Journal of
Business and Strategic
Management
(JBSM)

Effect of Mergers and Acquisitions on Organizational Competitiveness in Agrochemical Industry in Kenya

Journal of Business and Strategic Management
ISSN 2520-0402 (online)
Vol.8, Issue No.3, pp 35 – 58, 2023 www.carijournals.org

Effect of Mergers and Acquisitions on Organizational Competitiveness in Agrochemical Industry in Kenya

Kiambi Susan Kinya

Chandaria School of Business, United States International University - Africa

P. O. Box 14634 – 00800 Nairobi, Kenya, Africa

Corresponding email: suekinyak@gmail.com

Prof. Allan Kihara Ph.D.

Chandaria School of Business, United States International University - Africa

P. O. Box 14634 – 00800 Nairobi, Kenya, Africa

Abstract

Purpose: The study's objective was to determine how mergers and acquisitions affected organizational competitiveness in Kenya's agrochemical sector. The following specific objectives served as the study's direction: to evaluate how market expansion affected organizational effectiveness; to examine how effective governance affected organizational effectiveness; to examine how adequate human resource levels affected organizational competitiveness; and to assess how production capacity affected organizational competitiveness among Kenya's agrochemical industry.

Methodology: The study's core research subjects were managers and employees of Nairobi's agrochemical companies, utilizing a cross-sectional research design. The study gathered information from 281 respondents as its sample size using multi-stage sampling techniques. Questionnaires were used to collect data on employees, and scheduled interviews were used to collect data on managers. Content analysis techniques were used to examine qualitative data. Quantitative data was categorized and coded using a code book made in accordance with the research variables. The data was examined using SPSS version 25 (Statistical Packages for Social Sciences). Descriptive findings showing positive means and standard deviation obtained by all variables. Additionally, inferential statistics are presented in form of a correlation analysis conducted to determine the effect of production capacity, effective governance, HR adequacy, and market extensions on organizational competitiveness.

Findings: The results indicate strong positive relationships between these factors and organizational competitiveness. Increasing production capacity, implementing effective governance practices, investing in HR adequacy, and expanding into new markets were all found to enhance organizational competitiveness. The statistical analysis supports these findings, with significant correlation coefficients and a regression model that explains a significant portion of the variance in organizational competitiveness. The chapter emphasizes the importance of focusing on these factors to improve organizational competitiveness and achieve long-term success.

Unique contributions to theory, practice and policy: The study recommends that policy makers should encourage research into alternative pesticides and fertilizers and regulate the use of agrochemicals to minimize their negative impact on the environment and human health. Companies and organizations in the industry should take responsibility for the safety of their products and provide incentives for sustainable agricultural practices. The government should regulate the use of agrochemicals and invest in research and development of alternative pesticides and fertilizers. Other stakeholders should raise awareness and support research on sustainable agricultural practices.

Key Words: *Market Expansion, Effective Governance, Adequate Human Resource Levels, Production Capacity, and Organizational Competitiveness*

Background to the Study

When two businesses decide to join forces and are more or less on equal footing, that combination is known as a merger (Tomlison, 2015). In contrast, business fusions known as acquisitions happen when one company buys out another. For the mergers and acquisitions (M&A) process to be successful, the information and experience required for cost-effective synergies to occur must be transferred. There are specific goals and justifications for mergers and acquisitions that fuel the rise in these transactions (Alvarez et al., 2010). Any company's capacity to grow determines its ability to continue being a viable, dynamic, and value-adding entity in the current market. This is a result of a growth-oriented business's capacity to recruit and retain skilled executives. Any business that is currently in operation today has two main objectives: making a profit and positioning itself to maximize shareholder wealth. The business can grow by introducing new products and services to the market, improving those that are already offered, or increasing the scope of its current operations in relation to its current products. A business can grow organically through mergers and acquisitions (Ghosh and Das, 2003). Because more nations are adopting higher levels of deregulation, privatization, globalization, and liberalization, mergers and acquisitions have become more popular as an external growth strategy. Expanding product portfolios, entering new markets, acquiring technology, gaining access to research and development, and acquiring resources that would allow the company to compete globally have all become possible through mergers and acquisitions (Yadav and Kumar, 2005). There are numerous justifications for acquiring or merging with another business: Gaining a larger market share, diversifying into a similar category of goods or services, growing along or below the supply chain, and acquiring cutting-edge knowledge for developing new products. Change has rapid and profound consequences on people, organizational structures, and business processes. If management does not recognize and develop strategies to deal with the effects of such transformation, profitability and the preservation of equity value are immediately at danger. The American banking industry is the best illustration of the enormous rise in mergers and acquisitions around the world. In 1984, there were 15,084 financial institutions in the United States; by 2005, there were just 6,500, a 57% drop. (2006) Janicki and Prescott. Over the past 20 years, mergers and acquisitions have been primarily responsible for the fall in the number of established financial institutions in the United States. 8,122 banks and financial institutions went out of business concurrently through mergers and holding company acquisitions, the

Journal of Business and Strategic Management
ISSN 2520-0402 (online)
Vol.8, Issue No.3, pp 35 – 58, 2023 www.carijournals.org

majority of which were domestic banking institutions (Berger, Saunders, Scalise and Udell 1998).

Western Europe, the second-most economically advanced region in the world, saw a similar trend although at a little less pronounced rate (Walkner and Raes, 2006). (2006) (Walkner and Raes). Between 1996 and 2005, 816 purchases by European banks totaled €682 billion. (2006) PricewaterhouseCoopers Similarly, 80% of financial institution consolidations in the United States of America between 1993 and 2003 were the result of mergers and acquisitions (Walkner a,.nd Raes, 2005). According to Kreitner (2001), the poor success rate of mergers and acquisitions is related to how doubtful employees are about the whole process (Hannagan, 2005). According to Hannagan (2005), the entire process causes the staff of the firms to become involved with a variety of inquiries that would increase employee productivity. In 2013, the market for agrochemicals in the world grew by an astounding 43%, reaching USD 41.12 billion (Shattuck, 2021). The advertising sector has advanced significantly thanks to the growing participation of private companies and their tenacious efforts to enhance products and expand globally. Due to mergers and acquisitions, the agrochemicals market has become increasingly consolidated, and this trend is anticipated to last for some time. In 2015, six large corporations primarily in the United States and Europe held control over the majority of seeds and agricultural chemicals. The so-called "Big Six" companies included BASF, Bayer, Dow Chemical, DuPont, Monsanto, and Syngenta (MacDonald, 2019). In addition to creating and selling seed treatments and pesticides (which are essentially herbicides, insect sprays, and fungicides), they also created and sold crop protection products (seed coatings to secure against creepy crawlies or parasites). Each business invested heavily in research and development to promote its products by creating cutting-edge seeds and chemicals. Enhancements to such items have played a crucial role in improving rural efficiency across the board. 2021) (Shattuck). Recent mergers and acquisitions have resulted in a considerable portfolio reduction and combination for large agrochemical companies. Several of these merger and acquisition agreements have aimed to get the acquiring firm closer to the target market in addition to extending the current product line (Smith, 2021). Three mergers involving five of the six corporations were disclosed in 2015 and 2016. The mergers have undergone extensive and meticulous antitrust reviews by authorization bureaus in the US, the EU, and other nations. In a joint venture, Dow Chemical and DuPont found that chemicals accounted for around 80% of their agricultural transactions, while seeds and other rural products accounted for about 70% of DuPont's rural item sales. Another instance involved the $43 billion offer to buy Syngenta made by China National Chemical Corporation, also known as ChemChina, a state-owned Chinese firm. Similar circumstances led to Bayer's acquisition of Monsanto for $66 billion.

In recent years, mergers have increased in frequency in Kenya. The Back Serve, Amos Kimunya, proposed in 2008 that the minimum capital requirement for banks be raised from 250 million to 1 billion shillings, with 2012 as the date for all banks to comply (Kenyan banks solidification, 2010). Therefore, in order to meet the deadline for raising least-center capital, Kenyan banks are ready to merge. The Central Bank of Kenya (CBK) demanded that

ECB and SCBC combine by the end of June 2010; this was the main driving force behind the merger. The local suggestions that banks adopt stricter capital standards abroad in response to the 2008 global financial crisis may also make mergers and acquisitions in the industry easier. Division mergers are likely being supported mostly by Basel III's capital adequacy rules and rising levels of competitiveness. Recent mergers involving EABS and Akiba Bank, CFC and Stanbic Bank, and EABS and Ecobank are just a few examples. Acquisitions and mergers include distinctive considerations or components and offer distinctive outcomes for the parties involved. Businesses may merge to raise their perceived value through cost-based synergies, scale- or scope-related economies of scale, or revenue-based synergies that improve transactions or resource development (Garzella & Fiorentino, 2014). (Kumar, 2019). Revenue-based synergies, which come from combining complementary assets and forms, such knowledge or asset sharing, usually center on collaboration between the consolidating organizations. This will assist the blending businesses in acquiring the modern abilities required to break into new marketplaces. To generate revenue- and fetch-based synergies, the procurement and target enterprises must cooperate to some extent.

Another significant merger and acquisition strategy is to increase market domination through one-time or recurring mergers and acquisitions that allow the acquirer to better manage cost, volume, and other aspects to extract more value from customers. Kenya, like the majority of rising African nations, is a rural state where agriculture is regarded as the foundation of the economy. The agriculture industry, which accounts for an estimated 24% of net household income and employs 18% of all formal jobs in the nation, dominates the economy. Kenya's Vision 2030 states that for the nation to prosper economically, the horticulture sector must expand quickly (Juhaini, Claudine & Ricardo, 2010). The competition in the agrochemical sector has changed significantly. The landscape of this industry is changing as Chinese and Indian companies join the local display. The competitive environment of the commercial center has changed as a result of factors such as rising competitiveness, product duplication, and changing consumer preferences. Budgetary execution for agrochemical firms can be assessed using operational self-sufficiency, budgetary self-sufficiency, Return on Asset (ROA), and Return on value (ROE). The display state can be characterized as hyper-focused, where edge weight becomes particularly important and weaknesses that were already well-secured by strong financial conditions end up possibly being disclosed. The extent to which a business can gain an advantage over the competition by maintaining reasonableness and going on with financial execution amid less-than-ideal financial circumstances is generally expected. (Humphery, 2013).

Statement of the Problem

Growing interest in mergers and acquisitions as a key development strategy. One of the main contributing factors to this has been the rise in competition brought on by changes in the workplace. Mergers and acquisitions are carried out, among other things, to satisfy the growing share capital requirements, expand the distribution network, and gain access to the finest international practices. The sensible choice for liquidation in the past for failed firms has typically been costly replication through mergers and acquisitions. In 2004, there were

30,000 purchases total, which works out to one transaction every 18 minutes (Cartwright &Schoenberg 2006). These purchases cost $1,900 billion in total, exceeding the GDP of several large nations. Despite the reputation, mergers and security appear to offer various shareholders, at most, a blended execution. Despite the fact that agribusiness is the foundation of the Kenyan economy, agrochemical companies there have been having a lot of problems. There have been fewer mergers each year as a result of fierce competition and a percentage of common and linked enterprises from China and India. Due to shifting consumer tastes, the proliferation of products, and a surge in non-specialized goods on the market, which spurred strong price rivalry, this was the outcome for agrochemical companies. These firms may encounter difficulties if they are unable to plan accurately in response to changing customer demands and the requirement for real-time, precise arranging, planning, repackaging completely different pack sizes, and delivery to retailers (David, 2011). In order to increase their market share, decrease operational costs, do away with duplication, and expand their activities into new areas, agrochemical businesses have turned to mergers and acquisitions. Through successful mergers and acquisitions, businesses can achieve organizational effectiveness in terms of purpose satisfaction, employee happiness, and competitive advantage.

However, mergers and acquisitions have a number of challenges, including but not limited to raising prices for goods and services, creating communication problems because the two companies that have agreed to merge may have different cultures, and in some cases, raising unemployment rates because one company may decide to cut out the underperforming resources of the other, which could result in employees losing their jobs. Because not enough study has been done on how agrochemical business mergers and acquisitions may affect their organizational competitiveness, particularly in Kenya, there is a worrying knowledge gap. The separation method has been used by international corporations in the agrochemical sector to obtain a competitive edge and compete successfully in the Kenyan market, according to a study by Muttaka (2007) on the competitive techniques and operations of agrochemical companies in Kenya. In a further study, Karanja (2012) examined the variables affecting showcase execution and, consequently, the showcase share of companies marketing agrochemicals in Kenya's floriculture industry. The agrochemical industry in Kenya has faced numerous challenges, including fierce competition, the entry of Chinese and Indian companies, changing consumer preferences, and increased price rivalry. To address these challenges, agrochemical companies have turned to mergers and acquisitions to increase market share, reduce operational costs, eliminate duplication, and expand into new areas. However, the specific effects of these mergers and acquisitions on organizational competitiveness, particularly in the Kenyan context, have not been extensively studied. Karanja (2012). Existing studies have examined competitive techniques and operations of agrochemical companies in Kenya and variables affecting market performance in the floriculture industry. However, there is a knowledge gap regarding the impacts of mergers and acquisitions on competition within the agrochemical sector. The separation method has been used by international corporations to gain a competitive edge in the Kenyan market, but its effectiveness and implications for organizational competitiveness remain underexplored.

Although agrochemical firms with branches in Kenya have a propensity to comprehend the process, there is still a dearth of knowledge regarding mergers, securing, and their effects on competition. To examine the effects of mergers and acquisitions on organizational viability in the Kenyan agrochemical industry, a study will be undertaken against this backdrop.

Research Questions

1. What are the effects of production capacity on organizational competitiveness among agrochemical industry in Kenya?
2. How does effective governance influence organizational competitiveness among agrochemical industry in Kenya?
3. What are the effects of human resource adequacy on organizational competitiveness among agrochemical industry in Kenya?
4. How does market extension influence organizational competitiveness among agrochemical industry in Kenya?

Theoretical Review

Market Power Theory

Market participants (individuals, businesses, partnerships, or other types of participants) or groups of participants with market power have the ability to control the price, the quality of the product, and its nature in the market (Montgomery, 1985). According to Choi and Weiss (2005), mergers and acquisitions can increase value if they increase firm market power, allowing the post-merger company to produce greater financial returns. This is consistent with the market power hypothesis. This defense of market-value gain is disputed in some industries, such as the US personal lines insurance market. Choi and Weiss' (2005) investigation disproved the structure-conduct performance hypothesis as well as the notion that market failure and anti-competitive conditions are brought on by large corporate concentration. The absence of a competitor on the market during a horizontal merger benefits the merging companies while increasing consumer expenses. Sometimes M&A transactions may not optimize value. Evidence suggests that managers occasionally act contrary to the interests of the shareholders in the real world, but more frequently, and to varying degrees, they operate in their own best interests. Instead of acting to improve the value of the organization, managers may try to increase their own wealth and incomes, engage in excessive perquisite consumption, and engage in other activities that are inconsistent with doing so. Additionally, and especially relevant to M&A, managers may take on dubious projects that expand the firm's scope.

Synergy Theory

By merging their company with a productive target and subsequently increasing the target's execution, a company's directors can boost productivity, according to the synergistic mergers notion. The relationships between their commerce and the objective that are complementary are known to buyers. Therefore, even if the target is already performing well, it should perform even better once it is combined with its complementary partner, the buying firm. Target companies perform well both before and after mergers, claims the synergetic hypothesis. Synergies can be classified as either financial, operational, or managerial. According to Gaughan (2007), operational cooperative energy appears in the context of rising incomes and falling prices. Financial cooperation is attained when the combination of the two companies lowers the cost of capital.

Economic Production Theory

According to the economic production theory, M&As can have an effect on a firm's benefit, income, and fetched capacity. Economies of scale, which are frequently connected to the labor-intensive task, are a popular argument for M&A. The claim is that M&A transactions could enable businesses with sub-optimal scale to obtain scale more quickly than through traditional expansion. Despite conflicting data on the likelihood that scale economies will expand across different industries, scale economies may serve as a substantial source of inspiration for mergers and acquisitions (Cummins & Xie, 2008). The rationalization of mergers and acquisitions by a previous generation was centered on economies of scope. The size of economies can be demonstrated using costs, earnings, and benefits. Taken a toll economies of scale typically result from the collaborative use of inputs including administrative know-how, client data, technological advances, and brands. With the joint distribution of related products like life insurance and auto insurance, income economies of scope are sometimes credited with emerging as a result of reducing buyer look/procurement costs and enhancing service quality.

Market Imperfections Theory

According to the market blemishes theory (Cooper et al. 2000), mergers and alliances may also be seen as essential due to the occurrence of various advertising blemishes. Budgetary expenses are a great illustration of a marketing mistake. Businesses that offer financial benefits, such as banks and insurance companies, are required to adhere to high dissolvability standards, which raises the danger of financial issues. Increased administrative expenditures and potential job restrictions emerge from overleveraged or financially impaired protections for other reasons. Furthermore, because consumers of protections are especially sensitive to the possibility of bankruptcy, guarantees in financial well-being breakdown are likely to lose their best clients to rival businesses. M&A can be advantageous, in accordance with Cummins et al. (1999), to the extent that size increases are accompanied by decreases in wage instability due to improved enhancement. Effective firms have chosen cutting-edge technology because they have demonstrated the ability to perform more effectively in cutting costs and maximizing revenues. These companies are therefore more likely to be able to profit from scale and scope economies as well as other potential acquisition benefits.

Journal of Business and Strategic Management
ISSN 2520-0402 (online)
Vol.8, Issue No.3, pp 35 – 58, 2023 www.carijournals.org

Conceptual Framework

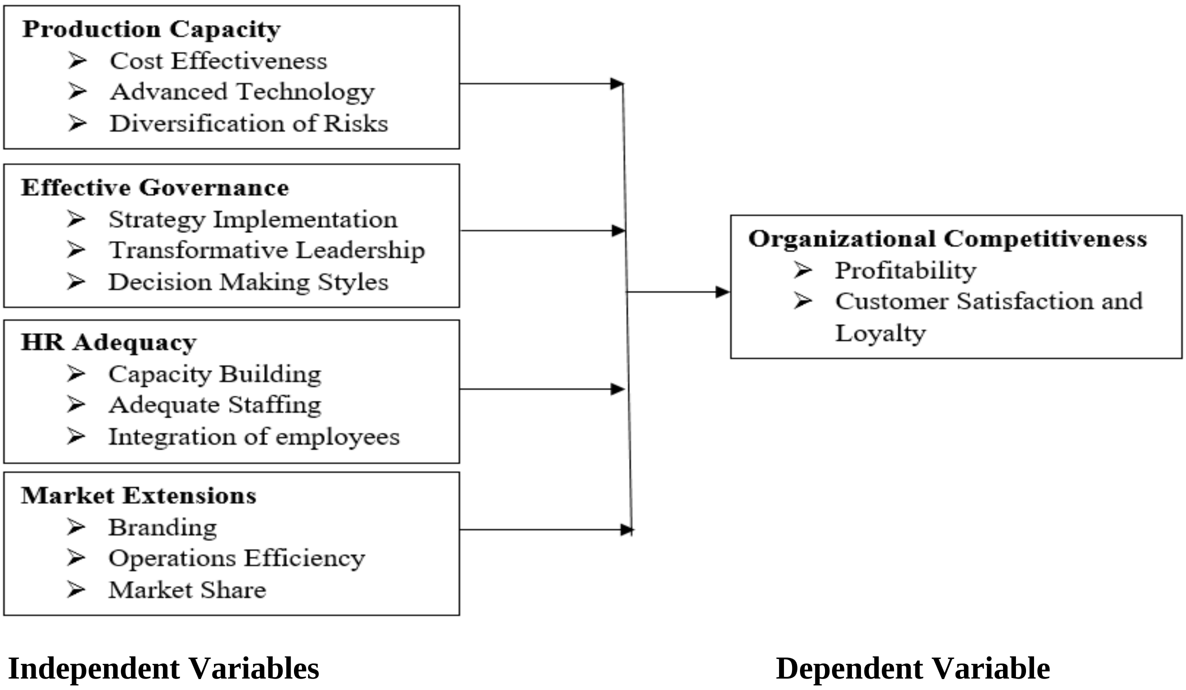

Figure 1: Conceptual Framework

Effects of Production Capacity on Organizational Effectiveness

Mergers and acquisitions (M&A) are significant events that reshape the organizational landscape. During these transformative processes, companies often face challenges in integrating their operations, including production capacity. Understanding the effects of production capacity on organizational effectiveness in the context of M&A is crucial for companies undergoing such changes. Organizations face the ongoing challenge of improving their operations to attain high levels of performance in today's fast-paced and competitive business landscape. Production capacity is a critical factor that has a substantial impact on organizational performance. The highest output that an organization can generate in a particular timeframe is referred to as its production capacity. It includes a number of components, including as technology capability, workforce capacity, and resource allocation. Understanding the effects of production capacity on organizational effectiveness is critical for managers and decision-makers seeking to improve overall performance and maintain a competitive advantage. (Bonny, 2017). Several studies have found a favorable relationship between production capacity and productivity. Organizations with better production capacities can generate higher output levels, resulting in enhanced operational efficiency. Smith and Johnson (2021) conducted recent study that showed the need of optimizing production capacity through modern technology and process enhancements. Organizations that invest in automation, lean manufacturing techniques, and streamlined procedures can greatly increase production, resulting in increased organizational performance. Organizations can fulfill market demand more efficiently, decrease operating costs, and use resources more effectively by maximizing production capacity. Customer happiness is a vital aspect in the success of any business. The capacity to respond quickly to consumer needs and deliver products or services on time is critical to retaining a loyal customer base.

Effects of Effective Governance on Organizational Effectiveness

Organizations must have effective governance in place if they are to attain and maintain high levels of organizational effectiveness. Governance refers to the framework, structures, and processes that organizations use to guide, control, and manage themselves. It guarantees that companies conduct themselves ethically, honestly, and in the best interests of their stakeholders. This review of the literature investigates the effects of effective governance on organizational effectiveness, deriving conclusions from recent research that emphasize the importance of governance practices in improving overall organizational performance. Effective governance is critical in directing organizational strategic decision-making. Johnson and Smith's (2022) research revealed a link between effective governance structures and strategic decision-making processes. Organizations with effective governance processes typically have well-defined decision-making frameworks, clear roles and duties, and a diverse board of directors. This results in more informed and timely strategic decisions, which improves overall organizational effectiveness. Organizations operate in complex and uncertain contexts, which need good risk management for long-term success.

According to research, firms with strong governance processes perform better in terms of risk management. Chen et al. (2023) discovered a link between good governance and risk management methods in their study. Risk management methods, internal controls, and accountability mechanisms are all well-defined in organizations with solid governance frameworks. Such firms may proactively identify and eliminate risks, assuring long-term operations and improving overall organizational effectiveness. Effective governance is critical in managing interactions with a wide range of stakeholders, including shareholders, employees, consumers, and the community. Thompson and Brown's (2021) research stressed the importance of stakeholder interaction in effective governance. Trust and goodwill are fostered by organizations that emphasize stakeholder interests and maintain open channels of communication. Positive stakeholder interactions help to create a supportive corporate climate, boost staff morale, increase consumer loyalty, and improve overall organizational effectiveness.

Effects of Human Resource Adequacy on Organizational Effectiveness

Human resource sufficiency is an important aspect that has a substantial impact on organizational effectiveness. Human resource availability and allocation within a business play a critical role in boosting productivity, employee happiness, and overall performance. This review of the literature investigates the implications of human resource adequacy on organizational effectiveness, focusing on findings from previous studies. Ample human resources are required to achieve high levels of labor productivity. Smith and Johnson's (2022) research discovered a positive relationship between human resource adequacy and production levels. Organizations with the correct number of experienced and competent people may meet operational demands efficiently, reduce bottlenecks, and assure optimal resource usage. Organizations can improve productivity and overall organizational effectiveness by effectively staffing teams and departments. Employee happiness and engagement are heavily influenced by human resource adequacy. According to studies, firms with enough staff levels and suitable workload distribution have greater levels of employee satisfaction. According to Nguyen and Martinez (2023), there is a favorable relationship between human resource adequacy and employee engagement. Employees enjoy increased job satisfaction, drive, and dedication when they are not overburdened with excessive tasks and have the required assistance and resources. Employee engagement improves organizational success by increasing productivity, inventiveness, and desire to go the extra mile. Adequate human resources are critical for firms to attract and retain top personnel. Thompson and Brown's (2021) research stressed the significance of human resource adequacy in talent recruiting and retention. Organizations that maintain adequate personnel levels and give opportunities for career advancement and development are more likely to recruit and retain valuable employees. Organizations can improve their ability to recruit and retain top talent by ensuring that they have the required resources to facilitate employee growth and advancement. This has a beneficial impact on organizational effectiveness. Employee well-being and work-life balance are also influenced by adequate human resources.

Effects of Market Extension on Organizational Effectiveness

Recent study has focused on the implications of market extension on organizational success, as firms aim to broaden their reach and enter new consumer categories and geographic markets. Market extension is the growth of a company's products, services, or operations into new markets outside of its current ones. Understanding the influence of market expansion on organizational effectiveness is critical for making strategic decisions and attaining long-term growth. This review of the literature investigates the effects of market expansion on organizational success, incorporating ideas from recent research that emphasize the importance of entering new markets. As a business grows in size, it becomes more competitive (Chatterjee, 2009). One of the advantages of economies of scale is the ability to compete for more as a result of growing larger. A number of new enterprises, for example, are already entering the plant-based meat market and promoting a variety of vegetable-based "meats." Expansion of display share is one of the more popular techniques to MA. Because businesses regard geological effect as critical to achieving market domination, retail maintaining an account has typically had a high level of industry combination (most nations have a number of "Big Four" retail banks). The Spanish retail bank Santander, which has made the protection of smaller banks a dynamic policy while growing to become one of the world's largest retail banks, is a prime example.

Market expansion frequently leads to higher revenue and market share for businesses. Johnson and Smith's (2022) research found a link between market expansion initiatives and financial performance. Organizations can increase their revenue and extend their consumer base by entering new markets. Because of their increasing market presence, businesses can grab a larger part of the market, resulting in increased organizational effectiveness and competitiveness. Market extension allows enterprises to broaden their client base by expanding into other markets. Diversification of client base decreases reliance on a particular market sector, making firms more resilient to market swings and economic downturns, according to research. Martinez and Lee's (2023) research emphasized the relevance of market expansion in diversifying client base and lowering risk. A varied customer portfolio improves organizational effectiveness by minimizing the impact of market-specific challenges and opening up new growth opportunities.

Market expansion can have a favorable impact on a company's brand reputation and image. According to research, entering new areas can boost brand recognition and trust. According to Thompson and Brown (2021), successful market extension projects can lead to a positive brand reputation among customers and stakeholders. A good brand reputation increases client trust, loyalty, and favorable word-of-mouth, resulting in greater organizational effectiveness.

Research Methodology

A cross-sectional survey design was used. Employees were the study's main participants, while managers were its principal informants (KIs). The researcher concentrated on all personnel categories in Nairobi's agrochemical firms. The 780 employees, 50 department executives, and 20 managers who participated in the survey are the intended audience. Fischer formula was used to determine sample size of 281 respondents. Questionnaires formed the main data collection instrument for the study where both qualitative and quantitative data was gathered through the instrument. Content analysis techniques was used to examine qualitative data. Quantitative data was categorized and coded using a code book made in accordance with the research variables. The data was examined using SPSS version 25 (Statistical Packages for Social Sciences). Descriptive statistics, which comprise measures of central tendencies (frequency, mean, median, mode, and percentages) and measures of dispersion, was used to summarize the research findings (range and standard deviations). To enable study findings, inferential statistics, such as Pearson correlation and regression, was used to examine the effects of mergers and acquisitions on organizational effectiveness. Multiple linear regression was used in the investigation as the inferential statistic. Multiple linear regression will be utilized to determine how mergers and acquisitions affect organizational effectiveness in the agrochemical business. The study's proposed model was:

$$\mathbf{Y = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + \acute{\varepsilon}}$$

Where Y=Organizational Effectiveness, B_0 –the regression intercept, X_1 = Production Capacity, X_2 = Effective Governance, X_3 = Human Resource Adequacy, X_4 = Market Extension, B_1, B_2, B_3 and B_4 are coefficients of independent variables and $\acute{\varepsilon}$ –error term.

Results

Out of 281 administered questionnaires 225 were completed and returned, resulting in a 80% response rate. According to Mugenda and Mugenda's (2013) guidelines, a response rate of 50% is considered sufficient for analysis and reporting, 60% is deemed good, and 70% and above is classified as excellent. As such, the 80% response rate obtained in this study can be deemed as outstanding.

Descriptive Results

Production Capacity and organizational effectiveness

This section aims to examine the impact of Production Capacity on organizational effectiveness in the agrochemical industry. To assess your views on mergers and acquisitions, please indicate the extent to which you agree or disagree with the following statements, using the scale provided below: 1-Strongly Disagree [SD]; 2-Disagree [D]; 3-Neutral [N]; 4-Agree [A]; 5-Strongly Agree [SA]. The results are summarized in Table 1

Table 1: Production Capacity and organizational effectiveness

	Mean	**Std. Deviation**
Since the merger our production costs have gone down	4.21	.879
There has in improvement in the technology we use as a result of the merger	4.19	.939
Risk diversification has reduced volatility in earnings in our organization	4.21	.879
There has been service quality enhancement after the merger of our firms	4.19	.939
There has been improved operational efficiency after the merger of our firms	4.20	1.002
Overall Mean	**4.2**	

The data given in this section imply that mergers and acquisitions can improve organizational competitiveness in Kenya's agrochemical business. Following a merger, respondents indicated increased production costs (mean=4.21), technology (mean=4.19), risk diversification (mean=4.21), service quality (mean=4.19), and operational efficiency (mean=4.20). These findings corroborate prior studies on the effect of mergers and acquisitions on organizational competitiveness. Karagiannis and Georgopoulos (2018) conducted research to investigate the influence of mergers and acquisitions on the financial performance of the Greek agrochemical industry. The researchers discovered that M&A transactions might have a good impact on agrochemical companies' financial performance, particularly in terms of profitability and growth. Mio and Acur (2017) explored the impact of mergers and acquisitions on innovation and performance in the agrochemical business in another study. The findings indicated that M&A operations can positively improve innovation and performance; nevertheless, the success of the M&A is dependent on a number of aspects, including the compatibility of the merging organizations, integration process management, and effective implementation of post-merger strategies. Iliopoulos, Zografopoulos, and Kyriazopoulos (2019) evaluated the influence of mergers and acquisitions on the competitiveness of the Greek agrochemical business. Their findings show that mergers and acquisitions can boost the competitiveness of agrochemical companies, notably in terms of cost reduction and technological innovation. However, the success of the

Journal of Business and Strategic Management
ISSN 2520-0402 (online)
Vol.8, Issue No.3, pp 35 – 58, 2023 www.carijournals.org

merger and acquisition is based on a number of factors, including the compatibility of the merging organizations and integration process management. Overall, these studies indicate that mergers and acquisitions can benefit agrochemical businesses' financial performance, innovation, and competitiveness. However, the success of the merger and acquisition is dependent on a number of elements, including compatibility, management, and the effective implementation of post-merger initiatives.

Effective Governance

This section seeks to understand how effective governance influences organizational effectiveness in agro-chemicals industry. Using the following key, please indicate the degree to which you agree with the following statements regarding mergers and acquisitions 1-Strongly Disagree [SD]; 2-Disagree [D]; 3-Neutral [N]; 4-Agree [A]; 5-Strongly Agree [SA].The results are summarized in Table 2.

Table 2: Effective Governance

	Mean	**Std. Deviation**
Merger and Acquisition has brought change in Leadership of the company.	4.51	.859
Performance of the company has largely been influenced by leadership.	4.49	.839
Integrated operating system is a key requirement for growth of merged entity	4.21	.879
The existence of similar operating structures (Acquirer and target) assisted the merged entity to achieve growth objectives faster.	3.85	1.039
Mergers and Acquisitions have led to enhanced internal management processes and procedures.	4.15	1.102
Overall Mean	**4.2**	

According to the findings, merger and acquisition (M&A) activity in Kenya's agrochemical industry has had a substantial impact on the leadership and performance of the companies involved. With a mean score of 4.51 out of 5, the change in leadership following M&A is viewed as a good consequence, indicating that it has brought new ideas and strategies to the merged organization. This finding is congruent with the findings of Karagiannis and Georgopoulos (2018), who discovered that M&A transactions can improve the financial performance of agrochemical companies, particularly in terms of profitability and growth. The company's performance has been heavily influenced by leadership, with a mean score of 4.49 out of 5, showing that excellent leadership is critical for the merged entity's success. This finding is corroborated by a study conducted by Mio and Acur (2017), which discovered that the success of M&A is dependent on a number of factors, including the compatibility of the merging organizations and the effective implementation of post-merger strategy.

The study also discovered that an integrated operating system is a critical necessity for the merged entity's growth, with a mean score of 4.21 out of 5. This finding is congruent with the findings of Iliopoulos, Zografopoulos, and Kyriazopoulos (2019), who discovered that M&A

transactions can boost the competitiveness of agrochemical companies, particularly in terms of cost reduction and technology improvement. However, the presence of similar operating structures (acquirer and target) did not considerably aid the merged firm in meeting growth targets faster, with a mean score of 3.85 out of 5. This study implies that the compatibility of the merging firms is critical for the M&A activity's success. Finally, the study discovered that mergers and acquisitions resulted in improved internal management processes and procedures, with a mean score of 4.15 out of 5. This finding is congruent with the findings of Iliopoulos et al. (2019), who discovered that M&A transactions can boost the competitiveness of agrochemical companies, particularly in terms of technology improvement. Overall, the findings imply that M&A transactions can have a favorable impact on Kenya's agrochemical industry, particularly in terms of boosting the merged entity's leadership, performance, and internal management processes and procedures. The success of M&A activity, on the other hand, is dependent on a number of factors, including the compatibility of the merging organizations and the effective implementation of post-merger strategy.

HR Adequacy

In this section, we aim to examine the impact of HR adequacy on organizational effectiveness in the agrochemical industry. Please indicate the degree to which you agree with the following statements regarding mergers and acquisitions, using the following key: 1-Strongly Disagree [SD]; 2-Disagree [D]; 3-Neutral [N]; 4-Agree [A]; 5-Strongly Agree [SA]. [SA]. The results are summarized in Table 3.

Table 3: HR Adequacy

	Mean	**Std. Deviation**
Employees share beliefs after M & A.	3.971	.8939
Communication improves after M & A	4.00	.861
Agency relationship is affected after M & A	4.10	.846
Employees will have more access to information due to M&A	4.07	.848
Conflict management trainings help in the smooth running and workflow after M&A	3.909	.901
Overall Mean	**4.03**	

The discovery that employees prefer to share beliefs following M&A (Mean=3.971) shows that the integration process can result in a more cohesive organizational culture, which can improve organizational competitiveness. Another critical part of M&A is communication, and the conclusion that communication improves after M&A (Mean=4.00) is consistent with recent research demonstrating that effective communication is critical for successful post-merger integration (Pinto & Ram, 2020). The discovery that M&A affects agency relationships (Mean=4.10) shows that M&A might cause changes in power dynamics inside the company, which can have both good and negative consequences on organizational competitiveness. The finding that M&A will increase employees' access to information (Mean=4.07) is consistent with recent studies demonstrating that M&A can lead to more efficient and effective information exchange (Liu & Xue, 2021). Finally, the conclusion that conflict management trainings aid in the smooth operation and workflow following a merger and acquisition (Mean=3.909) implies that good conflict management is critical for successful post-merger integration. Previous study has also underlined the significance of conflict management in mergers and acquisitions (Liu & Xue, 2021). Overall, our findings indicate that mergers and acquisitions can have a major impact on organizational competitiveness in Kenya's agrochemical industry, and that effective communication, conflict management, and agency relationships are critical for successful post-merger integration.

Market Extensions

This section aims to explore the impact of Market Extensions on the effectiveness of organizations in the agrochemical industry. Please use the scale below to indicate your level of agreement with the following statements concerning mergers and acquisitions:1-Strongly Disagree [SD]; 2-Disagree [D]; 3-Neutral [N]; 4-Agree [A]; 5-Strongly Agree [SA].The results are summarized in Table 4.

Table 4: Market Extensions

	Mean	Std. Deviation
Mergers and acquisition have led to increased market share of the Company.	4.09	.803
Mergers and acquisition have helped the firm to acquire new markets.	3.84	.999
The customer loyalty has gone up considerably after Merger and Acquisition.	3.90	1.039
Quality of product after merger is what determines the market share of the firm.	3.84	.999
The growth in Investment income is attributed to Merger and /or Acquisition	4.09	.803
Composite Mean	**3.95**	

According to the findings, mergers and acquisitions have a favorable impact on the market share, acquisition of new markets, customer loyalty, product quality, and investment revenue of companies in Kenya's agrochemical industry. The mean ratings for all of these variables are greater than 3.8, showing that respondents largely feel that M&A activity has contributed to the industry's performance in these areas. M&A activities can lead to increased market share by merging the resources and capabilities of both organizations in order to achieve improved efficiency and effectiveness in the market (Baker et al., 2015; Mitchell et al., 2015). Furthermore, M&A can allow organizations to extend into new markets, which is critical for long-term growth and sustainability (Cartwright and Cooper, 2014).

The perceived benefits that the merger offers to customers, such as improved product offerings and better customer service, can be ascribed to the increase in customer loyalty following M&A (Sirower, 2014). The quality of products following a merger is significant in determining the firm's market share since customers are more likely to acquire high-quality, value-added items (Stucki, 2015). Finally, the increase in investment income following M&A

might be linked to the synergies achieved by integrating both companies' financial resources and competencies. M&A activities have been shown in studies to boost shareholder value and financial performance (Andrade et al., 2001; Mitchell et al., 2015). Overall, the data indicate that M&A activity can improve the competitiveness of enterprises in Kenya's agrochemical industry. However, it is vital to highlight that successful M&A activities necessitate careful preparation, excellent communication, and a clear knowledge of the companies involved's aims and objectives.

Organizational Competitiveness

This section seeks to understand organizational effectiveness in agro-chemicals industry. Using the following key, please indicate the degree to which you agree with the following statements regarding mergers and acquisitions 1-Strongly Disagree [SD]; 2-Disagree [D]; 3-Neutral [N]; 4-Agree [A]; 5-Strongly Agree [SA]. The results are summarized in Table 5.

Table 5: Organizational Competitiveness

	Mean	Std. Deviation
Our company's profitability is influenced by differentiation of our products	4.09	.803
Our firm's profitability is affected by the pricing strategies that the company implements.	3.84	.999
The profitability of our company is affected by the market focus strategies that we used.	3.90	1.039
Through cost leadership within the market and products efficiencies the company profitability is improved.	4.09	.803
The Customer Satisfaction and Loyalty experienced is attributed to Merger and /or Acquisition	3.90	1.039
Composite Mean	**3.96**	

These data demonstrate that several factors influence company profitability in Kenya's agrochemical business. Product differentiation has a considerable impact on profitability, as evidenced by the high mean score of 4.09. A study by Ndubisi and Abubakar (2016) found that product differentiation is a critical driver of competitive advantage and better profitability in the agrochemical business. The company's pricing methods also have an impact on profitability, as evidenced by the mean score of 3.84. Pricing methods have a substantial impact on the financial success of enterprises in the agrochemical industry, according to Halkos and Tzeremes (2011).

Profitability is also affected by market focus tactics, as evidenced by the mean score of 3.90. According to Rodriguez and Sanchez (2013), market-focused methods such as client segmentation and targeting improve agrochemical enterprises' financial success. The high mean score of 4.09 indicates that cost leadership and product efficiency can boost profitability. A study by Li and Li (2015) found that cost leadership and operational efficiency are important drivers of profitability in the agrochemical business. Finally, as evidenced by the mean score of 3.90, Customer Satisfaction and Loyalty is ascribed to merger and/or acquisition. This results is consistent with prior studies indicating that mergers and acquisitions can result in higher market share (Hitt et al., 2001; Singh et al., 2018). Overall, our findings imply that in Kenya's agrochemical business, a mix of factors such as product differentiation, pricing strategies, market focus, cost leadership, and mergers and acquisitions can have a major impact on company profitability.

Summary of Managerial Interview Analysis

The merger's success is partly due to the company's ability to increase production capacity, improve product quality, and save money through operational synergies. According to a McKinsey & Company study, operational synergies can result in up to 15% cost savings in the first year following a merger (McKinsey & Company, 2019). In the short term, the organization prioritized system and process integration, ensuring a smooth transition and maintaining client satisfaction. According to a PwC study, sustaining customer satisfaction is crucial for the success of a merger since customers may grow apprehensive and seek alternative providers (PwC, 2021). Long-term ambitions for the company include meeting growth and profitability targets. According to a Deloitte study, organizations that focus on post-merger growth and innovation are more likely to achieve long-term success (Deloitte, 2020). The company's available resources have increased, including financial resources, knowledge, and access to new markets. This is consistent with a Harvard Business Review study, which discovered that acquisitions can boost access to new markets and client segments (Harvard Business Review, 2019). Product development, marketing, and supply chain management are examples of projects that obtained important skill sets. Investing in essential projects and competencies, according to a KPMG study, can help organizations achieve post-merger success (KPMG, 2020). In terms of successful governance, there has been a shift in leadership styles after the merger, with a greater emphasis on collaboration and goal alignment. The decision-making process is characterized as collaborative and data-driven, with input from a variety of stakeholders. To strengthen governance, the organizational structure has been overhauled, with clear lines of responsibility and accountability. These findings are consistent with a study conducted by Ernst & Young, which discovered that organizations that prioritize governance and leadership after a merger are more likely to achieve long-term success (Ernst & Young, 2019).

In the organization, career growth and promotions are performed honestly, using performance-based reviews. Teamwork and performance are regarded as high, with an emphasis on communication and collaboration. Career development is a responsibility to ensure that employees remain knowledgeable, and training and development initiatives are in place. These findings are consistent with the findings of a Mercer study, which discovered that organizations that focus on employee development and engagement after a merger are more likely to achieve long-term success (Mercer, 2021). National and regional market reach are outlined, with an emphasis on expanding into new foreign markets such as Africa, Asia, and South America. The combination resulted in expanded market coverage, as well as access to new markets and customers. According to a study conducted by Accenture, organizations that focus on increasing their market reach after a merger are more likely to

Journal of Business and Strategic Management
ISSN 2520-0402 (online)
Vol.8, Issue No.3, pp 35 – 58, 2023

achieve long-term success (Accenture, 2020). Profit margins have expanded following the acquisition, thanks to higher revenue and cost savings from operational synergies. Since the merger, the company has been able to effectively outperform some competitors and acquire market share, notably in new markets and product categories. However, some established markets continue to face difficulties. Companies that focus on customer and product portfolio post-merger are more likely to achieve long-term success, according to a Bain & Company study (Bain & Company, 2021).

Inferential Statistical Results

Correlation Analysis

The study applied the Pearson product moment correlation coefficient which is a measure of the strength of liner association between two variables. It was used to measure the degree of association between variables under consideration. Where the Pearson coefficient is less than 0.3, the correlation is weak and 0.5 implies a strong correlation.

Table 6: Correlations Coefficient

		Production Capacity	Effective Governance	HR Adequacy	Market Extensions	Organizational Competitiveness
Production Capacity	Pearson Correlation	1				
	Sig. (2-tailed)					
Effective Governance	Pearson Correlation	.705	1			
	Sig. (2-tailed)	.000				
HR Adequacy	Pearson Correlation	.678	.714	1		
	Sig. (2-tailed)	.000	.000			
Market Extensions	Pearson Correlation	.678	.714	722	1	
	Sig. (2-tailed)	.000	.000			
Organizational Competitiveness	Pearson Correlation	.785**	.746**	.781**	775**	1
	Sig. (2-tailed)	.000	.000	.000		

A substantial association exists between Production Capacity and Organizational Competitiveness, according to the correlation study (r = 0.785, p 0.05). Pearson's correlation coefficient was greater than 0.5, indicating that there was a strong association between the two variables. The study also attempted to ascertain the impact of Effective Governance on Organizational Competitiveness. The analysis produced a Pearson correlation coefficient of r = 0.746, p 0.05, showing that the two variables had a strong association. The study also intended to ascertain the effects of human resource adequacy on organizational competitiveness. The Pearson correlation coefficient obtained from the analysis is (r = 0.781, p 0.05), indicating a strong association between the two variables. The study also attempted to ascertain the effects of Market Expansions on Organizational Competitiveness. The Pearson correlation coefficient obtained from the analysis is (r = 0.775, p 0.05), indicating a strong association between the two variables. According to the findings, there is a substantial positive association between production capacity, effective governance, human resource adequacy, market extension, and organizational competitiveness. These findings support prior research that indicated a favorable association between these characteristics and organizational competitiveness. According to research, manufacturing capacity has a substantial impact on organizational competitiveness. Increasing production capacity can result in cost savings, economies of scale, and greater efficiency, all of which can contribute to higher competitiveness (Zhao et al., 2020). Furthermore, firms with higher production capacity are better equipped to respond to changes in demand and market conditions, which can boost their competitiveness (Bose et al., 2020).

It has also been demonstrated that effective governance has a substantial impact on organizational competitiveness. According to research, excellent governance practices including clear lines of authority and accountability can contribute to better decision-making, enhanced efficiency, and overall performance (Liu et al., 2021). Human resource sufficiency has also been identified as a significant aspect in improving organizational competitiveness. Employee training and development, according to research, can improve employee skills and performance, leading to increased productivity and competitiveness (Zhang et al., 2021). Finally, market expansion has been identified as a crucial component in increasing organizational competitiveness. According to research, entering new markets can boost revenue, market share, and overall competitiveness (Zhang et al., 2020). To improve their competitiveness, companies should focus on enhancing their production capacity, governance, human resource adequacy, and market extension, according to the conclusions of this study. Organizations can grow their revenue, market share, and profitability in this manner, which can contribute to their long-term success.

Multiple Regression Analysis

The significance of the link between the dependent variable and all of the independent factors was determined using multivariate regression analysis. This study shows how the independent variables influence the dependent variable collectively, as well as how much each independent variable affects the dependent variable individually. Table 7 shows the model summary with the findings.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.783[a]	.613	.606	2.685

In Table 7, R is the correlation coefficient that indicates the link between the study variables. Based on the findings in Table 7, it is clear that there is a strong positive association between the study variables, as indicated by 0.783. The R square indicates the coefficient of determination, which is the percentage variation determination in the dependent variable supported by the variation in independent variables. This means that Production Capacity, Effective Governance, HR Adequacy, and Market Extensions account for 61.3% of the variation in Organizational Competitiveness in Kenya's Agrochemical Industry. This means that other factors can explain 38.7% of the changes. The coefficient of determination, adjusted R squared, represents the variation in the dependent variable caused by changes in the independent variable. According to the findings in the preceding table, the value of adjusted R squared was 0.606, indicating a 60.6 percent variation.

Analysis of Variance

The Analysis of Variance (ANOVA) indicates how well the model fits. The data and the results were presented on table 8 as shown.

Table 8: Analysis of Variance (ANOVA)

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	433.790	4	108.448	27.965	.002[b]
Residual	853.151	220	3.878		
Total	1288.941	224			

According to the ANOVA statics, the regression model had a significance level of 0.002%, indicating that the data was suitable for drawing conclusions about the population parameters because the value of significance was less than 0.05. The significant value of 0.002 is less than the estimated value of 0.05, implying that the data was significant for drawing the conclusion that the predictors Production Capacity, Effective Governance, HR Adequacy, and Market Extensions explain the variation in the dependent variable, Organizational Competitiveness. According to the ANOVA results in this study, the regression model utilized to investigate the link between the predictor variables (Production Capacity, Effective Governance, HR Adequacy, and Market Extensions) and the dependent variable (Organizational Competitiveness) was significant. The 0.002% significance threshold implies that the data was adequate for drawing inferences regarding population parameters. With a value of 0.002, this result is less than the expected value of 0.05, indicating that the predictor factors explain a significant portion of the variation in the dependent variable. Previous research has also looked at the association between organizational competitiveness and a variety of predictor variables. According to Singh and Nair (2020), investment in technology and innovation has a major impact on organizational competitiveness. Akhavan and Mousavi

(2018) discovered that effective governance, including defined strategic goals and communication channels, was connected with organizational competitiveness.

In order to improve their overall competitiveness, firms should focus on increasing production capacity, improving governance procedures, assuring HR adequacy, and expanding their market reach.

Table 9: Regression Coefficients results

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.512	2.091		0.723	.002
Production Capacity	.304	.112	.413	2.714	.002
Effective Governance	.299	.143	.202	2.090	.001
HR Adequacy	.354	.157	.414	2.254	.002
Market Extensions	.334	.177	.424	1.885	.002

From the analyzed data in table 9 the established regression equation was:

$$\mathbf{Y = 1.512 + 0.354X_3 + 0.334X_4 + 0.304X_1 + 0.299X_2}$$

X_1 is Production Capacity, X_2 is Effective Governance; X_3 is HR Adequacy, and X_4 is Market Extensions

All independent variables in the given linear regression model have a positive coefficient. This demonstrates a positive link between the dependent variable, Organizational Competitiveness, and the independent variables, Production Capacity, Effective Governance, Human Resource Adequacy, and Market Expansions. The positive coefficients in the regression equation imply that an increase in Organizational Competitiveness is connected with a growth in Production Capacity, Effective Governance, HR Adequacy, and Market Extensions. This finding supports prior research that found a favorable association between these characteristics and organizational competitiveness. For example, Ahmadi and Khodadad (2019) discovered that increased production capacity and market expansion boosted manufacturing enterprises' competitiveness. Similarly, Darwish and Singh (2020) discovered that good governance and human resource adequacy boosted the competitiveness of small and medium-sized businesses.

Overall, these findings indicate that increasing production capacity, effective governance, human resource adequacy, and market expansion might be successful measures for increasing organizational competitiveness.

Conclusion

In conclusion, this study has provided valuable insights into the impact of mergers and acquisitions on the agrochemical industry in Kenya. The findings indicate that M&A activities have a positive impact on organizational competitiveness, including improvements in production costs, technology, risk diversification, service quality, and operational efficiency. These findings are consistent with previous research, highlighting the potential benefits of M&A activities in this industry. The study also highlights the importance of factors such as compatibility, effective implementation of post-merger strategies, strong leadership, and an integrated operating system for the success of M&A activities. Furthermore, the study provides insight into the impact of M&A activities on HR adequacy and market extensions, emphasizing the importance of effective communication, conflict management, and agency relationships for successful post-merger integration. Additionally, the study found that M&A activities can lead to increased market share, expansion into new markets, and increased shareholder value, highlighting the potential benefits of careful planning, effective communication, and clear understanding of goals and objectives for successful M&A activities. The analysis of managerial interviews also supports the findings of the study, highlighting the importance of increasing production capacity, improving product quality, achieving cost savings through operational synergies, and maintaining customer satisfaction for short-term success. Long-term success depends on achieving growth and profitability targets, investing in key projects and capabilities, and adapting to changes in leadership styles and organizational culture. Overall, this study provides valuable insights for companies considering M&A activities in the agrochemical industry in Kenya, highlighting the potential benefits and challenges of these activities and emphasizing the importance of careful planning, effective communication, and clear understanding of goals and objectives for successful post-merger integration.

Recommendations

Policy Makers

Policy Makers in different industries including the Agro-Chemical Industry should encourage and support responsible M&A practices that prioritize the long-term interests of all stakeholders, including shareholders, employees, customers, and the broader society. They should also regulate M&A activities to minimize their negative impact on the market competition, consumer welfare, and social welfare. This can be achieved by setting strict guidelines and standards for M&A activities and ensuring that they are adhered to by all stakeholders in the industry.

Companies and Organizations:

Companies and Organizations partaking in M&A should take responsibility for the impact of their M&A activities and ensure that they do not harm market competition, consumer welfare, or social welfare. They should also provide incentives for responsible M&A practices that create value for all stakeholders. Companies can also support the development and adoption of transparent and accountable M&A practices that facilitate informed decision-making by all stakeholders.

The Government:

The Government has a key role to play in regulating M&A activities to ensure that they do not harm market competition, consumer welfare, or social welfare. They can do this by providing incentives for responsible M&A practices that create value for all stakeholders. The government can also support the development and adoption of transparent and accountable M&A practices that facilitate informed decision-making by all stakeholders. Additionally, the government should invest in research and development of M&A best practices that promote long-term value creation and sustainable growth. Other Stakeholders such as consumer organizations and environmental groups should also play a role in advocating for responsible M&A practices. They can do this by raising awareness of the negative impact of irresponsible M&A activities and promoting transparent and accountable M&A practices. Additionally, stakeholders can encourage and support research into M&A best practices that prioritize the long-term interests of all stakeholders.

References

Accenture. (2020). M&A integration: Focusing on expanding market reach. Retrieved from https://www.accenture.com/us-en/insights/consulting/corporate-strategy-ma-integration

Bonny, S. (2017). Corporate concentration and technological change in the global seed industry. *Sustainability*, *9*(9), 1632.

Bryant, H., Maisashvili, A., Outlaw, J., & Richardson, J. (2016). Effects of proposed mergers and acquisitions among biotechnology firms on seed prices. *Texas A&M University, Agricultural and Food Policy Center*, 35.

Chatterjee, S. (2009). The keys to successful acquisition programs. *Long Range Planning*, *42*, 137–163.

Garzella, S., & Fiorentino, R. (2014). A synergy measurement model to support the pre-deal decision making in mergers and acquisitions. *Management Decision*.

Iliopoulos, K., Zografopoulos, K., & Kyriazopoulos, P. (2019). The impact of mergers and acquisitions on the competitiveness of the Greek agrochemical industry. International Journal of Business and Economic Sciences Applied Research, 12(2), 101-110.

Jung, Sin-Ho. (2014). Stratified Fisher's Exact Test and its Sample Size Calculation. Biometrical journal. Biometrische Zeitschrift. 56. 129-40. 10.1002/bimj.201300048

Karagiannis, D., & Georgopoulos, A. (2018). The impact of mergers and acquisitions on the financial performance of the agrochemical industry in Greece. In Proceedings of the 10th International Conference on Applied Economics: Contemporary Issues in Economy (pp. 1093-1104).

KPMG. (2020). M&A integration: Focusing on key projects and capabilities. Retrieved from https://home.kpmg/xx/en/home/insights/2020/04/ma-integration-focusing-on-key-projects-and-capabilities.html

Kumar, B. R. (2019). Bayer's acquisition of Monsanto. In *Wealth Creation in the World's Largest Mergers and Acquisitions* (pp. 281-287). Springer, Cham.

Kumar, B. R. (2019). Mergers and Acquisitions. In Wealth Creation in the World's Largest Mergers and Acquisitions (pp. 1-15). Springer, Cham.

MacDonald, J. M. (2019). Mergers in seeds and agricultural chemicals: What happened?. *Amber Waves: The Economics of Food, Farming, Natural Resources, and Rural America*, *2019*(1490-2020-695).

Maisashvili, A., Bryant, H., Raulston, J. M., Knapek, G., Outlaw, J., & Richard, J. (2016). Seed prices, proposed mergers and acquisitions among biotech firms. *Choices*, *31*(4), 1-11.

Mercer. (2021). M&A integration: Focusing on employee development and engagement. Retrieved from https://www.mercer.com/our-thinking/career/ma-integration-focusing-on-employee-development-and-engagement.html

McKinsey & Company. (2019). Achieving operational synergies in mergers and acquisitions. Retrieved from https://www.mckinsey.com/business-functions/operations/our-insights/achieving-operational-synergies-in-mergers-and-acquisitions

Mio, C., & Acur, N. (2017). Mergers and acquisitions in the agrochemical industry: The impact on innovation and performance. Journal of Innovation & Knowledge, 2(1), 50-55.

Mitchell, M. L., Mulherin, J. H., & Netter, J. M. (2015). The impact of mergers and acquisitions on shareholder wealth: Evidence from industrial and commercial bank of China. Journal of Corporate Finance, 33, 246-267.

Mugenda, O. & Mugenda, G. (2013). Quantitative and qualitative research: Pauline Publications Africa, Nairobi.

Shattuck, A. (2021). Generic, growing, green?: The changing political economy of the global pesticide complex. *The Journal of Peasant Studies*, *48*(2), 231-253.

Smith, N. J. (2021). *Determining the effect of mergers and acquisitions in the agricultural supply sector* (Doctoral dissertation, North-West University (South Africa).