN : 2278-0181.
- Boselin Prabhu, SR & Sophia, S, 2014, 'A review of efficient information delivery and clustering for drip irrigation management using WSN', *International Journal of Computer Science and Business Informatics*, vol. 14, no. 3, pp. 1-13, ISSN : 1694-2108.
- Boselin Prabhu, SR & Sophia, S, 2015, 'Cluster integrated self-forming wireless sensor based system for intrusion detection and perimeter defense applications', *International Journal of Computer Science and Business Informatics*, vol. 15, no. 3, pp. 70-83, ISSN : 1694-2108.
- Nehmeh, R., 2009. What is organizational commitment, why should managers want it in their work force and is there any cost effective way to secure it? SMC Working Paper, Issue 5. http://www.swissmc.ch/Media/Ranya_Nehmeh_working_paper_05-2009.pdf.
- Nwokah, N.G. and F.E. Ondukwu, 2009. Competitive intelligence and marketing effectiveness incorporate organizations in Nigeria. *Afr. J. Market. Manage.*, 1: 10-22.
- Arumugam, Thangaraja. (2016). The Role of Marketing Intelligence in Green Banking Practices – A Conceptual Approach. *Imperial Journal of Interdisciplinary Research (IJIR) Vol-2, Issue-9, ISSN: 2454-1362 , 756-758.*
- [Pull Factors, Career Anchor And Turnover Of Academicians In Malaysian Higher Education](#)
- TA Vimala Kadiresan *Journal of International Business and Economics*® 16 (4), 59-80
- Roe, S.J., 2010. Restaurant service employees motivation and organizational commitment: Shared gratuity versus independent gratuity environments. Proceedings of the 16th Graduate Students Research Conference, January 8, 2011, University of Nevada, Las Vegas
- Boselin Prabhu, SR & Sophia, S, 2015, 'Distributed clustering using enhanced hierarchical methodology for dense WSN fields', *International Journal of Applied Engineering Research*, vol. 10, no. 06, pp. 15581-15591, ISSN : 0973-4562 (Annexure II) (Serial Number: 8565).
- Boselin Prabhu, SR & Sophia, S, 2015, 'Issues in environmental pollution monitoring using distributed wireless sensor network', *Pollution Research Journal*, vol. 34, no. 1, pp. 51-57, ISSN: 0257-8050 (Annexure II) (Serial Number: 15251).
- Boselin Prabhu, SR & Sophia, S, 2012, 'A research on decentralized clustering algorithms for dense wireless sensor networks', *International Journal of Computer Applications*, vol. 57, no. 20, pp. 35-40, ISSN : 0975- 8887.
- Boselin Prabhu, SR 2012, 'A novel delay-tolerant and power-efficient technique in wireless sensor networks', *The Technology World Quarterly Journal*, vol. 3, no. 3, pp. 24-31, ISSN : 2180-1614.
- Boselin Prabhu, SR & Sophia, S, 2013, 'Mobility assisted dynamic routing for mobile wireless sensor networks', *International Journal of Advanced Information Technology*, vol. 3, no. 3, pp. 09-19, ISSN : 2231-1548.
- Arumugam, Thangaraja; Jan, Akbar; Subramani, A. K. (2019). "Examining the relationship between critical success factors of total quality management implementation and business performance: a structural equation modelling approach." *International Journal of Business Excellence* 17, no. 4 , 469-486.
- Tan, T.T.W. and Z.U. Ahmed, 1999. Managing market intelligence: An Asian marketing research perspective. *Market. Intell. Plan.*, 17: 298-306
- Trim, P.R.J. and Y.I. Lee, 2006. The Role of Marketing Intelligence Officers in Strategy Formulation and Implementation. In: *Handbook of Business Strategy*, Emerald Insight Staff, (Ed.). Vol. 7, Emerald Group Publishing Limited, UK, pp: 125-130
- Arumugama, T., & Jayakrishnana, B. (2020). A Social Network Analysis on understanding pattern of shoppers' OmniChannel adoption and clustering based on channel switching and preference attributes. *International Conference on Business Management, Innovation, and Sustainability (ICBMIS-2020)* .
- Zain, Z.M., R. Ishak and E.K. Ghani, 2009. The influence of corporate culture on organisational commitment: A study on a Malaysian listed company. *Eur. J. Econ. Finance Admin. Sci.*, 17: 16-26
- Johnson, J. S., & Sohi, R. S. (2017). Getting business-to-business salespeople to implement strategies associated with introducing new products and services. *Industrial Marketing Management*, 62, 137–149.

- Zablah, A. R., Chonko, L. B., Bettencourt, L. A., Allen, G., & Haas, A. (2012). A job demands-resources (JD-R) perspective on new product selling: A framework for future research. *Journal of Personal Selling & Sales Management*, 32(1), 73–87
- Thangaraja, A. (2015). The Veiling Part of Neuromarketing in Developing Brand Preference in FMCG Sector: A Conceptual Study. *IJARIE-ISSN(O)-2395-4396, Vol-1 Issue-5*, 1012-1015.
- Worm, S., Bharadwaj, S. G., Ulaga, W., & Reinartz, W. J. (2017). When and why do customer solutions pay off in business markets? *Journal of the Academy of Marketing Science*, 45(4), 490–512.
- Ahmad, N., Vveinhardt, J. and Ahmed, R.R. (2014), “Impact of word of mouth on consumer buying decision”, *European Journal of Business and Management*, Vol. 6 No. 31, pp. 394-403.
- Alsubagh, H. (2015), “The impact of social networks on consumers’ behaviors”, *International Journal of Business and Social Science*, Vol. 6 No. 1, pp. 209-216.
- Canziani, B., Welsh, D., Dana, L.P. and Ramadani, V. (2020), “Claiming a family brand identity: the semiotics of website storytelling”, *Canadian Journal of Administrative Sciences*, doi: 10.1002/ cjas.1543
- Frederick, H., Maritz, A. and Mayal, M. (2012), “Testing a practice-based theory of entrepreneurial marketing and social media”, *Australian Centre for Entrepreneurship Research Exchange(ACERE) and DIANA International Conference*, Fremantle, Western Australia, 31 Jan–3 Feb 2012.
- Golden, M. (2011), *Social Media Strategies for Professionals and Their Firms: The Guide to Establishing Credibility and Accelerating Relationships*, John Wiley and Sons, New Jersey, NJ.
- Hajli, N. (2014), “A study of the impact of social media on consumers”, *International Journal of Market Research*, Vol. 56 No. 3, pp. 387-404.
- Hanna, R., Rohm, A. and Crittenden, V. (2011), “We’re all connected: the power of the social media ecosystem. *business horizons*”, Vol. 54 No. 4, pp. 265-273.
- Hawkins, D.I. and Mothersbaugh, D.L. (2010), *Consumer Behavior: Building Marketing Strategy*, 11th ed., McGraw-Hill Irwin, New York, NY.
- Heinonen, K. (2011), “Consumer activity in social media: managerial approaches to consumers’ social behavior”, *Journal of Consumer Behaviour*, Vol. 10 No. 6, pp. 356-364.
- Kietzmann, J.H., Hermkens, K., McCarthy, I.P. and Silvestre, B.S. (2011), “Social media? Get serious! Understanding the functional building blocks of social media”, *Business Horizons*, Vol. 54, pp. 241-251.
- Jayakrishnan, B., Aruna, D. R., Arumugam, T., & Ramganathan, M. (2020). A Conjoint Based Approach on Female Customers’ High Relevant Attributes Towards Passenger Car Preferences. Available at SSRN 3713761.
- Hameed, S. S., Madhavan, S., & Arumugam, T(2020). Is Consumer Behaviour Varying Towards Low And High Involvement Products Even Sports Celebrity Endorsed?. *International Journal of Scientific and Technology Research*, 2020, 9(3), pp. 4848-4852
- Kadiresan, V., Khuan, W. S., Arumugam, T., Rasu, F., & Theseira, A. S(2019). Employee Engagement and Retention in Automotive Industry in Malaysian Context. Job Stress as a Moderator. *International Journal of Engineering and Advanced Technology*, 2019, 8(6 Special Issue 3), pp. 607-617
- Anuradha,, Arumugam, T., Jan, N.A., Subramani, A.K.(2019). Social media addiction, culture code and mediation effect of mindfulness: A structural equation modelling access, *International Journal of Recent Technology and Engineering*, 2019, 8(2 Special Issue 3), pp. 1097-1102.
- Subramani, A. K., Jan, N. A., Goute, A. K., & Arumugam, T. (2019). Exploring the Medical Representatives’ Perception towards Motivational Measures Implemented by Selected Pharma Companies, Chennai City. *Indian Journal of Public Health Research & Development*, 10(12), 6-13.
- Thangaraja.A, Abirami.A (2018), The consumer experience on geographical indicators and its impact on purchase decision: An empirical study, *International Journal of Pure and Applied Mathematics*, Volume 118 No. 20 2018, 2625-2630
- Thangaraja, A. (2018), The Role of Culture Code in Acceptance of internet of things (IoT) among fmcgconsumerS: a positivist approach. *Sadakath : A Research Bulletin*.
- Dr. Renju mathai& Dr. A. Thangaraja,(2017). *Human resource information system, human*

- resource performance and moderating effect of national and international banks of bank employees in Qatar. *International Journal of Research in Commerce, IT and Management*, volume no. 7 (2017), issue no. 10
- Kadiresan, V., Arumugam, T., Selamat, M.H., &Parasuraman, B. (2016). Pull Factors, Career Anchor And Turnover of Academicians in Malaysian Higher Education. *Journal of international business and economics*, 16, 59-80.
- R.JeyaRani, A.Thangaraja (2016)The Role of Marketing Intelligence in Green Banking Practices – A Conceptual Approach, *Imperial Journal of Interdisciplinary Research (IJIR)* Vol-2, Issue-9
- Krause, J., Croft, D.P. and James, R. (2007), “Social network theory in the behavioural sciences: potential applications”, *Behavioral Ecology and Sociobiology*, Vol. 62, pp. 15-27.
- Lee, E. (2013), *Impacts of Social Media on Consumer Behavior– Decision Making Process*, Bachelor’s Thesis, Turku University of Applied Sciences, Turku, pp. 1-77.
- Miller, R. and Lammas, N. (2010), “Social media and its implications for viral marketing”, *AsiaPacific Public Relations Journal*, Vol. 11, pp. 1-9.
- Olanrewaju, A.S.T., Hossain, M.A., Whiteside, N. and Mercieca, P. (2020), “Social media and entrepreneurship research: a literature review”, *International Journal of Information Management*, Vol. 50, pp. 90-110.
- Rasouli, S. and Timmermans, H.J.P. (2016), “Influence of social networks on latent choice of electric cars : a mixed logit specification using experimental design data”, *Networks and Spatial Economics*, Vol. 16 No. 1, pp. 99-130.
- Smith, T. (2009), “The social media revolution”, *International Journal of Market Research*, Vol. 51 No. 4, pp. 559-561.
- Mathai, R., & Arumugam, T. (2016).Preference and promoting of e-learning as a training medium in the hospitality industry with special reference to four and five star hotels in Tamil Nadu-India. *International Journal of Business Administration*, 7(3), 91-100.
- Subramani, A. K., Jan, N. A., Arumugam, T., &Sasikala, M. S. (2019).Examining the relationship between critical success factors of total quality management implementation and business performance: a structural equation modelling approach. *International Journal of Business Excellence*, 17(4), 469-486.
- Kadiresan, V., Arumugam, T., Jayabalan, N., Ab Rahim, H. B., & SPR, C. R. (2019).HR Practices and Employee Retention. Leader-Member Exchange (LMX) as a mediator. *International Journal of Engineering and Advanced Technology*.8 (6S3) 618, 62.