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# Influence Of Competitive Intelligence On Profitability Of Mobile Telecommunication Companies In Kenya

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# Abstract:

The process of collecting, storing, analyzing and making use of information on business or organization's external environment constitute an informed actionable intelligence ascertained by the needs prescribed by any business entity. The rapidly changing business climate created by advances in technologies, economic and social changes as well as the ever shortening product life cycles, lead to hyper-competition, demanding that firms embrace competitive intelligence as a strategy. This study sought to fill the existing knowledge gap by carrying out an investigation of competitive intelligence practices for greater profitability in the mobile telecommunication industry in Kenya.

The study employed descriptive research design and targeted management staffs who directly deal with the day to day management of the four mobile telecommunication companies providing primary data while in-house text books, reports, journals, newspapers and companies' websites and publications constituted secondary data sources. The study established that competitive intelligence practices play a vital role in overall profitability of mobile telecommunication companies in Kenya. The practices lead to greater profitability through reduction in cost for the companies with technology intelligence practices being the most practiced and also contributing the most in terms of competitive intelligence for greater profitability.

#### 1.Introduction

Competitive intelligence is the process of ethically collecting, analyzing, disseminating, accurate, relevant, specific, timely, foresighted and actionable intelligence regarding the implications of business environment, competitors and the organization itself (Ezendu, 2012), for purposes of applying information about products, domain constituents, customers, and competitors for the short term and long term planning needs of an organization. The rapidly changing business climate occasioned by advances in technologies, economic and social changes as well as fast-shortening life cycles lead to hyper competition requiring organizations to devote a greater proportion of resources to knowledge and innovation (McGonagle & Vella, 2004). a A more focused definition of competitive intelligence (CI) regards it as the organizational function responsible for the early identification of risks and opportunities in the market before they become obvious (Kahaner, 1997); this definition sets aside CI as a concept of molding all developments and events to yield competitive advantage. CI revolves around decisions made on positioning of a firm in such a way that all the available capabilities are fully utilized to distinguish the business from the competitors.

#### 2.Structure Of Mobile Telecommunication Industry In Kenya

The Kenyan mobile telecommunication industry is an oligopoly, with only four firms sharing the market; Safaricom Ltd is the lead firm with a subscriber base of 78.3%, followed by Airtel 10.6%, while Orange and Essar Telecom (Yu) have 5.6% and 5.4% respectively (Samuelson & Marks, 2006). The four firms are interdependent in the sense that the behavior of one firm affects the others, in the recent past, price wars have led to reduction of tariffs across the industry; the pricing of the various products is relatively the same. Although Safaricom ltd has continued to lead the industry through innovations such as electronic money transfer and data services, among others, the four firms employ almost similar business practices and the products offered are similar; all these firms use similar marketing strategies; promotional activities such as free airtime on top-up are witnessed across the firms (CCK, 2012).

The price of mobile telephone services in Kenya is determined to a greater extent by market forces of competition. However, Communications Commission of Kenya (CCK) has a direct regulatory role including carrying out research on the most appropriate pricing behaviors for the industry. It enforces interconnection charges which in turn dictate the tariffs charged by each firm. Mobile tariffs reduced significantly over the last quarter of 2010 registering an average of KES 2.65 for on-net calls per minute from KES 4.78 per minute in the previous period and KES 2.5 for post-paid subscribers at the end of the quarter. This represents 33.4 per cent reduction on pre-paid tariffs and 55.5 per cent on post-paid tariffs from the previous period. The tariff decline is attributed to an interconnection determination by the Commission during the period that saw mobile termination rates reduced to KES 2.212 from KES 4.42. In addition the CCK issued an addendum to the Interconnection Determination No. 2 of 2010 on Short Message Service (SMS) Interconnection termination rates. Mobile service operators were forced to implement lower SMS termination rates starting 1st January 2011. The operators were expected to interconnect at Ksh.0.60 per SMS and reduce progressively to Ksh. 0.05 by the year 2013, according to the prescribed glide path (CCK, 2011).

# 3.Background Of The Study

According to McGonagle and Vella, (2004), competitive intelligence (CI) is a process of supporting both strategic and tactical decisions through installing systems and processes able to gather and analyze reliable, relevant, and timely information that is available in vast amounts about competitors and markets. These systems must be able to keep the companies informed of what is happening in their competitive environment in order to help in dealing with effects which may result from intense global competition, changing markets, abundance of information and even the ever changing business environment.

Competition in mobile telecommunication industry is extreme and keeps on intensifying; this and many other factors necessitate major industry and technology changes. For this reason, mobile telecommunication companies have continued to relate to other businesses like internet providers and satellites with the aim of monitoring several intelligence domains; this makes the mastering of measurable and reproducible competitive intelligence processes highly essential.

The goal of a competitor analysis is to develop a profile of the nature of strategy changes each competitor might make either immediately or in the near future, each competitor's possible response mechanisms to the range of likely strategic moves other firms could make, and each competitor's likely reaction to industry changes and environmental shifts that might take place (Calof, 2008). Competitive intelligence is based on developing the strategies and tactics necessary to consistently transfer market share profitably and specific competitors to the company.

#### 4. Statement Of The Problem

The design of competitive intelligence, as a process that monitors all elements of the external environment wherever and whoever they may be, within a specific market place is relatively a new concept (Baars & Kemper, 2008). Competition in the industry continually work to drive down the rate of return on capital invested; this means that, specific developments within the business environment need to be closely monitored and that intelligence professionals or organizations in general need to establish means of integrating competitive intelligence work with marketing intelligence work. Mobile telecommunication companies are increasingly making use of various competitive intelligence aspects to ensure profitability.

Globally, mobile telecommunication industry contributes around 1.5% of world GDP (Vodafone, 2011). In the United Kingdom, the sector contributes 4.1% of total UK GVA (Gross Value added), while in South Africa, the industry contributes more than 7% of the country's GDP (Economic Survey, 2012). The Kenyan mobile telephony industry currently accounts for 7% of mobile phone subscribers in sub-Saharan Africa, Kenya had 17.4 million mobile phone subscribers by end of June 2009, translating to 45.7% penetration rate (CCK, 2011); this has grown to 29.2Million mobile subscriptions as at 31st march, 2012 rising from 28.02million the previous year, that is, as at 31st December, 2011 representing a growth rate of 4% in total mobile subscriptions (CCK, 2012).

The growth in mobile subscriptions is an indication of operators' determination to continue growing their subscriber base while increasing access to mobile telephony services in the country and at the same time reaping from economies of scale. At the end of March, 2012, mobile penetration was posted at 74.0% up from 71.3% recorded at the close of the 2011 (CCK, 2012). The contribution of mobile telephony to the Kenyan economy has grown by almost 250% over the last 5 years to represent over 5.6% of the country's GDP by 2011, while mobile-related employment has increased by 67%; this represents an increasing trend necessitated by among many other factors adoption of competitive intelligence (Deloitte, 2011).

Studies on competitive intelligence are generally limited, most of the conducted studies revolve around importance of the concept in business development, the conducted studies were independent of competitive intelligence practices and performance for greater profitability (Li et al., 2008).

In Kenya, local studies done include: Muiva, (2001) conducted a survey on the use of competitive intelligence systems in the Kenyan Pharmaceutical Industry; Kipkorir, (2001) researched on competitive intelligence practices by FM radio stations operating in Kenya while Karanja, Gakure & Mugo, (2012) did a research on CI and commercial banks in Kenya. These studies were however done on different institutions other than mobile telecommunication companies as an industry in Kenya. This study therefore sought to fill the existing knowledge gap by carrying out an investigation of competitive intelligence practices for greater profitability in the telecommunication industry in Kenya.

# **5.**Objectives Of The Study

#### 5.1.General Objective

The main objective of this study was to determine the influence of competitive intelligence practices in mobile telecommunication companies on overall business performance in Kenya.

# 5.2. Specific Objectives

The specific objectives of this study were:

- To establish the product differentiation strategies adopted by mobile telecommunication companies and their effect on profitability.
- To investigate whether market intelligence practices employed by mobile telecommunication companies affect profitability.
- To assess whether the technology intelligence practices affect profitability of telecommunication mobile companies in Kenya.
- To establish the strategic alliance intelligence practices adopted by telecommunication companies and their effect on profitability.

#### **6.Rationale Of The Study**

The study is important to managers in the mobile telecommunication sector and to larger extent managers of other industries in helping them understand the importance of various components of competitive intelligence and how different firms can achieve competitive edge in their respective industries. The study will also help other managers know the methods used in gathering and applying competitive intelligence in order to improve

their management styles in this era of competition driven industries. The study will act as a source of reference material for future researchers on other related topics; it would also help other academicians who undertake similar topics in their studies.

# 7. Literature Review On Competitive Intelligence Practices

Current society is characterized by the production of diverse forms of leverage over organizations, such as the dynamism of technological transformations characterized by shorter technology life cycles, the acceleration of competition and demographical dynamics forcing organizations to develop strategies in order to fit into the environment, where responsiveness, alertness, decision making, and speed are all important (Ruhli & Sachs, 1997). In identifying the major variables of success in competitive intelligence, it is crucial "to take into consideration not only the critical factors of the society, but also all those that relate to the main operational divisions and functional directions" (Kinsinger, 2007); this makes it possible to understand the relevance of the forms of internal coordination and the typology of relationships that are internally set regarding the competitive intelligence system.

The theory on intelligence concept has long been proposed as an effort to increase the firm's competitiveness and its strategic planning process (Guyton, 1962; Montgomery & Urban, 1970; Pearce, 1976; Montgomery & Weinberg, 1979; Porter, 1980). In 1966, William Fair proposed the formation of a corporate "Central Intelligence Agency" within the firm in order "collect, screen, collate, organize, record, retrieve and disseminate information" (Fair, 1966). Since that time, this proposition has grown to become an emerging business construct with delineated job functions directly responsible for intelligence collection, analysis, and dissemination (Kahaner, 1996). It is believed that CI may be the true purpose of intelligence, that is, to gain strategic advantage (Porter, 1980). Competitive intelligence includes competitor intelligence as well as intelligence collected on customers, suppliers, technologies, environments, or potential business relationships; this means that intelligence goes beyond monitoring competition, to even the entire business environment. Intelligence helps companies sustain and develop distinct competitive advantages by making use of the entire organization and its networks to develop actionable insights about the environment which includes customers, competitors, regulars, technology and so on.

Competitive intelligence uses systematic and ethical process involving, planning, collection, analysis, communication and management (Calof, 2008). Some of

epistemologies put across by various researchers to emphasis the importance of competitive intelligence in terms of creating competitive advantages for greater profitability include; strategic balancing theory, theory of network organization, Ansoff product-market growth matrix and Porter's generic strategies.

# 8. Conceptual Framework

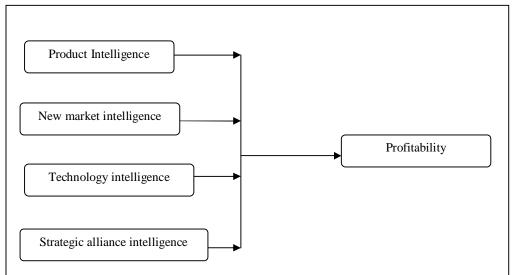


Figure 2.1: Conceptual Framework

# 8.1.Product Intelligence

Product intelligence involves automated for an system gathering analyzing intelligence about the market performance of a product either being designed or manufactured, for purposes of feeding the product managers and engineers involved in both designing and steering the product into the market in order to assist them in the development of the next iteration or version of that product (Montgomery, 1985). The goal of product intelligence is to accelerate the rate of product innovation, thereby making the product and its owners more competitive. Product intelligence is mostly applied, though not limited to electronic products. Product development process is only meaningful if the features and functionality of the intended solution align with customer's, wants, needs and expectations; this means that a high level strategic assessment, qualitative functional evaluation on how customers perceive products and services in comparison to the alternatives in the market is highly critical.

# 8.2.Market Intelligence

It's becoming increasingly difficult for businesses to make accurate forecasts about what might happen six months from now; the current world is in constant flux and providing accurate projections so that a company can adequately plan sales strategy, assess competitor threats and anticipate changes in consumer behavior is a perpetual challenge. Market intelligence (MI) is industry-targeted intelligence that is developed on real-time (dynamic) aspects of competitive events taking place among the 4Ps of the marketing mix (pricing, place, promotion, and product) in the product or service marketplace in order to better understand the attractiveness of the market (Fleisher, 2003).

Market intelligence helps Managers especially sales managers to tailor their marketing strategies to suit consumer demands in a fast-moving vertical market place. According to Fleisher (2003), marketing intelligence is not as widely spread as other components of CI, which are distributed to other non marketing decisions within an organization and is also a short term tactical approach aimed at improving certainty in decision making so as to accurately determine market opportunities, market penetration strategies, and market development metrics.

#### 9. Technology Intelligence

Technology intelligence is the capture and delivery of technological information as part of the process whereby an organization develops an awareness of technological threats and opportunities (Kerr *et. al*, 2006). Technology intelligence constitutes one of the most probable areas of informing the innovation process thus it could be the only blood that feeds the innovative firms especially those which operate in technology based arena and wish to survive in the extremely competitive market places of today. Technology intelligence exerts a significant influence on the ability to innovate and is viewed both as a major source of competitive advantage and of new product innovation. Technology is a prerequisite for natural implementation of the concept of competitive intelligence, indeed the latter uses instruments related to information and communication technology (Friar & Horwitch, 1985).

#### 10.Strategic Alliances

According to Patton and McKenna (2005) strategic alliances are formed as a mechanism for reducing uncertainty for parties of the alliance. A strategic alliance is "an agreement between firms to do business together in ways that goes beyond normal company-to-

company dealings, but fall short of a merger or a full partnership" (Wheelen & Hungar, 2000). These alliances range from informal "handshake" agreements to formal agreements with lengthy contracts in which the parties may also exchange equity, or contribute capital to form a joint venture corporation.

Strategic alliances offer a company an opportunity to construct broader business systems by linking the company's internal core competencies with the best of breed capabilities of allies; this alliances have continued to grow in most industries reducing competition to a battle between competing and often overlapping coalitions as it is between individual firms thus increasingly defining industry structures.

# 11.Research Methodology

The study sought to investigate the competitive intelligence practices and their effect on profitability in the mobile telecommunication companies in Kenya and adopted a descriptive research design. The study targeted management staffs who directly deal with the day to day management of the cellular companies to collect primary data and relied **on** in-house text books, reports, journals, newspapers and companies' websites and publications for secondary data. The primary data was analyzed using descriptive statistics which helped in describing the data through providing summaries about the sample and observations.

The Researcher carried out a pilot study to pretest the validity and reliability with an aim of enhancing the efficiency and effectiveness of the research instrument, that is, the questionnaire in addressing the research problem. The findings of the pilot study illustrated that all the scales were reliable since we're all above the critical value of 0.7 (Nunnually, 1978).

Data analysis was done using descriptive analysis, Likert scale was used to analyze the mean score and standard deviation, in order to help determine the extent to which the mobile telecommunication companies use competitive intelligence practices and the influence on profitability. The data was then organized, edited, coded, and computations done using SPSS, version 21.0, from which graphs, tables, figures and charts were derived for easy analysis and drawing of conclusions. A regression model was developed and correlation analysis conducted at 95% confidence level. In this study, the following regression equation was used to test the specific research objectives;

 $Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \epsilon$ : Where Y = Mobile company's profitability, X1 = market intelligence, X2 = product intelligence, X3 = technology intelligence, X4 =

strategic alliance intelligence,  $\beta 1$ ,  $\beta 2$ ,  $\beta 3$ ,  $\beta 4$ ,  $\beta 5$  = Coefficients of determination and  $\epsilon$  = Error term.

The results from the study were compared with the results in the literature review from which inferences were drawn, conclusions and recommendations made based on the results of the descriptive and inferential statistics on which the data was subjected to.

# 12.Research Findings And Discussions

# 12.1.Market Intelligence

The study established that all the mobile telecommunication companies studied employ new market intelligence as a competitive intelligence practice; indeed all the respondents (100%) agreed that their companies do apply some forms of market intelligence in trying to maximize their returns for overall profitability.

Most of the respondents, 66.7%, indicated that the companies apply new market intelligence when venturing into new markets, 65.4% indicated that the strategy is mostly used when introducing new products in the markets while 32.6% indicated that they apply the strategy to capture new markets from the competitors. The results are in agreement with the literature which had defined Market intelligence (MI) as an industry-targeted intelligence developed on real-time (dynamic) aspects of competitive events taking place among the 4Ps of the marketing mix (pricing, place, promotion, and product) in the product or service marketplace in order to better understand the attractiveness of the market, market and customer orientation and also in identification of new opportunities (Fleisher, 2003).

The study also established that, on marketing mix, most concentration was on product represented by 44.4%, pricing with 23.6%, place with 18.1% and promotion which accounted for 13.9%. The findings agreed with a study by Porter, (1985), which found out that most companies, especially in highly competitive industries or markets focus on the product as the central point; this involves finding out how to make the product, setting up the production line and tailoring the product to match the customer and market requirements.

The companies also used market segmentation as a form of market intelligence, According to findings from the literature review, market segmentation refers to the process of dividing a total potential market into smaller more manageable units in order to effectively serve different characteristics and demands exhibited by people or organizations in that market (Kotler, 2006). From the results majority of the respondents, 19.4% felt that the practice was very effective, 58.3% felt that market segmentation was moderately effective while 16.7% felt that the practice was just effective in creating competitive intelligence for greater profitability of the firm in a highly competitive industry.

# 12.2.Product Intelligence

All the respondents agreed that their respective companies used product intelligence which according to findings from literature review referred to gathering and analyzing intelligence about the market performance of a product either being designed or manufactured, for purposes of feeding the product managers and engineers involved in both designing and steering the product into the market in order to assist them in the development of the next iteration or version of that product (Montgomery, 1985).

The findings from the study concurred with the literature as most respondents indicated that, the main forms of competitive intelligence in the companies were customizing products to fit customer/ consumer needs with a mean score of 4.79, product advertising through media with a mean score of 4.74, introducing products based on customer needs with a mean score of 4.68, carrying out customer satisfaction surveys with 4.60, and finally through involving customers in product development through focused group discussions and also reviewing and re-launching products to make them more competitive with a mean score of 4.39 in each case.

Generally all the respondents indicated that the product intelligence techniques were effective in creating competitive intelligence for greater profitability within their companies, indeed, 61.1% of the respondents felt that the techniques were very effective, 31.9% felt that the techniques were moderately effective while 6.9% felt that the techniques were just effective in creating competitive intelligence for greater profitability of their firms.

#### 12.3. Technology Intelligence

According to Paturel & Levet (1996), the strategic dimension of competitive intelligence lies in research, reception, exploration, and decision-action, aspects which can only be achieved through use of technology; this was confirmed by the findings which indicated that all the four companies studied employed technology intelligence in creating competitive intelligence with the aim of designing an informed competitive strategy.

From the findings, technology intelligence techniques mentioned included: technological innovation, investing in technology driven products, interconnection/integration with telecoms and customer care centres, excellent IT systems, product integration with new technology, making use of videoconferencing and high class communication systems between departments and other units within the firm. Technological innovation was rated highest with a mean score of 4.64 while making use of videoconferencing was rated the less likely practice of creating competitive intelligence for greater market positioning and performance with a mean score of 3.64.

The respondents indicated that technology intelligence techniques being employed were effective in creating competitive advantage and majority of the respondents, 63.9% felt that the techniques were very effective, 22.2% felt that the practices were moderately effective while 13.9% felt that the practices were just effective. This can be deduced to mean that all the respondents agreed that the technology practices constitute a major part of competitive intelligence and contribute immensely in creating a competitive advantage over the peers in the industry. Indeed according to Hannula & Prittimaki (2003), companies that are able to establish a working balance between customer driven innovations and technology intelligence have a higher probability of succeeding in their respective industries.

# 12.4.Strategic Alliance Intelligence

Most of the respondents were aware of strategic alliance intelligence practices in their companies. Some defined strategic alliance intelligence techniques through giving examples, a clear indication that they were aware of what the concept entails and application in their respective companies.

Majority of respondents, 80.6%, indicated strategic alliances with other organizations as the main form of strategic alliance intelligence being practiced by their companies, others mentioned mergers, acquisitions and joint ventures with percentages of 6.9%, 9.7%, 2.8% respectively. For example, Safaricom Kenya partnered with Vodafone to create the Mpesa product and went further to also partner with banks and other financial institutions to project use of the service across the country. Safaricom also partnered with iHub on IPv6 testing, Jamii Telcom, Kenya Data Networks (KDN) and other internet service providers (ISP) for use of fiber networks in the country.

Other companies in the industry have partnered with Banks, schools, insurance companies, corporates like Kenya Airways, Red Cross and many others to project their

services to wider networks. The findings concur with a study by Drucker (1996), which found out that most companies are increasingly adopting strategic alliance intelligence practices, forcing a change in the corporate culture and accelerating growth of relationships based not on ownership, but on partnership. This has enabled corporations or business units to pool, exchange or integrate specific business resources to strategically achieve significant objectives that are mutually beneficial (Drucker, 1996). The study established that, companies benefit from strategic alliance techniques; this was ascertained by 34.7% of the respondents who felt that strategic alliance intelligence practices enabled their respective companies' access a broad range of expertise and skills, 33.3% felt that their companies benefit through reduction of market uncertainty, 16.7% indicated low cost of investment while 15.3% indicated that the companies

The study findings concurred with the findings of the literature review that strategic alliances are formed as a mechanism for reducing uncertainty for parties of the alliance and also as a means of gaining access to broad range of expertise and skills which would not be otherwise possible (Patton & McKenna, 2005).

#### 12.5. Challenges Hindering Adoption of Competitive Intelligence Practices

benefit through reduction of internal organization uncertainties.

From the findings, 48.6% of the respondents felt that changing customer needs was the main challenge in adoption of competitive intelligence practices, 30.6% felt that unequal business environment for the players brought about by favourism of some players by the government was hindering adoption of competitive intelligence practices. Other challenges mentioned included: high cost of technology, 13.9%, challenges in coping with different corporate cultures during mergers and joint ventures, 5.6%, and lack of adequately trained personnel.

# 13. Regression Analysis

Model	R	R Square	Adjusted R	Std. Error of
			Square	the Estimate
Product Intelligence	0.90	0.08	-0.06	0.7121
Market Intelligence	.297	.088	.075	0.6451
Technology Intelligence	.366	.134	.121	0.7211
Strategic Alliance Intelligence	.203	.041	.027	0.5321

Table 4.1: Regression Analysis

Regression analysis was conducted to establish the relationship between the independent (product intelligence, market intelligence, technology intelligence and strategic alliance intelligence) and the dependent variable (profitability of the mobile telecommunication companies). Among the four variables studied technology intelligence and market intelligence had the highest influence on profitability of the firms with 36.6% and 29.7%, strategic alliance intelligence had a 20.3% influence while product intelligence had the least with 9% influence. This can be deduced to imply that almost all the firms in mobile telecommunication industry in Kenya offer similar products and any introduction of a product in one company leads to introduction of similar products in the rest of the companies.

This fact concurs with the CCK (2012) report which indicated that the four firms employ almost similar business practices and offer similar products. An example is the introduction of MPESA product by Safaricom Ltd Kenya which led to introduction of three other similar products by Airtel Kenya (Airtel Money), Telkom Orange (Orange Money) and Essar (YU Cash).

#### 14. Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.8423 <sup>a</sup>	.7095	.6779	0.7385

Table 4.2: Coefficient of Determination.

Coefficient of determination shows the percentage of variation in the dependent variable explained by all the four variables. The table above shows the extent to which the independent variables explain profitability in these companies; the findings established that the four variables studied only explained 70.95% of the companies' profitability as shown by the value of R Square. It can therefore be deduced that other factors not covered in this study contributes 29.05% of the companies' profitability. Since CI is mostly aimed at designing competitive advantage to increase chances of survival and guarantee high profits, it can further be deduced that the mobile telecommunication industry in Kenya is fairly competitive, a fact that can be explained by overregulation of the industry by the government through CCK (Ellis, et. al, 2010).

# 15. Multiple Regression Analysis

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Variables		В	Std. Error	Beta		
	(Constant)	1.224	0.261		3.456	.000
	Market Intelligence	.825	0.194	.341	3.137	.003
	Product Intelligence	.301	0.157	.009	.072	.942
	Technology Intelligence	.906	0.391	.440	4.218	.001
	Strategic Alliance intelligence	.704	0.202	.178	1.371	.175

Table 4.3: Multiple Regression Analysis

The multiple regression analysis was done to determine the relationship between the four competitive intelligence practices and the companies' profitability. This included an error term, whereby the dependent variable (profitability) was expressed as a combination of independent variables. The unknown parameters in the model were estimated, using observed values of the dependent and independent variables (Stoodley, Lewis & Stainton, 1980).

The following model represented the regression equation of the profitability of mobile companies in Kenya as a linear function of the independent variables (market intelligence, product intelligence, technology intelligence and strategic alliance intelligence), with  $\epsilon$  representing the error term.

$$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \epsilon$$

Incorporating Beta values from the table above, the equation becomes,

$$Y = 1.224 + 0.825X1 + 0.301X2 + 0.906X3 + 0.704X4$$

Where Y = mobile company's profitability, X1 = market intelligence, X2 = product intelligence, X3 = technology intelligence and X4 = strategic alliance intelligence.

As shown in the table above, holding all the four factors constant, the profitability of the companies' as a result of competitive intelligence will be 1.224. The findings in the data can also be interpreted to mean that at *ceteris Paribas*, a unit increase in market intelligence practice will lead to 0.825 increase in profitability. Since Market Intelligence (MI) is industry-targeted intelligence that is developed on real-time (dynamic) aspects of competitive events taking place among the 4Ps of the marketing mix (pricing, place, promotion, and product) (Fleisher, 2003), the result can be interpreted to mean that the profits are only for a short run and the companies apply the practices to improve their market positions but more long term profits are achieved through other variables under study.

A unit increase in product intelligence leads to 0.301 increase in profitability; a unit increase in technology intelligence leads to 0.906 increase in profitability and finally a unit increase in strategic intelligence leads to 0.704 increase in profitability of the four mobile companies under study. This can further be inferred to mean that technology intelligence contributed more to profitability than any other variable studied.

At 5% level of significance and 95% level of confidences, technology intelligence had 0.001 level of significance, market intelligence had 0.003 significance level, strategic alliance intelligence had 0.175 while product intelligence showed 0.942 level of significance. From the findings it can be concluded that technology intelligence is the

most significant factor in determining the level of profitability of mobile telecommunication companies in Kenya, followed by new market intelligence, strategic alliance intelligence and finally product intelligence.

The t critical at 5% level of significance and at k = 3 degrees of freedom is 2.353; this implies that since the t calculated values of technology intelligence and market intelligence were above 2.353 then the two variables were most significant while strategic alliance intelligence and product intelligence were least significant (in that order) in explaining the profitability of the mobile telecommunication companies in Kenya.

# 16.Conclusion

From the analysis and discussion, the study concludes that technology, product, market and strategic alliance competitive intelligence practices affect the profitability of mobile telecommunication companies in Kenya. On market intelligence, the study concludes that concentration on product, pricing, place and market segmentation contributes to profitability of all the four mobile companies in Kenya.

On product intelligence, the study concludes that customizing products to fit customer needs, product advertisements through media (Radio, Newspapers and TVs), introducing new products based on customer needs (market pull), customer satisfaction survey, product development through focused group discussions (FGDs), customer satisfaction survey, re-launching and reviewing of existing products enable mobile companies in Kenya compete effectively and contribute to general profitability of the firms. The study concludes that technology intelligence practices such as technological innovation, technology driven products, excellent IT systems in all products, product integration with new technology and use of recent IT systems contribute the most to profitability of mobile companies in the Kenyan telecommunication industry than all other variables studied.

On strategic alliance intelligences, the study concludes that strategic intelligence practices adopted by mobile companies include: mergers, joint ventures and alliances with other business entities either within or in other industries like schools, banks, Internet service providers (ISP), and even other mobile firms in the other countries to offer roaming services to travelers and to also enable them penetrate the other markets. Some of the companies have also partnered with real estate companies to offer mortgage services, medical institutions to offer medical policies to their clients and so on.

The practices have enabled the firms to project their services beyond their networks, reduced business uncertainties and also enabled them access a broad range of expertise which would not have been otherwise possible ultimately impacting their profitability in the industry. According to the regression analysis, adoption of technology intelligence practices in the mobile firms in the country contributes most to the profitability of the companies followed by market, strategic alliance and product intelligences. The basis for CI revolves around decisions made by managers about the positioning of a business to maximize the value of the capabilities that distinguish it from its competitors. Failure to collect, analyze and act upon competitive information in an organized manner can lead to deterioration of the firm's profitability and ultimately the failure of the firm.

#### 17. Recommendations

Based on the findings, the study highly recommends adoption of competitive intelligence practices in the mobile telecommunication industry to improve profitability. In applying competitive intelligence for greater profitability, companies in the mobile telecommunication sector need to consider the four main competitive intelligence practices which include: Market Intelligence (MI), Product Intelligence, Technology Intelligence and Strategic Alliance Intelligence. Generally, the intelligences ensure that internal strengths of the companies are utilized for the betterment of the firm leading to greater profitability.

Among the four variables studied technology intelligence practices were highly obvious and every respondent selected was conversant with the practices and their application in their respective companies. From the findings, it was clear that technology intelligence practices had enabled the firms introduce automation services, helped project introduction of new products agenda, helped reduce costs and improved efficiency of service delivery translating to greater profits for the mobile firms. Based on this, the study recommends that companies need to prioritize technology intelligence practices among other intelligences to increase their competitiveness in terms of product innovation, customer satisfaction and market orientation.

The study recommends that mobile telecommunication companies need to keenly establish strategic alliance intelligences through partnerships, mergers and acquisitions to enable them penetrate foreign markets thus benefit from economies of scale, gain access to a broad range of expertise, reduce on initial investment capital and also reduce both external environment uncertainty and internal organizational uncertainties.

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