

COMPETITIVE INTELLIGENCE AND MARKETING EFFECTIVENESS OF ORGANIZATIONS: AN INVESTIGATION FROM PAKISTAN

Rizwan Raheem Ahmed

Nawaz Ahmad

Department of Business Administration & Commerce,
Indus University, Karachi

Imamuddin Khoso

Institute of Business Administration, Sindh University, Jamshoro

Khawaja A. Arif

Department of Business Administration & Commerce, Greenwich University

Rana I. Palwishah

Department of Business Administration & Commerce,
Indus University, Karachi

Abstract

This study examines, how the Competitive intelligence is important to make the marketing effective for a business. Competitive intelligence is a phenomenon in the business world that has started gaining more importance and attention. Competitive intelligence is the both external and internal information of the environment in which a business operates. Competitive intelligence is a tool through which business can gain competitive advantage and compete against their competition. In this research competitive intelligence is diffused into sub variables which all combine to make competitive intelligence. The sub variables include market opportunities, competitor risks, competitor threats, technological intelligence, technical intelligence, and strategic intelligence. Through this research it tested whether competitive intelligence is being used by the organizations in Pakistan which will prove the importance of competitive intelligence in business and it is also shown to what extent it is used. T-test has been used to individually test each variable and see for significance. The results of the research show that all the sub variables are significantly used by the organizations in Pakistan to make their marketing effective and thus competitive intelligence is important to make the marketing effective for a business.

Keywords: Competitive intelligence; Marketing effectiveness; Competitive intelligence variables; Market intelligence; Business intelligence

Introduction

Globally the business market has becoming more saturated day by day and the market is very competitive. With dramatic increase in the world's population and the rising consumer demands, people are moving towards entrepreneurship and more and more businesses are opening. Due to this entire scenario there is a cut throat competition globally in the business world and it is extremely difficult for organizations and firms to survive or sustain in this competitive market. According to Hughes (2005) competitive intelligence is the tool that provides organizations with a competitive edge through which they can compete with the competition and survive in the market and be profitable at the same time.

Competitive intelligence is the knowledge and information about the environment in which the organization is working and it enables the organization to gain a competitive advantage and compete against its competitors effectively. It focuses on monitoring a firm's competition to provide the firm with information about what its competition is doing to give it a competitive advantage in business. Competitive intelligence is a proactive technique where a company analyzes and monitors its environment and based on its finding develops its marketing strategies which in return affect its marketing effectiveness. It helps the company having a competitive position. In this research the influence of competitive intelligence on the marketing effectiveness is examine by adopting marketing intelligence model (Fahey's, 2007) and variations in competitive intelligence. Furthermore these variables are used as sub variables of competitive intelligence in order to see the extent to which these variables of competitive intelligence are used in organizations for marketing effectiveness.

Competitive intelligence has many different forms such as technical intelligence, technological intelligence, market intelligence, strategic intelligence, market opportunities, competitor threats and risks. Technical intelligence basically includes information about the processes and methods and technical things like patents and R & D of the competitors and the market technicalities that are used by firms to improve their own process. Technological intelligence is the information related to the technology that is available in the market or that is used by the competition and that information is used to gain a technological competitive advantage. Strategic intelligence is the knowledge or information that helps the management in a firm to make the right strategies by assessing the strategies of the competitors and then developing such strategies to counter the competition

and compete against them. Market opportunities are those areas where firm can tap and has scope, competitor risks are risks that competitors have and threats are the threats to business from competition.

Marketing effectiveness is basically the impact created by the marketing efforts of a firm. The strategies and marketing decisions every firm makes are basically developed based on a set of objectives that a firm wants to achieve .

The objective of this research is to test whether competitive intelligence(C.I) is used by organizations in Pakistan and to what extent, in order to gain marketing effectiveness. Identifying where organizations stand and to what factors of C.I they consider in order to compete in the market and to what extent.

Hypothesis

H₁: Competitive intelligence is used in organizations in Pakistan to make their marketing effective.

H₂: Market opportunities are significantly used in organizations to make their marketing effective.

H₃: Competitor threats are significantly used in organizations to make their marketing effective.

H₄: Competitor risks are significantly used in organizations to make their marketing effective.

H₅: Technical intelligence is significantly used in organizations to make their marketing effective.

H₆: Technological intelligence is significantly used in organizations to make their marketing effective.

Previous Research

Intelligence is a combination of analysis, evaluation, and interpretation of information that affects the way organization is working and helps in the survival of the organization. The proper execution, analysis, and interpretation of intelligence related information incorporation into the policies, plans and strategies of the organization makes the organization stronger and helps the CEO in fulfilling his responsibilities. Tan & Ahmad (1999) state intelligence is a continuous process and involves structure, processes, people, equipment and information used by marketing decision makers to improve their marketing efforts and making successful marketing strategies. Competitive intelligence has a strategic element involved in it. Competitive intelligence is a process that helps in the tactical and strategic decisions. Organizations need systems and processes that can gather timely, valid, useful, relevant information about competitors (Cobb, 2003). According to Montgomery & Weinberg (1979) strategic intelligence system

should be one that should identify valid information and also identify informational that is not useful (competition is the art of competing and working together with the competitors).

Competitive intelligence has now the main function of managing the information whether it's of inside the organization or of outside. Martre (1994) refers in his research that competitive intelligence should be used by firms to refine and improve their strategies to compete against their competition. McCord (2002) stated in her research that competition leads towards competitive intelligence. In her research she has reviewed many different theories such as strategic balancing, network organization, Ansoff Growth Matrix: Product/Market Matrix and Porter's Generic Strategy. According to Walle (1999) the most representative work on current state of competitive intelligence is the work of Leonard Fuld.

Porter (1980), states that technology intelligence has a significant impact on the innovation. Technology intelligence is a source for competitive advantage for a firm as well as a source of product innovation. According to Kim & Mauborgne (1999) technological intelligence should be linked with competitive intelligence to hold a competitive position. He also states that firms that have combined the customer value innovation with technological intelligence have a better chance of more profitability. Cappel, James, & Jeffrey (1995) concluded that there is a positive relationship between competitive intelligence and a firm's performance. When firms collect and analyze different information related to the environment, market, competitors and etc. and uses the collected intelligence while developing business plans and strategies that enables the firms to have a competitive edge and they can compete and perform better in the market thus their performance increases when using competitive intelligence.

Fahey (2007) has identified in his research inputs to competitive intelligence. According to him those inputs include marketplace opportunities, competitor threats, and competitive risks. Viviers, Saayman, & Muller (2005), have stated in their study that competitive intelligence has the purpose of providing strategic advantage and it incorporates information on customers, suppliers, technologies and environment. Maclayton (2006) has identified these factors as moderating variables in the relationship between business performance and customer-focus.

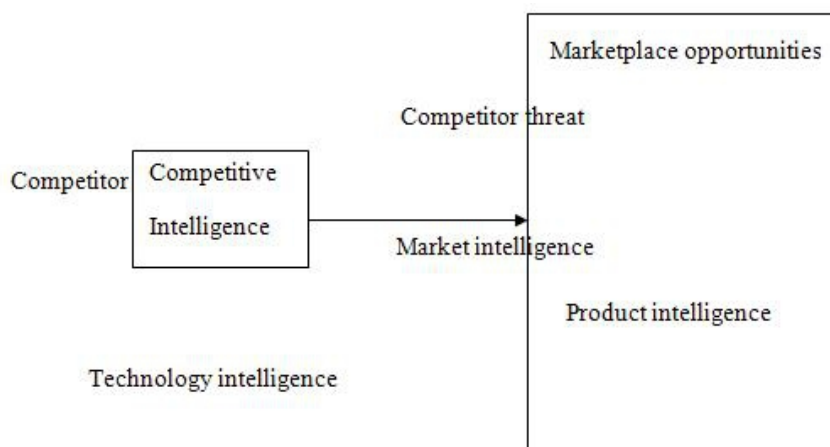
McGonagle & John (1999), state that some components of competitive intelligence include: strategic intelligence, competitor intelligence and technical intelligence. Henri (2008) in his research states that technical intelligence is a key component of competitive intelligence as it identifies the technicalities of the competition and the processes and methods the competitor are following and when this information is known a firm can improve or adapt its own system and processes to like its

competition or even further improve it thus it will gain a competitive advantage and will be better than its competition. Pary, Jan, Wayne, & Marcia (2000), finds in their research that technological intelligence can serve as a key opportunity for any enterprise if they keep track of it. Technological intelligence gives the firm know how of the new technologies available in the market as well as the technologies used by the competition. A good lesson of right use of technological intelligence is Motorola, Smithklinebleecham, and Clorox.

Material and method

This is a quantitative research and primary data is used for the research. The tool used for data collection is questionnaires. Other than questionnaires few interviews with industry experts are also conducted to take their view on the topic and further support the research. The sample size is 322 and constitutes of professionals only, from the FMCG industry, telecom, banking sector and executive MBA's working in different places. The sampling technique used is Purposive sampling. The statistical model used is t-test where each sub variable is tested to figure out its statistical significance which tells that whether that particular variable ought to be used by organizations to make their marketing effective. Other than that, a common average of all sub variables is taken to represent competitive intelligence as a whole, which is then tested on t-test to see for its significance whether it is used to make the marketing effective. A frequency table is also used to show the extent to which C.I and the sub variables are used to make marketing effective.

Model



Results and discussion

Table 1: Reliability Statistics

Reliability Statistics

Cronbach's	
Alpha	N of Items
.660	6

Competitive Intelligence defused into six sub variables, which are separately checked for reliability. For the sample to be reliable the Cronbach's Alpha value should be greater than 70%, which in our case is 66% thus we conclude that the data is fairly reliable and will give significant insights.

Table 2: One Sample Statistics (For all the variables)

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Market opportunities	322	3.5497	1.08760	.06061
Competitor threats	322	3.4596	1.11346	.06205
Competitor risks	322	3.2795	1.14228	.06366
Technical intelligence	322	3.5590	1.09285	.06090
Technological intelligence	322	3.3478	1.12331	.06260
Strategic intelligence	322	3.5683	1.10929	.06182

Table 2 shows the one-sample statistics for all the variables. Mean shows the average score out of the total score of 5. Each variable has a mean greater than 3 which means that the level of agreement by professionals that the particular variable is used to make marketing effective is above 60% (i.e. 3 out of 5 makes this ratio). Standard deviation shows the variation in data, which in this case for all variables is more than 100%.

Table 3: One Sample Test

One-Sample Test						
Test Value = 3						
	T	df	Sig. (2- tailed)	Mean Differenc e	95% Confidence Interval of the Difference	
					Lower	Upper
Market opportunities	9.069	321	.000	.54969	.4304	.6689
Competitor threats	7.407	321	.000	.45963	.3375	.5817
Competitor risks	4.391	321	.000	.27950	.1543	.4047
Technical intelligence	9.179	321	.000	.55901	.4392	.6788
Technological intelligence	5.556	321	.000	.34783	.2247	.4710
Strategic intelligence	9.193	321	.000	.56832	.4467	.6899

Table 3 shows the t-test result. The cutoff for the value of t is 2 and if absolute t value is greater than 2, then it is significant. In this case the t value for each of the variables is greater than 2 thus it is significant. The sig value

shows the significance and to be significant the value should be less than 0.05. In this case the sig value for each of the variable is less than 0.001 thus we conclude that all the variables are significant at 0.1% which means that all these variables of competitive intelligence are used by organizations to make their marketing effective.

Table 4: One Sample Statistics (Competitive Intelligence)

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Competitive Intelligence	322	3.4594	.67813	.03779

Table 4 shows the collective statistics for competitive intelligence, which are formed by obtaining the average for all variables and joining them to form competitive intelligence. Mean score for competitive intelligence is 3.46 on a scale of 5, which shows that the level of agreement for use of competitive intelligence to make marketing effective is more than 60%.

Table 5: One Sample Test (Competitive Intelligence)

One-Sample Test						
Test Value = 3						
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Competitive Intelligence	12.156	321	.000	.45941	.3851	.5338

Here, all the sub variables are fused and latent variable is obtained and its significance is computed. T -test result shows that for overall competitive intelligence, t value is greater than 2 meaning it is significant and the sig value is less than 0.001 thus it is significant at 0.1%. Hence, we conclude that competitive intelligence is significantly used by organizations to make their marketing effective.

Table 6: Modal Frequency

Model Frequency		
Variables	Score	Frequency
Market opportunities	3	100
Competitor Threats	4	106
Technological Intelligence	3	106
Strategic Intelligence	4	134
Competitor Risks	4	110

The model frequency table shows a summary of mode and its frequency for each of the variables. The table shows that which option was selected the most and how many times for each of the variable. It can be seen that for the variable market opportunities the most selected choice or score was 3 which is an average level of agreement. 31 % people chose the option 3 and it shows they agree to use market opportunities into their strategies.

For competitor threats 4 is the most preferred option and 32.9% of the sample had 80% level of agreement to using competitor threats into their strategies. 3 is the most preferred option for technological intelligence and 32.9% of the sample had 60% level of agreement to using technological intelligence into their strategies. For strategic intelligence the preferred option is 4 and 41.6% of sample has 80% level of agreement towards the use of strategic intelligence into their strategies. Lastly 4 was the most preferred option for competitor risks and 34.16% of sample had 80% level of agreement towards using competitor risks to improve their strategies.

Table: 7 Interviews Result

Rating importance of using C.I (1-Lowest, 5= Highest)	5
Sub Variables of C.I	<ul style="list-style-type: none"> • Consumer trends • Industry regulations • Product intelligence • Word of mouth
C.I used in Pakistan by organizations	<ul style="list-style-type: none"> • No, formally not used as no proper C.I systems used but informally yes. • Organizations are inward oriented, not external oriented.
Elements of marketing affected from C.I	<ul style="list-style-type: none"> • Marketing strategy <ul style="list-style-type: none"> • Pricing • Distribution • Production • Advertising • Marketing budget • Consumer offers
Benefits	<ul style="list-style-type: none"> • Marketing plan cannot be developed without using C.I • Foundation of planning • Competitive advantage • Gives direction to the organization to set its objectives and vision.

Conclusion

After looking at the results we conclude that for H_1 , H_0 is rejected as the results have shown that competitive intelligence is used by organizations in Pakistan to make their marketing effective. The results also show that each of the sub variables of competitive intelligence are significant which means that all these variables (competitor risks, competitor threats, market opportunities, strategic intelligence, technical intelligence and technological intelligence) are effective and are used by the organizations in Pakistan to make their marketing effective hence we conclude that for H_2 , H_3 , H_4 , H_5 , H_6 , and H_7 , H_0 is rejected. From interviews it is found that experts believe that still in Pakistan C.I is not formally used in organizations but informally all organizations use C.I to some extent. Competitive intelligence (C.I) affects the marketing elements such as Marketing strategy, Pricing, Distribution, Production, Advertising, Marketing budget, Consumer offers.

References:

- Brody, R. (2008). Issues in Defining Competitive Intelligence: An Exploration. *Journal of Competitive Intelligence and Management* , 4 (3).
- Censo General de Población y Vivienda 2010. (2011). Instituto Nacional de Estadística y Geografía (INEGI). Retrieved Julio 28, 2011, from Censo General de Población y Vivienda 2010: <http://www.inegi.org.mx>
- Indice de Desarrollo Humano Municipal en México 2000 2005. (2008). Programa de las Naciones Unidas para el Desarrollo. Retrieved Agosto 11, 2011, from Desarrollo Humano: <http://www.undp.org.mx>
- Anderson, J. C., Rungtusanatham, M., & Schroeder, R. G. (1994). A theory of quality management underlying. *Academy of management Review* Vol 19 , 472.
- Appiah, A. K., Fyall, A., & Singh, S. (2001). Marketing effectiveness and business performance in the financial services industry. *Journal of services marketing* , 15 (1), 18-34.
- Bernanke, B., & Frank, R. (2007). *Principios de Economía*. Madrid, España: Mc Graw Hill.
- Branden, B., & Nale, B. (2006). Information systems strategy and implementation: a casestudy of a building society. *ACM transactions on information systems* , 12 (2), 150-173.
- Bribiescas Silva, F. A., & Romero Magaña, I. F. (2011). *Hacia una Competitividad en Servicios Turísticos bajo la administracion de experiencias de calidad en la frontera Ciudad Juarez, Mx- El Paso USA*.
- Canela Lopez, J. R. (2004). *La gestion por calidad total en la empresa moderna*. Mexico: Alfaomega.
- Cappel, James, J., & Jefferey, P. B. (1995). A look at the link between competitive intelligence and performance. *Competitive intelligence review* , 6 (2).

- Castro, A., & Lessa, C. (1973). *Introducción a la economía, un enfoque estructuralista* (Novena Edición ed.). México D.F.: Siglo Veintiuno.
- Centro Chihuahuense para la calidad y productividad. (2012, 12 15). Retrieved 2013, from Centro Chihuahuense para la calidad y productividad: <http://www.cchcp.org.mx/Products/Awards.aspx>
- Cobb, P. (2003). Competitive intelligence through data mining. *Journal of competitive intelligence and management* , 1 (3), 80-89.
- Dombusf, R. F. (2009). *Macroeconomía* (Decima ed.). México: Mc Graw Hill.
- Dornbush, R., Fischer, S., & Startz, R. (2009). *Macroeconomía* (10 edición ed.). México: Mc Graw Hill.
- Drucker, P. (1987). *La Cambiada Economía Mundial*. *Investigación Económica* , 37 a 62.
- Fahey, L. (2007). Connecting strategy and competitive intelligence refocussing intelligence to produce critical strategy inputs. *Strategy Leadership* , 35 (1), 4-12.
- Fleisher, C. S., & Blenkorn, D. L. (2003). *Controversies in Competitive Intelligence the enduring issues*. Westport, CT: Praeger.
- Furtado, C. (1971, Abril Junio). Dependencia Externa y Teoría Económica. *El Trimestre Económico* , 335 349.
- Galgano, A., & Linares, A. L. (1993). *Calidad Total: Clave estrategica para la competitividad de la empresa*. Diaz de santos.
- Gutierrez, H., & Mariscal, M. (2010). Evolución de la marginación y la pobreza. In *2 Décadas el Desarrollo de Jalisco 1990 2010* (p. 141 160). Guadalajara: Gobierno del Estado.
- Henri, D. (2008). *Competitive technical intelligence. Methods and tools, application to innovation, SMEs, poles of competitiveness, research institutions and large companies*. International forum on technical innovation and competitive technical intelligence .
- Hernandez Sampieri, R., Fernandez Collado, C., & Baptista Lucio, P. (2010). *Metodologia de la investigación* . México: Mc Graw Hill.
- Huerta, A. (2006). *Por qué no crece la Economía Mexicana*. México D.F., México: Diana.
- Hughes, S. (2005). Competitive Intelligence as Competitive Advantage. *Journal of Competitive Intelligence and Management* , 3, 3-14.
- James, E. (2005). *Turismo, Política y Administración del Sector Público*. México D.F.: Unidad de Evaluación y Control, Cámara de Diputados .
- Kim, W. C., & Mauborgne, R. (1999). Creating new market space. *Harward business reviews* , 77 (1), 83-89.
- Maclayton, D. W. (2006). Customer focus and business performance the study of food and beverages organizations in Nigeria. *Measuring business excellence* , 10 (4), 65-76.

- Mankiw, G. (1997). *Macroeconomía* (3 edición ed.). Nueva York, Estados Unidos: Antoni Bosh.
- Martre, H., Levet, Jean, L., & Clerc, P. (n.d.). *Intelligence économique et stratégie des entreprises*.
- McCord. (2002). How information gives you competitive advantage. *Harvard business* , 3, 17.
- McGonagle, J. J., & Vella, C. M. (2012). *Proactive Intelligence: The Successful Executive's Guide*. London: Springer-Verlag.
- Merchand, M. (2007). *Teorías y Conceptos de Economía Regional y Estudios de Caso*. Puerto Vallarta, Jalisco, México: Universidad de Guadalajara.
- Montgomery, David, B., & Charles, B. W. (1979). Toward strategic intelligence systems. *Journal of marketing* , 43 (4), 41-52.
- Ngugi, J. K., & Gakure, R. W. (2013). Competitive Intelligence Practice and Their Effect on Profitability of Firms in the Kenyan Banking Industry. *International Journal of Business and Social Research* , 3 (3), 11-17.
- Nunnally, J. C., Berstein, & Ira, H. *Psychometric Theory*. USA: Mc-Graw Hill.
- Pary, M. N., Jan, P. H., Wayne, A. R., & Marcia, S. (2000). Putting competitive technology intelligence to work. *Research technology management* , 43 (5), 23-28.
- Porter. (1980). *Competitive Strategy: Techniques for analyzing industries and competitors*. New York: The free press.
- Prahala, & Venkat. (2004). *the future competition*. USA: harvard.
- Ricardo, R. R. (2001). *Calidad Estrategica Total*. Macchi.
- Rico, R. R. (2001). *Calidad estrategia total: Total quality managment*. Macchi.
- Rico, R., Hermida, J., & Irace, A. (1996). *Premio Nacional a la Calidad*. Buenos Aires Argentina: macchi.
- Shearer, R. (1958). El Concepto de Crecimiento Económico. In G. Ramírez, *Lecturas sobre Desarrollo Económico* (p. 71 a 84). México D.F., México: UNAM.
- Sistema Estatal de Información Jalisco. (2011, Agosto). Sistema Estatal de Información Jalisco. Retrieved Agosto 22, 2011, from SEIJAL: www.seijal.gob.mx
- Suárez, E. (1970). Consideraciones sobre el concepto del desarrollo económico. *El Trimestre Económico* , 401 a 411.
- Tamayo y Tamayo, M. (2003). *El proceso de la investigación científica*. México: Limusa S.A de C.V.
- Tan, T. W., & Ahmed, Z. U. Managing market intelligence an Asian marketing research perspective. *Marketing intelligence and planning* , 17 (6), 298-306.

- Tari Guillo, J. J. (2000). *Calidad Total: Fuente de ventaja competitiva*. Publicaciones Universidad de Alicante.
- Torres, F., & Delgadillo, J. (2002). Límites Estructurales al Desarrollo Regional en México. In J. L. Calva, *Política económica para el desarrollo sostenido con equidad Tomo II* (p. 282 a 313). México D.F.: UNAM.
- Trim, P. R. (2000). The Company-Intelligence Interface and National Security. *International Journal of Intelligence and Counter Intelligence* , 13 (2), 204-214.
- Viviers, W., Saayam, A., & Muller, M. (2005). Enhancing a competitive intelligence culture in South Africa. *International journal of social economics* , 32 (7), 576-589.
- Walle, A. H. (1999). From marketing research to competitive intelligence: useful generalization or loss of focus. *Manage decision* , 37 (6), 516-525.
- Wrights, S., Pickton, D. W., & Callow, J. (2002). Competitive intelligence in UK firms: A typology. *Marketing intelligence and planning* , 20 (6), 349-360.