EFFECT OF BUSINESS LEVEL STRATEGIES ON PERFORMANCE OF SOLAR INDUSTRY IN KENYA.

BY

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DECLARATION

I declare that this research project is my original work and has never been submitted for an award of a degree in any other university.

Sign ……. Date…….

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This project has been submitted for examination with my authority as the university supervisor.

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First, I thank God for helping me through this project writing. Secondly, special thanks to my supervisor Dr. Donald Gulali for his guidance and assistance. Finally, I thank my family for supporting me throughout my studies.

DEDICATION

This project is dedicated to my family and friends.

ABSTRACT

Globalization has led to intense competition in various industries and the world at large thus there is need for well thought strategic management practices to keep organization afloat and up on their feet in the market. Various level of management strategies such as corporate level strategies, business level strategies and functional level strategies can be employed. For this particular study that focuses in the solar industry market in Kenya business level strategies will be given emphasis; these strategies include focus strategies, cost leadership strategies and differentiation strategies. Many people in Kenya has no access to electricisince they live offgrid this has made Kenya a good market for solar product and thus 22 solar companies has been established in kenya however 4 of these companies has since folded dup due to various reasons including performance and management reasons like sustainability, social impact, gender equity, brand image and sometimes stiff competition. Various studies done by various authors has been done regarding business level strategies however there is no such studies linking it to solar industry in Kenya. The strudy focuses on internal resources to give these organizations competitive advantage over the competitors in the Industry hence resource based theory suits the study as a theory guiding it. The study used descriptive research design coupled with census survey to administrer questionnaires on 126 respondents to investigate the relationship between business level strategies and performance of solar industry in kenya. The target population are 7 heads of department (Human Resource, Sales, After sales, Marketing, Finance, Training and the Informational Technology departments) of 18 companies who are still afloat in Kenya resulting in 126 rewspondents. (7*18=126). It was evident from the results that all model coefficients were significant at 0.05. The findings also shows that all the model coefficients, which include: Cost leadership ($B = 0.139$, $p < .05$); Differentiation strategy ($\beta = 0.197$, $p < .05$); Focus strategy ($B = .437$, $p < .05$) had positive significant effect on performance. The unstandardized B coefficient of cost leadership shows that unit change in the level of cost leadership strategies causes a 0.139 units increment in organisational performance level and the change is significant as shown by the p-value. A unit change in Differentiation strategy and Focus strategy causes 0.197 and 0.437 units increase in organisational performance levels of solar industry. The findings shows that all the model coefficients; Cost leadership, Differentiation strategy, Focus strategy had positive significant effect on performance. This suggests that the selected determinants have an effect on the performance of Pay-As-You-Go solar firms in Kenya. The firms should also establish more strategic partnerships and good relations for better prices and hence reducing procurements costs, it also recommended that, in order to intensify the effect focus strategy on organisational performance, hence need to focus on providing superior customer service, investing in research and development, striving to have an outstanding strong image and reputation for quality innovation.

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ABBREVIATIONS AND ACRONYMS

PAYG(PAYGO)	pay as you go business model
PV	Photovoltaic
SMES	Small and Medium Enterprises
QM	Quality Management
CLCS	Cost Leadership Competitive Strategies
R&D	Research and Design
IRENA	International Renewable Energy Agency
KNBS	Kenya National Bureau of Statistics
MSMEs	Micro Small and Medium Enterprises
ETFs	Exchange trade funds
BLS	Business level strategies
HODs	Head of department
RBT	Resource based theory
CST	Competitive strategy theory
HQ	Headquarters

OPERATIONAL DEFINITION OF TERMS

The solar industry refers to the sector producing, installing, and maintaining solar energy systems. Solar energy is harnessed from the Sun using various technologies, such as solar photovoltaic (PV) panels or solar thermal systems; in the study context, we look into those adopting pay as you go business model in Kenya.

Pay as you go; under the pay-as-you-go model, a solar company or a solar service provider installs and maintains solar panels on a customer's property, typically on a residential or commercial building. Instead of requiring the customer to purchase and own the solar system outright, the provider offers the option to pay for the solar electricity generated by the design on a pay-as-you-go basis.

Photovoltaic; is the conversion of light into electricity using semiconducting materials that exhibit the photovoltaic effect (the process of emission of electricity when light hits a photosensitive material), a phenomenon studied in physics, photochemistry, and electrochemistry (KLB Physics Bk 4).

Portfolio; is a collection of financial investments like stocks, bonds, commodities, cash, and cash equivalents, including closed-end funds and exchange traded funds (ETFs). People generally believe that stocks, bonds, and cash comprise the core of a portfolio. Though this is often the case, it does not need to be the rule.

Performance; the ability to realize predefined goals and objectives effectively and efficiently." This definition emphasizes effectiveness (achieving

the right goals) and efficiency (achieving goals with minimal resources), reflecting a balanced approach to performance evaluation.

Businss level strategies; refers to companies' deliberate and purposeful actions to achieve competitive advantage within their specific market segments. It involves making critical choices about how to allocate resources, differentiate offerings, and create unique value for customers. By effectively implementing a well-defined business-level strategy, companies can carve out a distinct position in the market, attract customers, and drive sustainable growth.

Strategy; is the strategic initiatives a company pursues to create value for the organization and its stakeholders and gain a competitive advantage in the market.

Pilot testing; Pilot testing is a method used to evaluate a new process, product, service, or system in a real-world setting before it is fully implemented. The purpose of pilot testing is to identify and address any potential issues, gather feedback, and make necessary adjustments before the full-scale launch. This testing phase helps organizations minimize risks and improve the chances of

success when implementing new initiatives.

Validity testing; a process used to evaluate whether an assessment, measurement, or research instrument is accurately measuring what it is intended to measure. It is a critical aspect of research and assessment, ensuring that the results obtained are meaningful and applicable to the underlying construct or concept being studied. There are several types of validity testing, each addressing different aspects of the measurement instrument. Here are some key types of validity testing

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CHAPTER ONE

INTRODUCTION

This section gives a background of the study, the objective and significance of the study, and explains the problem statement. It also provides the scope of the research, the confines, and restrictions thereof, and outlines the study's hypotheses.

1.1 Background to the Study

World Bank report 2020 indicated that the percentage of the population living below the poverty line in Kenya was estimated to be around 35.6% in 2020. The poverty line is living on less than $1.90 per day. Given the estimated population of 54.7 million people in Kenya, this means that approximately 19.5 million people in Kenya live below the poverty line of $1.90 per day. With this report, it is clear that the majority of the Kenyan population will opt for a financial plan that is convenient and pocket friendly to them; pay-as-you-go is a good plan for them where they pay for services periodically instead of making such payments in a lump sum. Regarding access to electricity in Kenya, the latest data from the Kenya National Bureau of Statistics (KNBS) and the Ministry of Energy and Petroleum indicate that as of 2020, the electrification rate in Kenya was approximately 75%. This means that around 25% of the population still lacks access to electricity; the 2019 Census in Kenya indicated that the number of Kenyan people was 47,564,296, and 25% represents 11,891,074 not connected to electricity. In the face of increasing globalization, the effects of business-level strategies implemented are of great significance in organizations. Johnson et al. (2020) define business-level Strategy as a plan of action that a company takes to create and sustain a unique competitive advantage in a particular market or industry by focusing on the needs and preferences of a specific customer segment. In their documentation, Chris et al. (2019) define business-level Strategy as a plan of action that a company takes to achieve superior performance

in a specific market or industry by focusing on a few core competencies and delivering them consistently to customers. Business-level strategies include cost leadership strategies, differentiation strategies and focus strategies. The Strategy emphasizes the importance of creating and sustaining a unique competitive advantage, focusing on core competencies, delivering value to customers, and using processes and practices to achieve strategic objectives. For this purpose, the research sought to determine the relationship between business-level Strategy and the performance of solar firms adopting pay as you go business model.

Successful firms represent a crucial ingredient for developing nations. Many economists consider them an economic, social, and political development engine. Every firm should operate in performance conditions to survive in a competitive business environment. In their study, Taouab & Issor (2019) define performance as the level of achievement or effectiveness of an individual, team, organization, or system in accomplishing specific goals or objectives. It is a multidimensional concept that can be measured and evaluated in various ways depending on the context, domain, and dreams of interest. Performance can be assessed at multiple levels, including individual, team, organizational, and system levels.

Publication by Montoya-Duque et al. (2022) indicates that providing affordable and clean energy for all is a global priority, especially for off-grid and low-income regions. New business models, such as Pay-as-you-go (PAYG), have been a strategy for providing sustainable electricity in off-grid areas, especially in African countries; the pay-as-you-go model enables low-income earners to buy and own a solar home system at considerably affordable terms of purchase as they will pay daily, weekly or monthly depending on their financial capability and as they do that, they utilize the product, and this has been very effective and instrumental.

Nearly 840 million people worldwide do not have access to electricity, and over 1 billion people

are connected to an unreliable grid. As the underserved population is not connected to the primary grid, extending the grid is integral to providing those populations with energy access. However, developing the grid involves significant capital outlay and long lead times for constructing new infrastructure. An alternative to grid extension is power from distributed solar photovoltaic (PV) systems, Gogla & Esmap, (2020). The decreasing costs of such systems represent an opportunity for these communities to gain electricity access without grid extension. However, making the upfront investments necessary to set up distributed renewable energy systems to satisfy electricity demand and improve supply reliability is challenging in many areas, mainly rural communities. The PAYG business model is an innovation that emerged to address the energy access challenge and to provide electricity generated from renewable energy sources at affordable prices, with payments facilitated by technologies available in these areas. Widespread use of mobile payment technologies, rich solar resources, declining solar PV and battery costs, and increased awareness of these technologies have been key drivers in implementing this business model. Growing numbers of companies offer PAYG systems, and high competition in this field pushes prices for consumers even lower. With the advent of PAYG systems of payments in the solar industry, many businesses have managed to give access to green energy to vulnerable members of our society. By that virtue, lives have significantly changed positively.

1.2 Statement of the problem

The number of people living off grid are moderately high in Kenya and Africa at large. That population provides a good market for solar industry to thrive in the market. In Kenya 22 solar companies has been set up and 4 of such companies has folded up as of year s2022 due to competition and management related issues like, social impact, sustainability, gender equity and social consciousness. If this is not address then several companies are set to ground on their knees

and leave behind the Kenyan available market. Studies has been done about Business level strategies (BLS) however there is no such studies carryout out in Kenya linking business level strategies to performance of solar industry thus makes this area an important topic of study. This study will be able to identify where there is management gap and necessary precautions that needs to be done to ensure efficiency and effectiveness on performance of solar industry in Kenya. A good focus on a particular niche will ensure high productivity and performance of such organization, this is a similar case with differentiated products and brands notably when there a firm concentrates on cost leadership they are most likely able to maximize on profits and shareholders wealth as they minimize on costs. The Kenyan government has set an ambitious target of achieving universal access to electricity by 2022, and they have made significant progress toward this goal. Access to solar energy has been increasing in Kenya in recent years, and it is now one of the leading countries in Africa in adopting solar power. According to a report by the International Renewable Energy Agency (IRENA), Kenya's total installed solar capacity reached 349 MW in 2020, making it the country with the highest installed solar capacity in East Africa. As the adoption of solar energy increases across the globe and in Kenya specifically, it comes with challenges of Management of the solar operations, financial efficiency, and general organizational structure management at different levels and with that adoption of business level strategies such as focus strategy, differentiation strategy, and cost leadership strategy would be an essential tool to enhance efficiency profit maximization and wealth maximization of these businesses as they minimize on costs.

1.3 Objectives of the Study

1.3.1 General Objective

The study's objective was to determine the effects of business level strategies on the organizational performance of solar Industry in Kenya.

1.3.2 Specific Objectives

i. To determine the effect of focus strategy on the organizational performance of solar Industry in Kenya

ii. To establish the effect of differentiation strategy on the organizational performance of solar Industry in Kenya

iii. To determine the effect of cost leadership strategy on the organizational performance of solar Industry in Kenya

1.4 Study Hypothesis

i. H01: Focus strategy does not affect the organizational performance of solar Industry in Kenya

ii. H02: Differentiation Strategy does not affect the organizational performance of solar Industry in Kenya

iii. H03: Cost Leadership does not affect the organizational performance of solar Industry in Kenya

1.5 Scope of the Study

The study covered solar companies adopting the PAYG business model in Kenya. Kenya is located between latitudes 4.04° North and 4.68° South and longitudes 33.91° East and 41.89° East. The equator passes through the country, meaning some parts of Kenya are located in the northern hemisphere while others are in the southern hemisphere. The longitude of Nairobi, the capital city, is 36.82° East, bordered on the East by Somalia and the Indian Ocean, on the north by Ethiopia and Sudan, on the west by Uganda, and the south by Tanzania.The study is conducted on companies that are either registered on or before 2022 in Kenya by registrer of companiesand has their report published yearly by Gogla report. The study concentrated on solar companies adopting pay as you go (PAYG) model of payment hence solar industry refered here majorly refers to company adopting PAYG.

1.6 Significance of the Study

There are several contributions that the study offered of interest. It helped in understanding the business-level strategies used by solar companies adopting pay as you go business model in Kenya, and this brought guidance in understanding the relationship between the Strategies adopted and the organization's performance in the competitive industry. Also, it provides policymakers with a background for formulating strategies for their organizations in this competitive industry.

1.7 Limitations of the study

The study is limited to the companies and HODs willing to fill in the questionnaires submitted to nthe either physically or through google forms. It is limited to solar companies adopting pay as you go modes of payment.

The study is limited to business level strategies and has not focused on corporate level strategies or functional level strategies.

1.7 Conceptual Framework

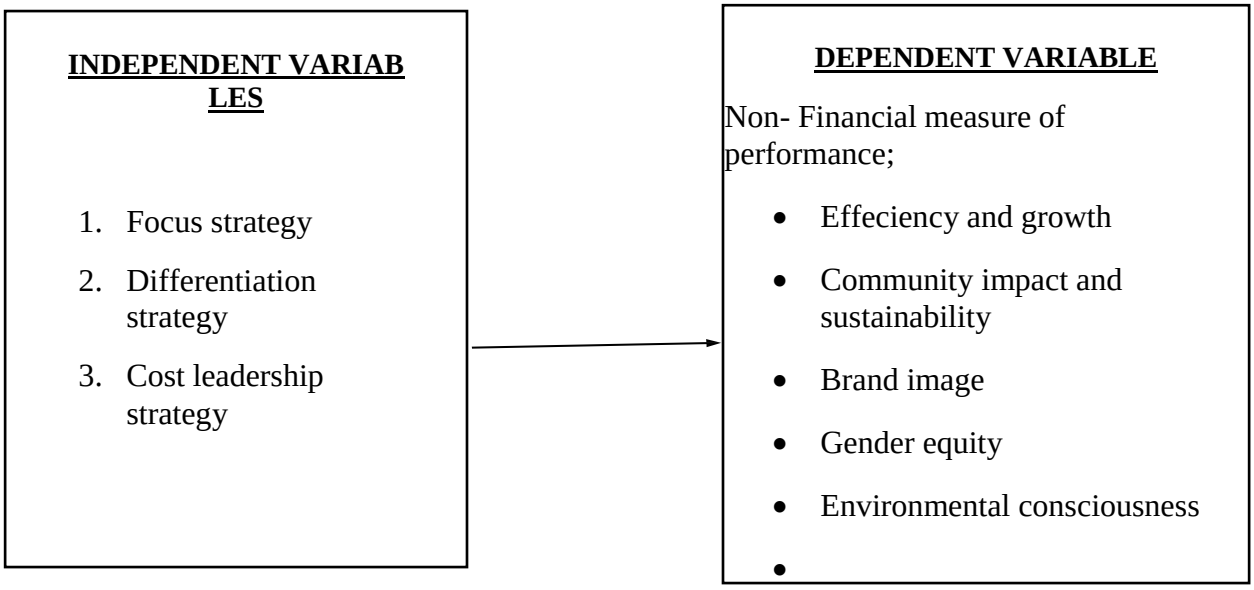

Figure 1 Conceptual Framework.

Source; Self conceptualization

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section outlines the relationship between business strategy and the performance of Pay-As-You-Go firms in Kenya. It describes the theoretical framework, the business strategies, and the effect of these choices. The reviewed literature is further summarized into knowledge gaps based on context, concept, and methodological gaps.

2.2 Theoretical Review

2.1.1 Resource Based Theory (RBT)

This theory was developed by Birge Wenefeldt in 1984.The theory acknowledges that firms achieve competitive advantage and superior firm performance through synergistic mix of valuable, rare, inimitable and non-substitutable resources that they possess (Barney, 1991). RBT asserts that firms use these resources to implement strategies by effectively and efficiently developing capabilities that can be leveraged to sustain competitive advantage (Barney, 1991).The theory further emphasizes analysis and identification of firm‘s strategic advantages based on examining its distinct combination of assets, skills, capabilities and intangibles as an organization. According to RBT proponents, it is much more feasible to exploit external opportunities using existing resources in a new way rather than trying to acquire new skills for each different opportunity. In RBT model, resources are given the major role in helping companies to achieve higher organizational performance. There are two types of resources: tangible and intangible. Tangible assets are physical things. Land, buildings, machinery, equipment and capital. Physical resources can easily be bought in the market so they confer little advantage to the companies in the long run

because rivals can soon acquire the identical assets while intangible assets are everything else that has no physical presence but can still be owned by the company (Anand, Wamba & Sharma, 2013). Brand reputation, trademarks, intellectual property are all intangible assets. Unlike physical resources, brand reputation is built over a long time and is something that other companies cannot buy from the market. The RBT‘s underlying premise is that a firm differs in fundamental ways because each firm possesses a unequal bundle of resources-tangible, intangible assets and organizational capabilities to make use of those assets (Anand, Wamba & Sharma, 2013). Each firm develops competencies from these resources, and when developed especially well, these become the source of the firm‘s competitive advantage (Pearce & Robinson, 2007). The theory emphasizes more on organization internal resources as its source of performance and competitive advantage sinc the external resources can always be acquired by any other competing firms in the industry.

2.2.1 Competitive Strategy

While the term "strategy" may not possess the same dynamism as other words in the business lexicon, it is premature to declare its demise as a fundamental discipline. Professor Michael E. Porter's groundbreaking analytical approach to Strategy, introduced in 1980 at the Harvard Business School, marked a pivotal moment in business analysis. By revisiting Professor Porter's influential work, "Competitive Strategy," Measuring Business Excellence affirms that it continues to serve as a robust framework for comprehending contemporary organizations' competitive landscape. Chong & Ali (2022) define Strategy as achieving a competitive advantage by optimizing strengths and minimizing limitations. He also suggests that competitive Strategy should create favorable and sustainable conditions for the forces that shape industry competition. Strategy refers to a company's specific actions and approaches to reach its goals. A business strategy serves

as a guide for firms to compete and maintain operational continuity. Implementing cost leadership and product differentiation strategies can determine a company's success within an industry (Wibowo et al., 2017).

Business-level Strategy is crucial in determining a company's competitive position and performance within its industry. It involves choosing how to compete effectively in the market by pursuing cost leadership or differentiation strategies or focusing on a specific customer segment or market niche. Theoretical reviews suggest that a well-defined business-level strategy can lead to several benefits, including enhanced market share, increased customer loyalty, improved profitability, and sustainable competitive advantage. By aligning their resources, capabilities, and activities with a coherent business-level strategy, companies can effectively differentiate themselves, leverage their strengths, and respond to market dynamics, ultimately driving their long-term success and performance.

2.2.2 Cost Leadership Strategy

This Strategy emphasizes efficiency. The firm hopes to use economies of scale and experience curve effects by producing high volumes of standardized products. The product is often an essential, no-frills product produced at a relatively low cost and made available to a large customer base. Maintaining this Strategy requires a continuous search for cost reductions in all aspects of the business. The associated distribution strategy is to obtain the most extensive distribution possible. Promotional Strategy often involves trying to make a virtue out of low cost. When a firm designs, produces, and markets a product more efficiently than competitors, such a firm has implemented a cost leadership strategy (Allen et al. 2006). Cost reduction strategies across the activity cost chain will represent low-cost leadership (Tehrani, 2003; Beheshti, 2004). Attempts to reduce costs will spread throughout the business process from manufacturing to the final product

selling stage. Any techniques that do not contribute towards minimizing the cost base should be outsourced to other organizations to maintain a low-cost base (Akan et al. 2006).

Low costs will permit a firm to sell relatively standardized products that offer features acceptable to many customers at the lowest competitive price, and such low prices will gain a competitive advantage and increase market share (Bauer & Colgan, 2001; Hyatt, 2001; Davidson, 2001). These writings explain that cost efficiency gained in the whole process will enable a firm to mark up a price lower than the competition, ultimately resulting in high sales since the competition could not match such a low-cost base. If the low-cost base could be maintained for more extended periods, it would ensure a consistent increase in market share and stable profits hence consequent in superior performance. However, all writings direct us to the understanding that the sustainability of the competitive advantage reached through a low-cost strategy will depend on a competitor's ability to match or develop a lower cost base than the existing cost leader in the market. (Colgan, 2001) A firm attempts to maintain a low-cost base by controlling production costs, increasing capacity utilization, controlling material supply or product distribution, and minimizing other expenses, including R&D and advertising (Prajogo, 2007). Mass production, mass distribution, economies of scale, technology, product design, learning curve benefit, workforce dedicated to low-cost production, reduced sales force, and less spending on marketing will further help a firm to be paramount to a low-cost base (Tuminello, 2002). Decision makers in a cost leadership firm will be compelled to closely scrutinize the cost efficiency of the firm's processes. Maintaining the low-cost base will become the primary determinant of the cost leadership strategy.

For low-cost leadership to be effective, a firm should have a significant market share (Richardson & Dennis, 2003; Hyatt, 2001, cited by Allen and Helms (2006). New entrants or firms with a smaller market share may not benefit from such a strategy since mass production, mass

distribution, and economies of scale will not impact such firms. Low-cost leadership becomes a viable strategy only for larger firms. Market leaders may strengthen their positioning by advantages attained through scale and experience in a low-cost leadership strategy. But is there any superiority in low-cost Strategy over other strategic typologies? Can a firm adopting a low-cost approach outperform another with a different competitive design? If firms' costs are low enough, they may be profitable even in a highly competitive scenario; hence it becomes a defensive mechanism against competitors (Kim& Lirn, 1988).

Further, they mention that such low costs may act as entry barriers since new entrants require colossal capital to produce goods or services at the same or lesser price than a cost leader. As discussed in the academic framework of competitive advantage, raising barriers to competition will result in sustainable competitive advantage. In consolidation with the above writings, we may establish that a low-cost competitive Strategy may generate a sustainable competitive advantage. Low-cost leadership could be considered a competitive strategy ~hatwill create a sustainable competitive advantage. (Kim et al., 2004). However, low-cost leadership is attached to a disadvantage: less customer loyalty. Relatively low prices will create a negative attitude towards the quality of the product in the customers' mindset. Customers' impressions regarding such products will enhance the tendency to shift towards an outcome that might be higher in price but project an image of quality. (Yakhlef, 2001).

2.2.3 Differentiation Strategy

With the differentiation strategy, the unique attributes or perceptions of uniqueness and characteristics of a firm's product other than cost provide value to customers. The firm pursuing differentiation seeks to be unique in its industry along some dimensions valued by customers, which means investing in product R&D and marketing (Porter, 1980). It is the ability to sell its

differentiated product at a price that exceeds what was spent to create it, allowing the firm to outperform its rivals and earn above-average returns. A product can be differentiated in various ways. Unusual features, responsive customer service, rapid product innovations, technological leadership, perceived prestige and status, different tastes, and engineering design and performance are examples of approaches to differentiation (Porter, 1980). Differentiation is aimed at the broad market that involves the creation of a product or service that is perceived throughout its industry, as unique. The company or business unit may then charge a premium for its product. This specialty can be associated with design, brand image, technology, features, dealers, network, or customer service. Differentiation is a viable strategy for earning above-average returns in a specific business because brand loyalty lowers customers' sensitivity to price. Increased costs can usually be passed on to the buyers. Buyers' loyalty can also serve as an entry barrier-new; the firm must develop its distinctive competence to differentiate its products in some way to compete successfully (Porter, 1980). Rather than cost reduction, a firm using differentiation must concentrate on investing in and developing distinguishable things that customers will perceive. The essential success factor of differentiation in terms of strategy implementation is to establish and maintain innovativeness, creativeness, and organizational learning within a firm (Yakhlef, 2001). Successful differentiation is based on studying buyers' needs and behavior to learn what they consider important and valuable. The desired features are then incorporated into the product to encourage buyer preference. The basis for competitive advantage is a product whose attributes differ significantly from a rival's. (Yakhlef, 2001). Competitive advantage results when buyers become strongly attached to these incorporated attributes, and this allows the firm to: charge a premium price for its product, benefit from more sales as more buyers choose the product, and more buyers become attached to the differentiating features resulting in greater loyalty to its brand. Efforts to

differentiate often result in higher costs. Profitable differentiation is achieved by either keeping the differentiation cost below the price premium that the differentiating features command or offsetting the lower profit margins through more sales volumes (Yakhlef, 2001). Kotler (2001) insists that anything a firm can do to create buyer value represents a potential basis for differentiation. Once it finds a good source of buyer value, it must build the value, creating attributes in its products at an acceptable cost. These attributes may raise the product's performance or make it more economical. Differentiation possibilities can grow from possibilities performed anywhere in the activity cost chain. The risks associated with a differentiation strategy include imitation by competitors and changes in customer tastes. Additionally, various firms pursuing focus strategies may be able to achieve even greater differentiation in their market segments Kotler (2001)

2.2.4 Focus Strategy

The focus strategy concentrates on a narrow segment and, within that segment, attempts to achieve either a cost advantage or differentiation. The premise is that the group's needs can be better serviced by focusing entirely on it. A firm using a focus strategy often enjoys high customer loyalty, and this entrenched loyalty discourages other firms from competing directly. Because of their narrow market focus, firms pursuing a focus strategy have lower volumes and, therefore, less bargaining power with their suppliers. However, firms pursuing a differentiation-focused strategy may be able to pass higher costs on to customers since close substitute products do not exist. Firms that succeed in a focus strategy are able to tailor a broad range of product development strengths to a relatively narrow market segment that they know very well. Some risks of focus strategies include imitation and changes in the target segments.

Furthermore, it may be fairly easy for a broad market cost leader to adapt its product to compete

directly. Finally, other focusers may be able to carve out sub-segments that they can serve even better. (Porter, 2005)

2.2.5 Performance

Throughout the years, numerous authors have provided diverse definitions of performance.

In 1964, Peter Drucker defined performance as "doing the right things well." According to Drucker, performance involves achieving high levels of productivity and aligning one's efforts with an organization's strategic goals and objectives. Robert K & David N (1988) introduced the concept of the Balanced Scorecard, which defined performance as the accomplishment of four key perspectives: financial, customer, internal processes, and learning and growth. This perspective emphasized the importance of measuring performance in multiple dimensions to provide a holistic view.

In 1992, Michael Armstrong offered a more individual-centric definition, stating that performance is "the ability to apply knowledge, skills, and abilities to achieve desired results." Armstrong's definition highlights the personal attributes and competencies that contribute to effective performance in the workplace.

Lastly 2011, Andre de Waal defined performance as "the ability to realize predefined goals and objectives effectively and efficiently." This definition emphasizes effectiveness (achieving the right goals) and efficiency (achieving goals with minimal resources), reflecting a balanced approach to performance evaluation. These chronological definitions of performance showcase the evolving perspectives on what constitutes performance, ranging from organizational alignment and measurement frameworks to individual competencies, collective contributions, observable behaviors, and achieving predefined goals.

There are various methods for the measurement of business performance. The first is through

objective (quantify) and Subjective (judgmental) methods. Financial (e.g., profit, sales) and operational (e.g., customer satisfaction, quality). Primary (from the organization) and secondary (from databases) databases (Venkatraman and Ramanujam, 1986; Sang, 2004).In objective measurement, quantitative data (i.e., absolute performance data) is measured, whereas in the subjective method, what is measured is perceptive opinions about performance according to the competitors or company expectations (Dess and Robinson, 1984). The same performance criteria are measured both objectively and subjectively. Your criteria can be qualitative such as customer satisfaction and overall business performance, or quantitative such as profit. Effectiveness-oriented companies are concerned with output, sales, quality, creation of value-added, innovation, and cost reduction. It measures the degree to which a business achieves its goals or how outputs interact with the economic and social environment. Usually, effectiveness determines the policy objectives of the organization or the degree to which an organization realizes its goals (Zheng, 2010). Meyer and Herscovitch (2001) analyzed organizational effectiveness through organizational commitment. Commitment in the workplace may take various forms, such as the relationship between leader and staff, employee identification with the organization, involvement in the decision-making process, and psychological attachment felt by an individual. Shiva and Suar (2010) agree that superior performance is possible by transforming staff attitudes towards an organization from a lower to a higher plane of maturity. Therefore, human capital management should be closely bound to effectiveness concepts.

2.3 Empirical Review

2.3.1 Focus Strategy and Performance

In their study, Linking Porter's generic strategies to firm performance, the study investigated the importance of using Porter's generic Strategy on a firm's performance. He uses questionnaires as a research methodology, and econometrics models are used to measure these relationships; they employ various statistical methods, including a t-test, Pearson's correlation analysis, and multivariate regression analysis (Islami et al., 2020). Econometric results demonstrate that pursuing a differentiation strategy leads to superior firm performance compared to the other two Porter's generic strategies. Their study does not address the aspect of the PAYG business model and thus misses the knowledge for entrepreneurs and researchers interested in venturing in pay as you go business model.

Research conducted by Olson et al. (2021), Business Strategy and the Management of digital marketing. The business landscape has undergone a disruptive change with the advent of the Internet, resulting in the emergence of numerous digital marketing tactics. Interviews were conducted by administering questionnaires to the Management and the shareholders of such businesses; after that, statistical analysis was done through the T-test. Results found that, with the availability of these new tactics, marketing managers must determine their priorities and decide on the digital marketing tactics they want to invest in. This article explores these concerns through the lens of four business strategies. The study is more on digital marketing and gives the general outlook of all three of Porter's generic strategies.

Allen & Helms. (2006) study on Linking strategic practices and organizational performance to Porter's generic strategies. Using factor analysis and regression analyses, the study tested specific strategic practices that can be identified, which are associated with each generic Porter strategy, and there are specific strategic practices that are more strongly associated with higher levels of

organizational performance within each generic Strategy. The study revealed critical strategic practices significantly associated with organizational performance for each of Porter's generic strategies. Further, the research uncovered a core list of strategic practices which better define each generic Porter strategy. The study has viewed competitive strategies in general and did not emphasize every Strategy to which this study is giving attention and focus. For instance, a study by Porter and his colleagues (2011) found that companies that adopted a focused approach had higher profitability and return on assets than those that pursued a broader market strategy. Similarly, a study by Grant (2016) found that companies focusing on a niche market tended to have higher revenue growth and market share than those pursuing a more general market approach. These studies generally give attention to customers who opt to buy products in a lump sum and leave out the majority who would opt to survive on PAYG models.

There is limited empirical research on the impact of a focus strategy on the performance of pay-as-you-go businesses. However, some studies have examined the impact of a focus strategy on the performance of other types of businesses. A study by Arasa & Gathinji (2014) found that competition is high in the industry, and product differentiation and low-cost leadership are the most commonly used strategies. Other strategies include strategic alliance strategies and specific market focus strategies. The study adopted a descriptive survey design on a mix of stratified and purposive sampling techniques mobile telecommunications industry in Kenya. The study concluded that the strategies adopted improved the overall firm performance. However, it focused on the telecom industry. It gave more emphasis on two of Porter's competitive generic Strategies. In contrast, the current study focuses on the PAYG businesses adopted in solar industries in Kenya and emphasizes all three of Porter's generic strategies.

According to Pang and Lu, 2018, Organization motivation, employee job satisfaction, and

organizational performance, the study focuses on examining the relationship between organizational factors and performance outcomes. Pang and Lu study the relationship between organizational motivation, employee job satisfaction, and organizational performance. It employed sampling and questionnaires as data collection methods and used different data analysis methods, including exploratory factor analysis and reliability tests, among others in the firm. The study adopts an empirical approach by collecting and analyzing data from real-world organizations to draw conclusions and make inferences. However, the study focuses on organizational motivation and employee job satisfaction, but other factors may influence organizational performance that was not considered or controlled for in the analysis. These unaccounted variables may introduce potential confounding effects on the observed relationships.

According to Sroufe & Gopalakrishna-Remani, (2019), Management, social sustainability, reputation, and financial performance relationships. In the study, they used a sample as a data collection method. In contrast, on data analysis, they employed an empirical study combining different secondary data sources: Newsweek Green rankings, Bloomberg, and Compustat to minimize the potential threat of common method variance affecting the analysis results. They examine the relationships between various factors and financial performance outcomes. Sroufe and Gopalakrishna-Remani explore the relationships between Management, social sustainability, reputation, and financial performance in US firms. At the same time, the other study (unspecified source) likely investigates a different set of factors and their impact on financial performance. It's important to consider potential confounding variables and factors influencing the relationships under investigation. The study should address whether it controls for other variables that may impact both the independent and dependent variables.

According to Nimeh et al. (20180) on Lean supply chain management practices and performance.

Studies examine the relationships between specific factors and performance outcomes in business operations. Nimeh et al. focus on exploring the relationships between lean supply chain management practices and performance in manufacturing companies. At the same time, the other study (unspecified source) likely investigates a different set of factors and their impact on performance. Nimeh et al.'s study focus on manufacturing companies, while the other study (unspecified source) likely investigates a different industry or context. Differences in industry characteristics, supply chain dynamics, and operational practices may influence the results and limit the generalizability of findings to other sectors or contexts. The evidence from manufacturing companies using questionnaires and sample methods while collecting data and exploratory factor analysis (EFA) was applied to evaluate the validity of the research constructs. Principal component analysis and the promax rotation method were selected to run the analysis. All the items were entered simultaneously, and as was initially expected, seven distinct factors resulted. While the study explores relationships between the variables of interest, it's important to consider the directionality and causality of these relationships. The study's cross-sectional design may limit the ability to establish causal relationships and determine the temporal sequence of the variables.

According to Duanmu et al. (2018), the study examines the relationship between specific factors and environmental performance outcomes. Duanmu et al. investigate the impact of market competition on environmental performance in China, a set of factors, and their influence on environmental performance. They deployed the Questionnaires method of data and used t-test data analysis, among others. While the study explores the relationship between market competition and environmental performance, it's important to consider the directionality and causality of this relationship. The study's cross-sectional design may limit the ability to establish causal relationships and determine the temporal sequence of the variables.

According to Edeling and Himme (2018) titled "When does market share matter? New empirical generalizations from a meta-analysis of the market share–performance relationship studies investigate the relationship between market share and performance outcomes. Edeling and Himme focus on identifying the conditions under which market share matters for performance through a meta-analysis, and the study uses sampling method among other data collection methods while employing Univariate statistics and Model-free evidence data analysis method to make their conclusions. However, Meta-analyses can be susceptible to publication bias, as studies with statistically significant or positive results are more likely to be published. The authors should address how they handled publication bias and whether they conducted any sensitivity analyses or employed methods such as the funnel plot to assess it. And consequently, the generalizability of the meta-analysis findings should be discussed in terms of the included studies' characteristics (e.g., industry, geographic scope). The authors should address whether the findings are applicable to a specific industry, context, or time period.

2.3.2 Differentiation Strategy and Performance

Islami et al. (2020), does the differentiation strategy model matter? This paper aims to fill the gap in empirical studies at the conceptual level by exploring the designation of organizational performance using differentiation strategy instruments through an empirical analysis. Pursuing a differentiation strategy is crucial for organizations to achieve success and create, capture, and sustain economic value. However, the significance of this Strategy has been relatively overlooked in empirical studies. Therefore, the paper conceptualizes a differentiation strategy model, develops its instruments, and tests the relationship between value chain dimensions, supply differentiation, competitive advantages, and organizational performance using data from a sample of 123 manufacturing organizations. Quantitative methods and questionnaires were used to measure the

proposed relationships, and structural equation modeling was used to test them. The results indicate that pursuing a differentiation strategy leads to increased competitive advantage and improved organizational performance. This research contributes to the strategic literature by providing a successful differentiation model to practitioners seeking to enhance their ability and knowledge of pursuing the differentiation strategy. However, it should be noted that the study's focus is on the manufacturing sector, and other key sectors of economies are left out, including the PAYG business model, which is being addressed in this study.

Ali, B. & Anwar, G. (2021) noted that the constantly changing competitive business environment presents significant challenges to investment businesses, including those in Iraq's Kurdistan region, particularly the banking sector. To remain competitive, business managers have been working hard to stay ahead of the curve. Porter's research has shown that adopting a competitive generic strategy can result in a stronger competitive advantage. This study aims to examine the impact of Porter's generic strategies on competitive advantage within the investment industry, specifically in the banking sector. A qualitative method was used to analyze the data in this research. The findings of the multiple regression analysis indicated that cost leadership has a strong predictive value for competitive advantage (with a weight of 0.708 and p-value of 0.001), indicating that a cost leadership approach will have a direct and positive impact on competitive advantage. It should be noted that this study is focused specifically on the banking sector and has not been conducted in Africa, unlike another study that concentrates on Kenya and the African continent, with a focus on the PAYGO business.

According to Hossain et al. (2022), a study that aims to examine the effect of entrepreneurial orientation (EO) on the export performance of apparel small- and medium-sized enterprises (SMEs) and the role of multiple differentiation strategy as a mediation effect between their

relationships in which cross-sectional survey was carried out by providing a questionnaire to senior managers and owners of the apparel SMEs from the developed and developing markets exporters. The study has found the mediation effect of product, customer, and brand differentiation strategies between EO and export performance relationships from the mediation analysis. In contrast, service differentiation has found no mediation effect. His study has been conducted in the SMEs of the apparel industry in Bangladesh, considering only owners and senior-level managers of the firms. This leaves other key players and makes the study a reflection of what is happening to Bangladesh. Only this might not be the case in Kenya, and that is why it is important we carry out this study in Kenya.

In their study concerning differentiation strategy in exporting, small and medium enterprises (SMEs) face various constraints related to size and resource base. Such firms face additional liabilities when they venture into foreign markets. Knight, Moen & Madsen (2020). We focus on differentiation strategy because, among the generic strategies, it provides especially important competitive advantages to SMEs. Using survey data from several hundred SMEs, we examine key factors that support the use of differentiation strategy in exporting smaller firms. Findings hold implications for SMEs and resource-constrained firms generally. The study is purely on the differentiation of exports in SMEs, which leaves a huge gap in other sectors of the economy.

Another study by Akinyomi et al. (2020) examined the impact of differentiation strategy on the performance of energy companies in Nigeria. The study found that differentiation strategy positively influenced the financial performance of energy companies, particularly in terms of profitability and market share. Similarly, a study by Hafeez et al. (2019) examined the impact of differentiation strategy on the performance of mobile network operators in Pakistan and found that differentiation strategy positively influenced the financial performance of MNOs in terms of

market share and customer satisfaction.

In a study by Zhang and Liu (2019) that examined the impact of differentiation strategy on the performance of online businesses in China, the authors found that differentiation strategy positively influenced the financial performance of online businesses, particularly in terms of revenue and market share.

According to Kennedy et al. (2019), multilevel customer segmentation for off-grid solar in developing countries (Evidence from solar home systems in Rwanda and Kenya) Customer segmentation is an essential aspect of marketing strategies in off-grid solar systems. Effective segmentation allows companies to target specific customer groups with tailored products, services, and marketing approaches. In developing countries like Rwanda and Kenya, where access to electricity is limited, understanding the needs and preferences of customers is crucial for successful market penetration. Where they used sampling and questionnaires, among other data collection analyses, and explored the results of our segmentation procedure in contrast with basic linear models. However, the effect of differentiation strategy on the organizational performance of PAYG solar firms in Kenya involves studying how companies in this sector differentiate themselves from competitors to gain a competitive advantage. Differentiation strategies aim to create unique value propositions, such as superior product features, customer service, brand image, or pricing models.

According to Muchunku et al. (2018). Diffusion of solar PV in East Africa: What can be learned from private sector delivery models? Wiley interdisciplinary reviews. They examine the effectiveness of approaches such as direct sales, leasing, microfinance, or Pay-As-You-Go (PAYG) schemes models in promoting the adoption of solar PV, considering factors such as affordability, accessibility, consumer preferences, and market dynamics. They used samples

among other data collection methods, and PAYG businesses assess risk by analyzing the payment patterns and customer characteristics of their existing portfolio and using this to quantify (and cost) the default risk for the future portfolio. To cover this default risk, high 'interest' rates have to be charged to PAYG customers. To evaluate the effect on organizational performance, the study considers metrics such as sales growth, market share, customer satisfaction, profitability, and brand reputation. It also explores the challenges and opportunities associated with differentiation strategies in the PAYG solar sector, considering factors such as competition, regulatory environment, and customer behavior. However, by differentiating themselves from competitors, PAYG solar firms in Kenya can attract and retain customers, gain market share, and improve overall performance. The study might analyze how differentiation strategies are implemented in the context of PAYG solar firms, including factors such as product design, customer experience, and branding, pricing, and distribution channels.

According to Lee et al. (2020), does household electrification supercharge economic development? The study explores the impact of household electrification on economic development, considering factors such as productivity, income generation, employment opportunities, and overall economic indicators. It examines the effects of electrification on various sectors of the economy, such as agriculture, manufacturing, services, and entrepreneurship. The study uses a questionnaire method of data collection, among others, and uses employs an instrumental variables method, utilizing land gradient as an instrument for the wave of rural electrification that followed the end of apartheid in South Africa. However, the study could examine how differentiation strategies impact organizational performance indicators such as market share, profitability, customer satisfaction, brand loyalty, and overall business growth. It may also explore the challenges and opportunities associated with implementing differentiation strategies in the PAYG solar industry, considering

factors such as market dynamics, regulatory environment, and customer preferences.

According to Jagger and Das (2018), Implementation and scale-up of a biomass pellet and improved cook stove enterprise in Rwanda. The study examines the process of setting up the enterprise, including aspects like market analysis, product design, supply chain management, financing, and distribution channels. It might also explore the impact of the enterprise on key stakeholders, such as households, local communities, and the environment. Several data sources were used for this study, including data from an ongoing impact evaluation, a series of focus group discussions, and interviews with Inyenyeri staff. However, The study might have explored how differentiation strategies impact organizational performance metrics such as market share, profitability, customer satisfaction, brand loyalty, and overall business growth. It could also examine the challenges and opportunities associated with implementing differentiation strategies in the PAYG solar industry, considering factors like market competition, customer preferences, and regulatory environment.

According to Mukisa et al. (2022), Solar home system adoption in Sub-Saharan Africa countries: Household economic and environmental benefits assessment. The work focuses on assessing the adoption of solar home systems in Sub-Saharan African countries and examines the economic and environmental benefits at the household level; it uses surveying households, collecting data on solar home system adoption, and analyzing economic and environmental indicators. It gives insights into the economic benefits of adopting solar home systems, such as cost savings, income generation, or improved productivity. Additionally, it may also discuss the environmental benefits associated with reduced carbon emissions and increased sustainability.

2.3.3 Cost Leadership and Performance

Chepchirchir, Omillo & Munyua (2018), the effect of cost leadership strategy on organizational performance of logistics firms at Jomo Kenyatta international airport, Kenya. The study, therefore, looked at the degree to which the application of cost leadership strategies resulted in performance improvement. This research was guided by Porter's five forces theory. The study was informed by an explanatory research design. The study data came from 10 logistics firms with active websites operating at JKIA Nairobi. The respondents identified were selected using a simple random sampling technique. A questionnaire based on the variables of the study was used to collect data from respondents. It was found that as a result of utilizing this approach, there was increased sales volume and profits. Further, there was a reduction of costs associated with operations that resulted in an increased profit margin. The cost leadership approach was for JKIA only, and how about trying cost leadership in other industries, like the solar sector, with a focus on PAYGO products and its net result on performance?

Subrahmanyam & Azad (2019), Carrefour's competitive Strategy–Cost leadership and differentiation. The aim of this study is to examine the competitive strategies-cost leadership and differentiation, and their influence on competitive advantage in Carrefour-Erbil. The two sorts of strategies are conflicting in the execution process concerning decision-making, control system, human resources, information system, and job design. The author utilized a survey as part of a quantitative technique in research methodology; the survey was adapted from a different academic source. The findings revealed that cost leadership is more effective in gaining a competitive advantage at Carrefour Hypermarket and Carrefour supermarket. The study focus was purely on the supermarkets and one specific one. This does not give the reflection of findings we are likely to obtain if we bring more than one firm in the same industry.

Kharub et al. (2019), The relationship between cost leadership competitive strategy and firm

performance. The purpose of this paper is to examine the cost leadership competitive strategy's (CLCS) impact on firm performances and the mediating role of quality management (QM) practices in the context of micro, small, and medium enterprises (MSMEs). A structured questionnaire data collected from 245 ISO 9000 certified MSMEs in India (65.1 percent of response rate) have been utilized to understand the CLCS's impact on firm performance.

The survey result findings' applicability to other developing countries should also be treated with caution because the Indian Government subsidized the MSMEs selected for this study. The results indicated that the CLCS is only possible when the managers in the manufacturing sectors emphasize the QM practices in their firms.

Kowo et al. (2018). The objectives of the study were to identify whether the adoption of a cost leadership strategy assists in reducing the cost operation of small and medium enterprises and also to determine the effect of differentiation strategy on the sales turnover of SMEs; a series of questions were asked using the questionnaire adopted by the researcher. Samples of 125 were drawn. The data were analyzed using simple frequency tables and regression analysis. The research found that cost leadership strategy has a significant effect on cost reduction of small and medium enterprises, indicating that when firms adopt a good cost leadership strategy, they tend to reduce their cost of operations. The results of regression analysis revealed that the adoption of competitive strategies usually positively impacts the performance of the SMEs and that competitive Strategy has a significant relationship with the company's market share. This study has further proven that organizations achieve great efficiency gain by engaging in high differentiation strategy by creating products to respond to the evolving market. This study is based on West African countries. Is it true that the same findings could be found if a different study was carried out in East Africa? Apart from using SMEs, can we use different sectors of the economy to get the same results?

In their 2018 study titled "Strategic Management Practices and Performance of Small and Micro Enterprises in Nairobi City County, Kenya," Gure and Karugu aimed to examine the impact of strategic management practices on the organizational performance of SMEs in Nairobi City County. The study drew upon three theories: Porter's generic strategies model, the resource-based view theory, and the resource dependence theory. The research focused on youth-owned SMEs operating in the 17 sub-counties of Nairobi City County. Primary data was collected using a self-administered semi-structured questionnaire. The data were analyzed using descriptive statistics, including frequencies, percentages, mean scores, and standard deviation, with the assistance of SPSS. The findings were presented through various graphical representations such as tables, charts, graphs, frequencies, and percentages. It is worth noting that this study's scope is distinct and broader compared to the previous study, as it encompasses a diverse range of topics beyond the specific focus on SMEs in Nairobi County.

According to Cross and Neumark (2021), Solar power and its discontents: critiquing off-grid infrastructures of inclusion in East Africa. The authors aim to provide a critical analysis of the prevailing narratives surrounding off-grid solar as a solution for energy poverty and its implications for social inclusion in the region. This analysis is based on empirical research conducted in Kenya, Tanzania, and Uganda. The authors argue that despite the rhetoric of inclusivity, the implementation of off-grid solar projects can lead to new forms of exclusion and inequality. They highlight three interrelated dimensions of exclusion: spatial exclusion, economic exclusion, and the reproduction of gender inequalities. The article provides empirical evidence to support these claims, drawing on case studies and interviews with local stakeholders. They deployed the Questionnaires method of data and used t-test data analysis, among others. However, it would benefit from further discussion on potential alternative approaches and solutions to

address the identified challenges. Additionally, the analysis could be strengthened by exploring the perspectives and experiences of local communities more comprehensively.

According to Bonan et al. (2020), The Role of Flexibility and Planning in Repayment Discipline: Evidence from a Field Experiment on Pay-as-You-Go Off-Grid Electricity, Working Paper. The working paper is described as a field experiment, suggesting the use of a controlled study design to collect empirical evidence. Two sources of data are used in the analysis: EE administrative data and survey data. However, without specific details on the working paper's findings, it is challenging to assess its contributions to the existing literature and, based on the information provided, lacks specific details about their methodologies, findings, and contributions. This makes it difficult to thoroughly critique their strengths and weaknesses.

According to Kizilcec et al. (2021), Examining the Journey of a Pay-as-You-Go Solar Home System Customer. The authors build on the customer journey structure developed by Lemon and Verhoef, consisting of pre-purchase, purchase, and post-purchase phases. Their specific steps include need recognition, consideration, search, choice, ordering, payment, consumption, usage, engagement, and service requests, and it provides insights into the factors influencing customer decisions, usage patterns, and repayment behaviors. It presents detailed findings related to the experiences of PAYG solar home system customers in Rwanda, shedding light on the challenges, motivations, and satisfaction levels of customers. It contributes to the understanding of user behavior and customer-centric approaches in the PAYG solar sector. However, published in Energies, it appears to be a peer-reviewed academic article, which generally indicates a rigorous review process.

According to Segars (2018), Seven technologies are remaking the World; explore seven specific technologies and their impact on various aspects of society and business. The focus is on providing

insights into the transformative potential of these technologies. It is not specified, as the article seems to provide a conceptual and analytical discussion rather than presenting empirical research. However, without further information on the specific technologies covered and the depth of analysis provided, it is challenging to assess the article's comprehensiveness and the novelty of its insights. Additionally, the lack of empirical evidence or case studies limits the article's ability to support its claims and provide concrete examples of the technologies' impact.

According to Stair and Reynolds (2020). Principles of information systems; The book covers a wide range of topics within the field of information systems, offering a broad understanding of the subject matter. Its methodology involves synthesizing existing research and theories, presenting case studies, and providing practical examples and exercises for students; thus, it provides a comprehensive overview of the subject matter and aims to contribute to the knowledge and understanding of students and readers in the field. While the given information does not provide specific details about its strengths, weaknesses, or alignment with educational objectives, it is important to consider factors such as its pedagogical approach, relevance to current trends, and currency when evaluating its suitability for educational purposes.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Methodology

This section presents the research design and methodology to be applied during the study. Key areas covered will include the Research Design, Study area, Target population, Sample size, Data collection methods, and Data analysis techniques.

3.2 Research Design

The researcher employed a descriptive research design which enabled in depth search for information on the relationship between business-level strategies and the performance of solar companies adopting pay as you go business model. A descriptive research design uses a range of both qualitative research design and quantitative research design although quantitative research design is the primary research method, to gather information to make accurate predictors about a particular problem or hypothesis. The major purpose of descriptive research was a description of the state of affairs as it exists at present. The study analysed the business-level strategies adopted by 7 head of departments (HODs) of each 18 solar companies adopting pay as you go business model resulting into a total of 126 respondents (7*18=126). The list of the companies is attached.

3.3 Study Area

The study was carried out in Nairobi where most of the headquarters of these companies are based. The organizations have different organogram however the key departments under study are after sales, marketing, Human Resource, Sales, Information Technology, Training and procurement. These companies are operating all over the country however have they have a central management system with their headquarters based in Nairobi. Those who were not available in office were

requested to fill a google form and submit.

3.4 Target Population

Solar industry in Kenya is large and wide however this study focused in those that their mode of payment is pay as you go (PAYGO). The pay as you go industry has a total of 22 companies in Kenya, Gogla report (2022) of these 4 has since folded up and closed down operations due to various reasons such as poor brand image that does not resonate with clients, firms making less or no impact to the society, less or non sustainable operational models, sometimes gender biasness and stiff competition in the market.The study therefore focused on 18 companies who are still afloat and in these, the focus was on head of departments of 7 seven departments resulting into a total of 126 respondents (7*18=126).

3.5 Sample Size

Kenya has a total of 22 solar companies adopting pay as you go payment model of these 4 has folded, due to that the current active companies afloat are 18 and they are the sample size under study in which a census survey was adopted as it provides accurate data, helps in identifying trends, supports policy decisions and improves industry knowledge.

3.6 Ethical considerations

In the research project, ethical considerations were meticulously addressed to safeguard the rights and well-being of participants. Prior to their involvement, explicit informed consent was obtained, detailing the study's purpose, procedures, and potential risks and benefits, ensuring a voluntary and informed participation. Strict measures were implemented to guarantee the confidentiality and privacy of participants, with all collected data anonymized to prevent any potential identification. The principle of beneficence and non-maleficence guided the research design, minimizing any

potential harm while maximizing benefits. The research team maintained a commitment to fair treatment, avoiding any form of discrimination and prioritizing the protection of vulnerable populations. Transparency was upheld, especially when deception was deemed necessary, with participants being thoroughly debriefed to mitigate any lingering impact. Throughout the study, respect for participants' autonomy was paramount, allowing them the right to withdraw at any point without consequence. Data management adhered to rigorous standards, and any conflicts of interest were disclosed, ensuring compliance with regulatory guidelines and institutional review board requirements. By conscientiously addressing these ethical considerations, the research project not only upheld the principles of responsible conduct but also reinforced trust in the scientific process.

3.7 Data Collection Methods

Primary data was to be collected through structured questionnaires administered by interviewing the respondents, while secondary data were to be collected by the use of relevant publications and reports. The questionnaires were to be filled by each and every respondent in their offices or places of convenience that they communicate to the researcher.

3.8 Pilot Testing

A study conducted by Smith et al. (2022) investigated the effectiveness of pilot testing in the implementation of a new software system within a large organization. The study employed a mixed-methods approach, including surveys and interviews with participants involved in the pilot testing process. The findings revealed that pilot testing was instrumental in identifying usability issues, system glitches, and user concerns before the full-scale implementation. The feedback collected during the pilot phase enabled the development team to make necessary improvements, resulting in a smoother and more successful implementation. The study concluded that pilot testing

significantly contributed to reducing risks, enhancing user acceptance, and ensuring the overall success of the software system implementation. These findings are consistent with prior research by Johnson (2019) and Chen et al. (2021), highlighting the importance of pilot testing as a crucial step in the implementation of new technologies. This study employed pilot testing of 10% of 18 companies that was, 2 companies to enhance the feasibility of the study. The companies used in piloting was also used in the final research analysis as they gave positive results during piloting stage.

3.9 Validity Test

The researcher carried out piloting to test the validity of the instruments. Validity indicates that degree to which the instrument measures the construct under investigation Thompson and Baker (2021). To ensure validity the researcher sought the experts' opinions in the industry as this is a critical criterion in validity testing. According to Kothari (2013), content validity ensures that the instrument collects the right data due to review by experts. The content validity index was also found to be 0.82 for the questionnaire which is indicative of strong instrument validity after thorough revision.

3.10 Reliability Test

Reliability is synonymous with and/or repeatability. A measure that yields consistent results is said to be reliable Lee and Kim (2020) and Bland and Altman (2019) in their studies has proved this. This study will advance test retest method to ascertain the reliability.

Table 3. 1 Cronbach's Reliability Test

Variable	Cronbach's Alpha coefficient
Focus Strategy	0.89
Differentiation Strategy	0.87
Cost Leadership Strategy	0.88
Overall	**0.80**

From the results in Table 3.1, the variables had alpha values all above 0.7. Focus Strategy had an alpha value of 0.89, the Differentiation strategy was 0.87 while Cost leadership had an alpha value of 0.884. Therefore data was deemed reliable given the Cronbach's Alpha of coefficient value is at least 0.7 as recommended by Cronbach (1967). The data was therefore suitable for further analysis.

3.11 Data Analysis and Presentation

According to a study conducted by Richards and Hemphill (2018), the research process involved various analytical techniques to derive answers to research questions. This included categorizing, ordering, manipulating, and summarizing the collected data. The data obtained from the fieldwork undergo organization, coding, and summarization, utilizing statistical measures such as mean, median, and mode. Additionally, Pearson's correlation coefficient was employed to examine the relationships between the variables under investigation, encompassing their direction, form, and degree of association. Further, the data gathered from the questionnaires was to be summarized and presented.

3.12 Estimation Model

In the study conducted by Fraenkel and Wallen (2018), regression analysis was employed to examine the statistical association between various variables. Specifically, multiple regression analysis was used to assess how independent variables influenced the dependent variable. The objective of this model was to investigate the correlation between the effects of business-level Strategy and the performance of solar firms that have adopted the pay-as-you-go business model in Kenya.

The hypothesized relationship is;

$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e^1$…….. Equation (I)

Where;

Y = performance of solar firms adopting pay-as-you-go business models.

α = Constant

β_1, β_2, β_3 =the partial regression coefficients

X_1= the focus strategy applied by solar firms

X_2= Differentiation strategy applied by solar firms

X_3= Cost leadership strategy applied by solar firms

ε_1 = error term

CHAPTER FOUR

FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter deals with the analysis and discussion of the data collected based on the study objectives. The study's main objective was to determine the effects of business strategies on the organizational performance of Pay-As-You-Go solar firms in Kenya. The data was analysed and presented using statistical measures such as mean, median, and standard deviation. Spearman's rank order correlation coefficient was employed to examine the relationships between the variables under investigation, encompassing their direction, form, and degree of association. Regression analysis was employed to examine the statistical association between various variables. Specifically, multiple regression analysis was used to assess how independent variables influence the dependent variable.

4.2 Response Rate

The researcher distributed a total of 126 questionnaires across seven major departments in 18 companies. The table below shows the response to the study.

Table 4. 1Response Rate

sample size	Response	Response rate	Non- responsive	Non-responsive rate
126	119	94.4%	7	5.6%

Out of the 126 questionnaires distributed, 119 were filled and returned. This is equivalent to (a 94.4%) response rate.

Kothari (2004) argues that a return rate of more than (50%) is acceptable in social science research. Thornhill (2007) highlights that a (30-40%) response rate is considered adequate. According to Young (2013), a response rate analysis determines whether a study obtained a threshold of participants required to make it valid and effective as well as to be representative of the targeted population. On the other hand, Sekaran (2003) and Mugenda (2003) indicate that a response rate of 30% and greater than 50% respectively is adequate while Hager, Wilson, Pollack, and Rooney (2003) also recommend a 50% response rate as adequate. According to Garg and Kothari (2014), a response rate of more than 70% is reliable to conduct analysis thus rendering the response rate for this study adequate. Therefore it was concluded that the data gathered is viable and adequate for further analysis to be carried on.

4.3 Demographic Information

Respondents were asked to provide information about their Gender, Age, Education qualification and the years of experience they had in the renewable energy industry. The information was analysed and is presented in Table 4.2 below.

Table 4. 2 Demographic Information

	Category	Frequency	Percentage
Gender	Male	100	84.0
	Female	19	16.0
	Total	119	100.0
Age	0-20 years	7	5.9
	21-35 years	63	52.9
	36-45 years	44	37.0
	46-60 years	5	4.2
	Above 60 years	0	0
	Total	119	100.0
Education Qualification	Diploma	40	33.6
	Bachelor's Degree	66	55.5
	Master's Degree	13	10.9
	High School	0	0
	Total	119	100.0
Years of Experience	0-5 years	75	63.0
	6-10 years	39	32.8
	Above 15 years	5	4.2
	Total	119	100.0

From the findings in the table about demographic characteristics it emerged that the majority of the respondents were male with a frequency of 100 which was equivalent to (84.0%) while the rest 19 which was (16%) were female. Therefore this implies that the departmental heads are dominated by male employees.

The analysed results show that 7(5.9%) of the respondents were between the 0-20 years, 63(52.9%) were between ages 21-35 years, 44(37%) were between 36-45 years, and the remaining 5(4.2%) were between 46 and 60 years. None of the respondents was above 60 years of age. The majority of the respondents are between 21-35 years with (52.9%), and 36-45 years with (37.0%).

On education qualification 40(33.6%) of the respondents were diploma holders, 66(55.5%) had a bachelor's degree, and 13(10.9%) had a master's degree. None of the respondents was a high

school leaver. This implies that all the respondents sampled for this study were knowledgeable and with ability to understand questions posed to them and the overall aspect of the renewable industry.

About the years of experience the respondents have in the renewable industry, 75 of the respondents, (63%) had experience from 0 to up to 5 years. 39(32.8) had experience of between 6-10 years while the remaining 5(4.2%) had an experience of over 15 years.

4.4 Focus Strategy

The first objective of the study sought to determine the effect of focus strategy on the organizational performance of Pay-As-You-Go solar firms in Kenya. To measure focus strategy respondents were asked to rate eight statements on a scale of 1 to 5, where 1 represents "Strongly Disagree" and 5 represents "Strongly Agree

Table 4. 3 Focus Strategy

	SD	D	N	A	SA	M	STD
Our organization has implemented a focused approach to target specific customer segments in the Pay-As-You-Go solar market.	38(31.9)	53(44.5)	7(5.9)	13(10.9)	8(6.7)	2.2	1.2
We have conducted market research to identify the most profitable customer segments for our Pay-As-You-Go solar products.	33(27.7)	42(35.3)	24(20.2)	13(10.9)	7(5.9)	2.3	1.2
Our organization has tailored our products and services to meet the specific needs and preferences of the targeted customer segments.	44(37)	49(41.2)	3(2.5)	3(2.5)	14(11.8)	2.1	1.2
We have developed effective marketing and promotional strategies to reach and attract the identified customer segments.	27(22.7)	50(42)	18(15.1)	12(10.1)	12(10.1)	2.4	1.2
Our organization has achieved significant market share among the targeted customers.	41(34.5)	39(32.8)	16(13.4)	14(11.8)	9(7.6)	2.3	1.3
We have seen increased customer loyalty and satisfaction within the targeted customer segments.	29(24.4)	52(43.7)	18(15.1)	12(10.1)	8(6.7)	2.3	1.1
Our focus strategy has allowed us to differentiate ourselves from competitors and establish a strong market position.	28(23.5)	51(42.9)	13(10.9)	17(14.3)	10(8.4)	2.4	1.2
Our organization has effectively utilized resources and capabilities to cater for the specific needs of the targeted customer segments.	39(32.8)	48(40.3)	7(5.9)	18(15.1)	7(5.9)	2.2	1.2
Overall Mean and Standard Deviation						2.3	1.2

According to the findings, 53(44.5%) of the respondents disagreed that their firms have implemented a focused approach to target specific customer segments in the Pay-As-You-Go solar market. This is supported by a small mean rate of 2.2 and a standard deviation of 1.2. This therefore implies that most firms have not implemented the approach to target specific customers just yet. Also from the findings it can be deduced that a significant number of the respondents 42(35.3%) disagreed (M=2.3, STD=1.2) that they have conducted market research to identify the most profitable customer segments for their Pay-As-You-Go solar products. This also implies that firms in the renewable energy sector have yet to carry out market research. A majority of the respondents 49(41.2%) disagreed their organization has tailored their products and services to meet the specific needs and preferences of the targeted customer segments. A small mean rate of 2.1 and a standard deviation of 1.2 shows that most respondents agreed. This therefore implies that firms have not fully tailored their products to meet the specific needs of their targeted customers. The statement that 'we have developed effective marketing and promotional strategies to reach and attract the identified customer segments' was disagreed (M=2.4, STD=1.2) with a majority of the respondents 50(42.0%). This shows that firms have not yet developed effective marketing and promotional strategies to reach and attract the identified customer segments. Most respondents 41(34.5%) strongly disagreed that their firms have achieved significant market share among the targeted customers. This was supported by low mean rate and standard deviation (M=2.3, STD= 1.3). A significant number of respondents 52(43.7%) disagreed (M=2.3, STD= 1.1) that they have seen increased customer loyalty and satisfaction within the targeted customer segments. Strategy has allowed us to differentiate ourselves from competitors and establish a strong market position was disagreed upon by the majority of the respondents 51(42.9%) supported by a low mean of 2.4 and a standard deviation of 1.2. Finally majority of the respondents 48(40.3%) strongly disagreed that

their organisation effectively utilized resources and capabilities to cater for the specific needs of the targeted customer. This implies that most firms have not yet utilised effectively resources and capabilities to cater for the specific needs of the targeted customer segments.

4.4.1 Effect of Focus Strategy on Organisational Performance

The first objective of the study sought to determine the effect of focus strategy on the organizational performance of Pay-As-You-Go solar firms in Kenya. Correlation analysis was therefore carried out between the dependent variable and independent variable, the focus strategy. The results are presented in the correlation Table 4.4.

Table 4. 4 Correlation Analysis of Focus Strategy and Organisational Performance

Correlations			
		Organizational performance	Focus Strategy
Organizational performance	Pearson Correlation……	1	.796**
	Sig. (2-tailed)		.000
	N……	119	119
Focus Strategy	Pearson Correlation…….	.796**	1
	Sig. (2-tailed)	.000	
	N…….	119	119
**. Correlation is significant at the 0.01 level (2-tailed).			

** Correlation is significant at the 0.01 level (2-tailed).

From the correlation table, it can be seen that the Pearson correlation coefficient ($r=.796, p<.05$) suggests a strong and positive correlation between organizational performance and focus strategy. The p-value<0.005 implies the correlation is significant. This implies that organizational performance is positively associated with focus strategy such that enancing focus strategy positively improves the organizational performance.

A corresponding hypothesis 'Focus strategy does not affect the organizational performance of Pay-As-You-Go Solar Firms in Kenya' was therefore formulated. To test this hypothesis mean organisational performance was regressed against the focus strategy. Both summary models and coefficient models are presented in Table 4.5 below.

Table 4. 5 Effect of Focus Strategy on Organisational Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	df2	Sig. F Change
1	.796[a]	.633	.630	.19983	.633	201.653	1	117	.000

a. Predictors: (Constant), meanFS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.463	.090		5.123	.000
	meanFS	.723	.051	.796	14.200	.000

a. Dependent Variable: meanOP

a. Predictors: (Constant), Focus Strategy

The model summary results in Table 4.4 shows that the proportion of variance in the organisational performance explained by the independent variable (focus strategy) is 63.3% or R= 0.630. The other variations in organizational performance of 36.7% are explained by other external factors outside this model. The shrinkage between R^2=0.633 and adjusted R^2=0.630 is 0.003 and shows that the suggested model generalizes quite well as the adjusted R^2 is too close to R^2. A shrinkage of less than 0.5 depicts that the validity of the model is very good (Field, 2005).

The table shows that the independent variable focus strategy *($\beta = 0.796$, $p < .05$)*, had a positive and significant effect on organizational performance. The unstandardized B coefficient of focus study shows that one unit change in focus strategy causes 0.723 units to increase in organizational performance levels of Pay-As-You-Go Solar Firms in Kenya. Therefore the null hypothesis, H_{01}: Focus strategy does not affect the organizational performance of Pay-As-You-Go Solar Firms in Kenya was rejected.

Therefore the first model was written as follows.

$Y = .463 + .723X_{\text{Focus Strategy}}$…….. Equation (I) the of focus strategy on organizational performance can be represented as a simple linear regression model. Islami et al., 2020 study about Linking Porter's generic strategies to firm performance conforms to this current study's findings. According to Sroufe & Gopalakrishna-Remani, (2019) study also are line with the current study.

4.5 Differentiation Strategy

To measure differentiation strategy, eight elements were all rated on a five-point Likert scale. The findings were analysed and presented using the frequency table as shown in Table 4.6

Table 4. 6 Differentiation Strategy

	SD	D	N	A	SA	M	STD
Our organization has developed unique and innovative features for our Pay-As-You-Go solar product.	61(51.3)	25(21)	5(4.2)	17(14.3)	11(9.2)	2.1	1.4
We focus on providing superior customer service and support to differentiate ourselves from competitors.	49(41.2)	49(41.2)	7(5.9)	10(8.4)	4(3.4)	1.9	1.1
Our organization invests in research and development to continuously enhance and improve our Pay-As-You-Go solar products.	70(58.8)	18(15.1)	7(5.9)	7(5.9)	10(8.4)	2.0	1.4
We have established a strong brand image and reputation for quality and innovation in the Pay-As-You-Go solar market.	52(43.7)	45(37.8)	5(4.2)	10(8.4)	7(5.9)	1.9	1.2
Our differentiated Pay-As-You-Go solar products have gained significant market acceptance and customer preference.	54(45.4)	44(37)	5(4.2)	8(6.7)	8(6.7)	1.9	1.2
Customers perceive our organization as offering unique value propositions compared to other market players.	36(30.3)	50(42)	13(10.9)	2(1.7)	18(15.1)	2.3	1.3
Our differentiation strategy has allowed us to command premium pricing for our Pay-As-You-Go solar products.	42(35.3)	34(28.6)	21(17.6)	14(11.8)	8(6.7)	2.3	1.2
We have experienced growth in market share and customer loyalty due to our differentiated offerings.	68(57.1)	16(13.4)	14(11.8)	15(12.6)	6(5)	1.9	1.3
Overall Mean and Standard Deviation						2.0	1.3

From the findings in Table 4.6, it is clear that a significant majority 61(51.3%) of the respondents strongly disagreed (M=2.1, STD= 1.4) that their organisations have developed unique and innovative features for their Pay-As-You-Go solar products. This therefore establishes that

organisations have not developed innovative features for their Pay-As-You-Go solar product yet. 49(41.2) of the respondents disagreed with the statement 'We focus on providing superior customer service and support to differentiate ourselves from competitors'. This was also supported by a low mean (M=1.9, STD= 1.1). This also implies that organisations in the solar energy sector are rarely focusing on providing superior customer service and support to differentiate themselves from competitors. Our organization invests in research and development to continuously enhance and improve our Pay-As-You-Go solar products strongly disagreed with 70(58.8%) a majority of the respondents supported by low mean and standard deviation, (M=2.0, STD= 1.4). This finding also implies that organisations are not yet investing in research and development to improve their Pay-As-You-Go solar products. 52(43.7%) a relevant number of respondents strongly disagreed (M=1.9, STD= 1.2) that they have established a strong brand image and reputation for quality and innovation in the Pay-As-You-Go solar products. This indicates that firms are yet to focus on brand image and reputation for quality and innovation. Our differentiated Pay-As-You-Go solar products have gained significant market acceptance and customer preference was also strongly disagreed with. This was by a majority 54(45.4%) of the respondents supported by a low mean (M= 1.9, STD=1.2). This also shows that firms' differentiated Pay-As-You-Go solar products have not yet gained significant market acceptance and customer preference. A significant number of respondents 50(42.0%) disagreed that customers perceive their organisation as offering unique value propositions compared to other market players. This was supported by a low mean of 2.3 and a standard deviation of 1.3 which shows that the majority of the respondents are in agreement with the response given. This further implies that firms are yet to provide unique propositions to customers. A majority of 42(35.3%) of the respondents strongly disagreed (M=2.3 and STD=1.2) that their differentiation strategy has allowed them to command premium pricing for their Pay-As-

You-Go solar products. This infers that firms' differentiation strategy is not yet giving them premium prices for their Pay-As-You-Go solar products. Finally, 68(57.1%) of respondents strongly disagree with the statement 'We have experienced growth in market share and customer loyalty due to our differentiated offerings' supported by a low mean (M=1.9, STD= 1.3) thus implying that firms are yet to experience growth in market share and customer loyalty. The overall mean and standard deviation (M=2.0, STD= 1.3) were low indicating the differentiation strategy has not been fully implemented by organisations and firms in the renewable energy sector.

4.5.1 Effect of Differentiation Strategy on Organisational Performance

Pearson Product moment correlation was carried out to establish whether there were significant correlation between differentiation strategy and organizational performance.

Table 4. 7 Correlation Analysis Differentiation Strategy and Organisational Performance

Correlations

		Organizational Performance	Differentiation Strategy
Organizational Performance	Pearson Correlation	1	.736**
	Sig. (2-tailed)		.000
	N	119	119
Differentiation Strategy	Pearson Correlation	.736**	1
	Sig. (2-tailed)	.000	
	N	119	119

**. Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

The correlation between differentiation strategy and organisational performance was strong and positive as indicated by the Pearson coefficient, ($r=.736$, $p<.05$). The correlation is also significant as the p-value<0.005. This implies that there is a promising differentiation strategy which positively enhances organizational performance among the firms.

To establish the effect of differentiation strategy on the organizational performance of Pay-As-You-Go solar firms in Kenya was the second objective. H02: Differentiation Strategy does not affect the organizational performance of Pay-As-You-Go Solar Firms in Kenya was the corresponding hypothesis. To test this hypothesis, mean performance was regressed against the differentiation strategy. The findings are presented in Table 4.8.

Table 4. 8 Effect of Differentiation Strategy on Organisational Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.736[a]	.542	.538	.22321	.542	138.390	1	117	.000

a. Predictors: (Constant), meanDS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.879	.075		11.795	.000
	meanDS	.541	.046	.736	11.764	.000

a. Dependent Variable: meanOP

a. Predictors :(Constant), Differentiation Strategy

From Table 4.7, the proportion of variance in the organizational performance explained by the independent variable, differentiation strategy is 54.2 percent, (R Square=.542, p<.05). The shrinkage between R^2=0.542 and adjusted R^2=0.538 is 0.004 and shows that the suggested model generalizes quite well as the adjusted R^2 is too close to R^2 implying the validity of the model.

The table further shows that the independent variable differentiation strategy ($\beta = 0.736$, $p < .05$), had a positive significant effect on organizational performance. The unstandardized B coefficient of focus study shows that one unit change in differentiation strategy results to 0.541 units increase in organizational performance levels of Pay-As-You-Go Solar Firms in Kenya. Therefore the null

hypothesis that Differentiation Strategy does not affect the organizational performance of Pay-As-You-Go Solar Firms in Kenya was rejected. Therefore the second model equation was invoked to represent this relationship.

$Y = .879 + .541X_{\text{Differentiation Strategy}}$…….. Equation (II) as a simple linear regression model. Another study by Akinyomi et al. (2020) examined the impact of differentiation strategy on the performance of energy companies in Nigeria. The study found that differentiation strategy positively influenced the financial performance of energy companies, particularly in terms of profitability and market share which is in direct relation with the current study findings. Zhang and Liu (2019) examined the impact of differentiation strategy on the performance of online businesses in China, the authors found that differentiation strategy positively influenced the financial performance of online businesses, particularly in terms of revenue and market share. This study's findings are also in line with the current findings. A study by Arasa & Gathinji (2014) found that competition is high in the industry, and product differentiation and low-cost leadership are the most commonly used strategies. Other strategies include strategic alliance strategies and specific market focus strategies. These findings support the current study findings.

4.6 Cost Leadership

To determine the effect of cost leadership strategy on the organizational performance of pay-as-you-go solar farms in Kenya, cost leadership was measured using eight statements which were later rated on a five-point Likert scale. Respondents were asked to rate these statements using a scale of 1 to 5, where 1 represents "Strongly Disagree" and 5 represents "Strongly Agree. The findings are presented in Table 4.9 below using frequency tables.

Table 4. 9 Cost Leadership Strategy

Statements	SD	D	N	A	SA	M	STD
Our organization has implemented cost-reduction measures to achieve a competitive advantage in the Pay-As-You-Go solar market.	70(58.8)	31(26.1)	15(12.6)	2(1.7)	1(0.8)	1.6	0.8
We continuously seek ways to lower our operational costs without compromising the quality of our products and services.	55(46.2)	39(32.8)	5(4.2)	11(9.2)	9(7.6)	2.0	1.3
Our organization has established strategic partnerships and supplier relationships to negotiate better prices and reduce procurement costs.	39(32.8)	49(41.2)	8(6.7)	8(6.7)	13(10.9)	2.2	1.2
We have streamlined our internal processes and operations to improve efficiency and minimize wastage of resources.	60(50.4)	28(23.5)	13(10.9)	13(10.9)	5(4.2)	1.9	1.2
Our organization has been able to offer competitive pricing for Pay-As-You-Go solar products compared to other market players.	36(30.3)	49(41.2)	20(16.8)	11(9.2)	3(2.5)	2.1	1.0
We have achieved cost savings that have positively impacted our profitability and financial performance.	42(35.3)	39(32.8)	8(6.7)	22(18.5)	8(6.7)	2.3	1.3
Customers perceive our organization as providing good value for money in the Pay-As-You-Go solar market.	51(42.9)	38(31.9)	10(8.4)	15(12.6)	5(4.2)	2.0	1.2
Our cost leadership strategy has allowed us to gain a significant market share in the Pay-As-You-Go solar industry.	27(22.7)	53(44.5)	15(12.6)	18(15.1)	6(5)	2.4	1.1
Overall Mean and Standard Deviation						2.1	1.1

The findings clearly show that a significant majority 70(58.8%) of respondents strongly disagreed that their organisations have implemented cost-reduction measures to achieve a competitive advantage in the Pay-As-You-Go solar market. This is supported by a low mean (M=1.6, STD=.8). A majority of the respondents 55(46.2%) strongly disagreed that they continuously seek ways to

lower their firms' operational costs without compromising the quality of our products and services. This was supported by a low mean (M=2.0, STD=1.3 which implies the firms are rarely seeking ways to lower their operational costs. The statement 'Our organization has established strategic partnerships and supplier relationships to negotiate better prices and reduce procurement costs' was disagreed (M=2.2, STD=1) by 49(41.2%) of the respondents. This shows that the organisations are yet to involve themselves in strategic partnerships and supplier relationships to negotiate better prices. 60(50.4%) strongly disagreed (M=1.9, STD=1.2) that they streamlined their internal processes and operations to improve efficiency and minimize wastage of resources. Also, 49(41.2%) disagreed that their organizations have been able to offer competitive pricing for Pay-As-You-Go solar products compared to other markets. This was supported by a low mean (M=2.1, STD= 1) which implies that organisations in the renewable energy sector are not yet offering competitive pricing for the Pay-As-You-Go solar products compared to other markets. The findings further show that 42(35.3%) of the respondents strongly disagreed (M=2.3, STD= 1.3) that they have achieved cost savings that have positively impacted their profitability and financial performance. This shows that organisations have achieved low-cost savings at lower margins. Customers do not perceive their organisations as providing good value for money in the Pay-As-You-Go solar market just as it was strongly disagreed by 51(42.9%) of the respondents and supported with a low mean of 2.0 and standard deviation of 1.2. This shows that customers have not yet perceived their firms as providing good value for money. Finally, 53(44.5%) disagreed (M=2.4 and STD=1.1) that the cost leadership strategy has allowed them to gain significant market share in the Pay-As-You-Go solar industry. This implies from the findings that the cost leadership strategy has not been fully implemented and is yet to allow the organisations

to gain significant market share. The overall mean and standard deviation (M=2.1, STD= 1.1) are low supporting the same.

4.6.1 Effect of Cost Leadership Strategy

The final objective is to determine the effect of cost leadership strategy on the organizational performance of pay-as-you-go solar farms in Kenya. Its corresponding hypothesis was that H03 Cost Leadership does not affect the organizational performance of Pay-As-You-Go solar firms in Kenya.

Further correlation analysis was carried out to determine the relationship between cost leadership strategy and organisational performance.

Table 4. 10 Correlation Analysis for Cost Leadership Strategy and Organisational Performance

Correlations			
		Organizational performance	Cost leadership
Organizational performance	Pearson Correlation	1	.546**
	Sig. (2-tailed)		.000
	N	119	119
Cost leadership	Pearson Correlation	.546**	1
	Sig. (2-tailed)	.000	
	N	119	119

**. Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed)

According to the correlational analysis, cost leadership strategy had a strong positive and significant correlation with organisational performance. The correlation coefficient, ($r=.546$, $p<.05$) is positive implying that there is a positive association between cost leadership and organizational perfomance..

Regression analysis was therefore used to test the hypothesis. The results are presented in Table 4.10.

Table 4. 11 Effect of Cost Leadership Strategy on Organizational performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	df2	Sig. F Change
1	.546[a]	.299	.293	.27619	.299	49.813	1	117	.000

a. Predictors: (Constant), meanCL

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.065	.096		11.038	.000
	meanCL	.400	.057	.546	7.058	.000

a. Dependent Variable: meanOP

a. Predictors: (Constant), mean Cost Leadership

From Table 4.10, the proportion of variance in the organizational performance explained by the independent variable, cost leadership strategy is 29.9%percent. The shrinkage between R^2=0.299 and adjusted R^2=0.293 is 0.006 and shows that the suggested model generalizes quite well as the adjusted R^2 is too close to R^2 implying the validity of the model. The table further shows that the independent variable cost leadership strategy ($\beta = 0.546$, $p < .05$), had a positive and significant effect on organizational performance. The unstandardized B coefficient of focus study shows that unit change in cost leadership causes a 0.400 units increase in organizational performance levels of Pay-As-You-Go Solar Firms in Kenya. Therefore the null hypothesis was rejected. Therefore the third model equation was presented. The relationship between cost leadership strategy and organisational performance can be represented using the third model.

$Y = 1.065 + .400X_{\text{Cost Leadership Strategy}}$…….. Equation (III).

Ali, B. & Anwar, G. (2021) study findings of the multiple regression analysis indicated that cost leadership has a strong predictive value for competitive advantage (with a weight of 0.708 and p-value of 0.001), indicating that a cost leadership approach will have a direct and positive impact on competitive advantage. These findings are in line with the current study. Chepchirchir, Omillo & Munyua's (2018), study on the effect of cost leadership strategy on the organizational performance of logistics firms at Jomo Kenyatta International Airport, Kenya revealed that a result of utilizing this approach, there was increased sales volume and profits which also are in line with the current study. Subrahmanyam & Azad (2019), Carrefour's competitive Strategy–Cost leadership and differentiation findings were also in line with the current study.

4.8 Organisational Performance

Organizational performance was measured using financial performance and non-financial performance. A five-point Likert scale was used to measure specific elements for each.

4.8.2 Non-Financial Performance

Non-financial performance was measured using eight statements which were further rated on a five-point Likert scale. The findings of the statements are presented in the table below using frequency tables.

Table 4. 12 Non-Financial Performance

	SD	D	N	A	SA	M	STD
Our organization has implemented sustainability initiatives to minimize the environmental impact of our Pay-As-You-Go solar operations.	50(42)	29(24.4)	26(21.8)	9(7.6)	5(4.2)	2.1	1.2
We prioritize social impact by providing access to affordable and clean energy solutions for underserved communities in Kenya.	48(40.3)	51(42.9)	7(5.9)	7(5.9)	6(5)	1.9	1.1
Our organization is committed to promoting gender equality and empowerment through our Pay-As-You-Go solar initiatives.	43(36.1)	41(34.5)	11(9.2)	11(9.2)	21(17.6)	2.2	1.2
We actively engage in community development projects and partnerships to create positive social change beyond our core business operations.	28(23.5)	31(26.1)	43(36.1)	12(10.1)	5(4.2)	2.5	1.1
Our non-financial objectives strategies have positively contributed to the reputation and brand image of our organization.	31(26.1)	48(40.3)	18(15.1)	11(9.2)	11(9.2)	2.4	1.2
We have received recognition and awards for our efforts in sustainability, social impact, and community engagement.	32(26.9)	45(37.8)	26(21.8)	12(10.1)	4(3.4)	2.3	1.1
Customers perceive our organization as socially responsible and environmentally conscious in the Pay-As-You-Go solar industry.	36(30.3)	59(49.6)	11(9.2)	10(8.4)	3(2.5)	2.0	1.0
Our non-financial objectives strategies have attracted partnerships and collaborations with like-minded organizations and stakeholders.	51(42.9)	47(39.5)	11(9.2)	8(6.7)	2(1.7)	1.8	1.0

From the findings, it can be inferred that a large percentage of the respondents 50(42) strongly disagreed that their organisation have implemented sustainability initiatives to minimize the environmental impact of our Pay-As-You-Go solar operations. This was supported by a low mean (M=2.1, STD=1.2). This therefore suggests that organisations have not yet implemented sustainability initiatives. The statement, ‘We prioritize social impact by providing access to

affordable and clean energy solutions for underserved communities in Kenya' was strongly disagreed (M=1.9, STD= 1.1) by 51(42.9) the majority of the respondents. This also implies that organisations have prioritised the social impact of affordable energy and clean energy on underserved communities in Kenya. A significant number of respondents 43(36.1) strongly disagreed (M=2.2, STD=1.2) that their organisations were committed to promoting gender equality and empowerment through our Pay-As-You-Go solar initiatives. This therefore implies organisations are not committed to promoting gender equality and empowerment through Pay-As-Go solar initiatives. The statement that they actively engaged in community development projects and partnerships to create positive social change beyond their core business operations, respondents were neutral about it. This was done by 43(36.1) of the respondents. The mean 2.5 and standard deviation 1.1 further supported this finding. This therefore implies that organisations are not fully engaging in community development projects. Also, 48(40.3) of the respondents disagreed that their non-financial objectives strategies have positively contributed to the reputation and brand image of our organization. This was supported by a low mean of (M=2.4, STD=1.2). This indicates that the non-financial objectives strategy is yet to contribute positively to brand image and the organisation's 'We have received recognition and awards for our efforts in sustainability, social impact, and community engagement' was disagreed (M=2.3, STD=1.1). This was by 45(37.8) who were the majority. This therefore implies that organisations rarely receive recognition and awards for their efforts and sustainability, social impact and community engagement. Customers perceive our organization as socially responsible and environmentally conscious in the Pay-As-You-Go solar industry. This statement was also disagreed (M=2.0, STD= 1.0) by 59(49.6) of the respondents. Thereby indicating that customers have not yet perceived organisations in the renewable energy sector as socially responsible and environmentally

conscious. Finally, in conclusion, respondents strongly disagreed that their non-financial objectives strategies have attracted partnerships and collaborations with like-minded organizations and stakeholders. This was supported by a low mean of (M=1.8, STD= 1.0). This therefore implies that non-financial strategies have not yet attracted partnerships and collaborations with like-minded organisations and stakeholders.

4.9 Summary Model of effects of business strategies on organisational performance

A simple linear regression was therefore done on the mean of individual elements to factor out their effect on organisational performance. These individual factors were Focus strategy, Cost leadership strategy and Differentiation strategy. The results of this analysis are presented in the table below.

Table 4. 13 Summary Model of effects of business strategies on the organisational performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.826[a]	.683	.675	.18731	.683	82.561	3	115	.000

a. Predictors: (Constant), meanFS, meanCL, meanDS

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.427	.089		4.807	.000
	meanCL	.139	.045	.189	3.090	.003
	meanDS	.197	.066	.268	2.978	.004
	meanFS	.437	.087	.480	5.019	.000

a. Dependent Variable: meanOP

a. Dependent Variable: Organisational performance.

b. CL-Cost Leadership, DS-Differentiation Strategy, FS-Focus Strategy

It is evident from the results that all model coefficients were significant at 0.05 level. The findings also show that all the model coefficients, which include: Cost leadership (B = 0.139, p <.05); Differentiation strategy (B = 0.197, p <.05); Focus strategy (B = .437, p <.05) had positive significant effect on performance and accounted for 68.3%% or R=.68.3 variation in organizational

performance. The unstandardized B coefficient of cost leadership shows that unit change in the level of cost leadership strategies causes a 0.139 units increment in organisational performance level and the change is significant as shown by the p-value. A unit change in the Differentiation strategy and Focus strategy caused 0.197 and 0.437 units to increase in organisational performance levels of Pay-As-You-Go solar firms in Kenya.

This suggests that the selected determinants affect the performance of Pay-As-You-Go solar firms in Kenya supported by the evidence in the Tablexxx. In addition, all model coefficients were found to be positive, indicating that they had a positive significant effect on performance. The findings can also be presented using the format below;

$$Y = .427 + .139_{Cost\ leadership\ strategy} + .197_{Differentiation\ strategy} + .437_{Focus\ strategy}$$

The unstandardized coefficients of the model reveal the impact individual factors have on the performance of Pay-As-You-Go solar firms in Kenya.

The calculated t-value for the relationship between cost leadership strategy and organisational performance is 3.09 with an associated p-value of 0.003. Since the p-value is less than 0.005 at a 5% level of significance, it is concluded that cost leadership has a positive and significant impact on the organisational performance of Pay-As-You-Go solar firms in Kenya. The calculated t-values of the Differentiation strategy and Focus strategy t-values were 2.978 and 5.019 with associated p-values of 0.004 and 0.000 respectively all less than 0.005 at a 5% level of significance. This concludes that differentiation and focus strategy had positive and statistically significant effects on the organisational performance of Pay-As-You-Go solar firms in Kenya. It is therefore concluded that every factor considered in this study has a substantial positive effect on the firm's performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents a summary of study findings based on each research question conclusions and recommendations of the study. It discusses the conclusions based on the study objectives and hypotheses. It also presents the limitations of the study and finally, it suggests areas for further study.

5.2 Summary Findings

This study sought to study's objective was to determine the effects of business strategies on the organizational performance of Pay-As-You-Go solar firms in Kenya. The findings are in line with the three objectives.

The first objective of the study sought to determine the effect of focus strategy on the organizational performance of Pay-As-You-Go solar firms in Kenya. 'Focus strategy does not affect the organizational performance of Pay-As-You-Go Solar Firms in Kenya' corresponding hypothesis' was the corresponding hypothesis. The study findings revealed that there was a statistically positive relationship between focus strategy and organisational performance. The results further indicated that the independent variable focus strategy had a positive effect on organizational performance leading to the rejecting of the null hypothesis.

To establish the effect of differentiation strategy on the organizational performance of Pay-As-You-Go solar firms in Kenya was the second objective. H02: Differentiation Strategy does not affect the organizational performance of Pay-As-You-Go Solar Firms in Kenya was the corresponding hypothesis. The study found that Differentiation had a positive and statistically

significant effect on the organisational performance of Pay-As-You-Go solar firms in Kenya. Differentiation strategy explained a significant variation in variance in organisational performance of Pay-As-You-Go Solar Firms in Kenya. The independent variable differentiation strategy had a positive effect on organizational performance. The unstandardized β coefficient of focus study shows that unit change in differentiation strategy causes unit increase in organizational performance levels of Pay-As-You-Go Solar Firms in Kenya. Therefore the null hypothesis was rejected and an alternative adopted.

The final objective is to determine the effect of cost leadership strategy on the organizational performance of pay-as-you-go solar farms in Kenya. Its corresponding hypothesis was that H03 Cost Leadership does not affect the organizational performance of Pay-As-You-Go solar firms in Kenya. The findings of the study revealed a positive effect of cost leadership on organizational performance. The unstandardized β coefficient of cost leadership shows that unit change in cost leadership causes units to increase in organizational performance levels of Pay-As-You-Go Solar Firms in Kenya. Therefore the null hypothesis was rejected.

The study results revealed that all model coefficients were significant at 0.05 significant level. The findings also show that all the model coefficients, which include: Cost leadership, Differentiation strategy, and Focus strategy had a positive significant effect on performance. This suggests that the selected determinants affect the performance of Pay-As-You-Go solar firms in Kenya.

5.3 Conclusions

Three can be drawn from the findings of the three objectives under the study from the preceding evidence.

The first conclusion based on the first results is that overall, focus strategy is a critical determinant in the organisational performance of Pay-As-You-Go Solar Firms in Kenya. The study thus concluded that focus strategy has a positive and statistically significant effect on the organisational performance of Pay-As-You-Go solar firms in Kenya. This finding makes an important contribution, it identifies the areas that can be handled to better predict the level of performance arising focus strategy as a business strategy of Pay-As-You-Go Solar Firms in Kenya.

Based on the second results, it is concluded that differentiation strategy is a critical aspect of the performance of Pay-As-You-Go Solar Firms in Kenya. This finding makes an important contribution in terms of isolating elements that constitute differentiation strategy which are key to consider in terms of influencing Pay-As-You-Go Solar Firms in Kenya.

The final objective was to determine the effect of cost leadership strategy organisational performance of Pay-As-You-Go solar firms in Kenya. It was therefore determined that cost leadership strategy had a substantial effect on the organisational performance of Pay-As-You-Go solar firms in Kenya and accounted for substantial variance. The current study therefore concludes that cost leadership strategy is important since it positively affects a firm's performance.

5.4 Recommendations

According to the findings, several conclusions can be made;

Based on the first conclusion, it is recommended that to intensify the effect focus strategy on organisational performance of Pay-As-You-Go Solar Firms in Kenya, these firms should improve

on the focus as a business strategy as it was seen to significantly and positively enhance firms' performance. Specifically, firms should have clear and precise strategies.

The second conclusion was that differentiation strategy is a critical aspect of the performance of Pay-As-You-Go Solar Firms in Kenya. Therefore it is recommended that Pay-As-You-Go Solar Firms in Kenya focus on providing superior customer service, investing in research and development, and striving to have an outstanding strong image and reputation for quality innovation in the Pay-As-You-Go –Go solar markets. Finally, the firms should come up with unique and innovative features for their products.

Finally, the study recommends that Pay-As-You-Go solar firms in Kenya should implement innovative cost-reduction measures. The firms should also seek to lower operational cost which entirely affects the final performance. The firms should also establish more strategic partnerships and good relations for better prices and hence reducing procurements costs.

5.5 Limitations for the Study

This study offers immense contributions to the Pay-As-You-Go Solar Firms in Kenya and their organisational performance; it is paramount to evaluate the results from the perspective of the study's limitations.

First, the choice of survey design as the preferred methodological choice for the study has a profound effect, especially on the measurement problems. Surveys and their cross-sectional nature of data imply that conclusions are generally limited by being collected at one point in time and do not give the sequence of events thereafter.

The second limitation relates to the fact that the current study focused on the relationship between business strategies and the organisational performance of Pay-As-You-Go Solar Firms in Kenya.

Concerns have been raised as to whether a sole industry focus was enough to make the results of the study more generalizable to other industries. However, the focus of such a study conferred the obvious advantage of control for industry effects.

The third limitation concerns the collection of data through questionnaires administered to internal respondents who are employees of these facilities. This may allow respondents to be biased and give responses that are not a true reflection of true practices. Thus, the main purpose may be to cushion the facility from defamation or to give the firm unmerited publicity. However, the purpose of the study which was purely academic was explicitly explained to the respondents to avoid any suspicion or bias.

5.6 Suggestions for Further Studies

From the conclusions of the findings of this study, the researcher suggested the following future research directions in the field relating to the practice performance relationship.

First, this study used cross-sectional data to test the hypothesis on the relationship between business strategies and organisational performance of Pay-As-You-Go Solar Firms in Kenya. It only provided a snapshot picture at a single point in time. Therefore, there is a need to conduct a longitudinal study to provide even more conclusive evidence of the above relationship.

Given that the current study is limited to one industry, the relationship between business strategies and the organisational performance of Pay-As-You-Go Solar Firms in Kenya would need to be validated by further research. Perhaps an effective way to validate this assertion is by focusing future studies on various other unrelated industry players through comparative studies between the players.

The current study is limited to a small area of firm performance, future studies should expand beyond performance to validate whether similar results can be substantiated for other areas like marketing, sales and firms operation.

Since most of the senior managerial staff do not possess a technical skill set, they may not be better placed to answer questions related to the technical acumen of the firms. Therefore, future studies may consider alternative respondents such as plant operators, engineers, drivers or plant supervisors for a better understanding of the practices and policies.

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APPENDICES

APPENDIX 1 : LETTER OF INTRODUCTION

Dear Participant,

I am Walter Odhiambo Opiyo, a student at Maseno University, undertaking a Master in Business Administration, Strategic Management of Reg. MBA/BE/00014/021. I am currently undertaking a study based on the topic, "Effect of Business Level Strategies on Performance of Solar Industry in Kenya." I am requesting your help in filling out this questionnaire.

Kindly note that your responses will only be used for my academic purposes and will not in any way affect you.

Thank you in advance.

Yours Sincerely

Walter Odhiambo Opiyo

0741517301

APPENDIX 2 : DATA COLLECTION INSTRUMENT (QUESTIONNAIRE)

NAME OF THE ORGANIZATION_____

YOUR ROLE _____

Note: This questionnaire is designed to gather information about the strategies and organizational performance of Pay-As-You-Go solar firms in Kenya. Your responses will be treated confidentially, and the data will be used for research purposes only. Please answer the following questions to the best of your knowledge.

DEMOGRAPHIC INFORMATION

Gender:

1)Male [ ] 2) Female [ ] 3) Prefer not to say [ ]

Age:

0-20 years [ ] 21-35 years [ ] 36-45years [ ] 46-60 years [ ] Above 60 years [ ]

Educational Qualification:

High School [ ] Diploma [ ] Bachelor's Degree [ ] Master's Degree [ ]

Doctorate Degree [ ]

How many years of experience do you have in the renewable energy industry?

0-5 years [ ] 6-10 years [ ] 11-15 years [ ] Above 15 years [ ]

In the below statement, please rate the following statements on a scale of 1 to 5, where one represents "Strongly Disagree" and 5 represents "Strongly Agree."

COST LEADERSHIP

S/N		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	Our organization has implemented cost-reduction measures to achieve a competitive advantage in the Pay-As-You-Go solar market.					
2.	We continuously seek ways to lower our operational costs without compromising the quality of our products and services.					
3.	Our organization has established strategic partnerships and supplier relationships to negotiate better prices and reduce procurement					

	costs.					
4.	We have streamlined our internal processes and operations to improve efficiency and minimize wastage of resources.					
5.	Our organization has been able to offer competitive pricing for Pay-As-You-Go solar products compared to other market players.					
6.	We have achieved cost savings that have positively impacted our profitability and financial performance.					
7.	Customers perceive our organization as providing good value for money in the Pay-As-You-Go solar market.					
8.	Our cost leadership strategy has allowed us to gain a significant market share in the Pay-As-You-Go solar industry.					

DIFFERENTIATION STRATEGY

S/N		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	Our organization has developed unique and innovative features for our Pay-As-You-Go solar product.					
2.	We focus on providing superior customer service and support to differentiate ourselves from competitors.					
3.	Our organization invests in research and development to continuously enhance and improve					

	our Pay-As-You-Go solar products.					
4.	We have established a strong brand image and reputation for quality and innovation in the Pay-As-You-Go solar market.					
5.	Our differentiated Pay-As-You-Go solar products have gained significant market acceptance and customer preference.					
6.	Customers perceive our organization as offering unique value propositions compared to other market players.					
7.	Our differentiation strategy has allowed us to command premium pricing for our Pay-As-You-Go solar products.					
8.	We have experienced growth in market share and customer loyalty due to our differentiated offerings.					

FOCUS STRATEGY

S/N		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	Our organization has implemented a focused approach to target specific customer segments in the Pay-As-You-Go solar market.					
2.	We have conducted market research to identify the most profitable customer segments for our Pay-As-You-Go solar products.					
3.	Our organization has tailored our products and services to meet the specific needs and preferences of					

	the targeted customer segments.					
4.	We have developed effective marketing and promotional strategies to reach and attract the identified customer segments.					
5.	Our organization has achieved significant market share among the targeted customers.					
6.	We have seen increased customer loyalty and satisfaction within the targeted customer segments.					
7.	Our focus strategy has allowed us to differentiate ourselves from competitors and establish a strong market position.					
8.	Our organization has effectively utilized resources and capabilities to cater to the specific needs of the targeted customer segments.					

NON-FINANCIAL PERFORMANCE

S/N		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1.	Our organization has implemented sustainability initiatives to minimize the environmental impact of our Pay-As-You-Go solar operations.					
2.	We prioritize social impact by providing access to affordable and clean energy solutions for underserved communities in Kenya.					
3.	Our organization is committed to promoting gender equality and empowerment through our Pay-As-You-Go solar initiatives.					
4.	We actively engage in community					

	development projects and partnerships to create positive social change beyond our core business operations.					
5.	Our non-financial objectives strategies have positively contributed to the reputation and brand image of our organization.					
6.	We have received recognition and awards for our efforts in sustainability, social impact, and community engagement.					
7.	Customers perceive our organization as socially responsible and environmentally conscious in the Pay-As-You-Go solar industry.					
8.	Our non-financial objectives strategies have attracted partnerships and collaborations with like-minded organizations and stakeholders.					

END.

THANK

APPENDIX 3 : GLOBAL LIST OF SOLAR COMPANIES ADOPTING PAYGO

Methodology of Sales Data Collection

Table 18 - List of Participating Companies

#	Company Name	Off-Grid Solar Lighting	Off-Grid Solar Appliances
1	[illegible] Limited	MAN	-
2	[illegible] Ltd	-	MAN
3	Alternative Energy Technologies Group (Altech Group)	DIS	DIS
4	ARESS	DIS	-
5	BAOBAB+	DIS	DIS
6	Barefoot Power	MAN	MAN
7	Bboxx Ltd	MAN&DIS	MAN&DIS
8	BEIJING [illegible] TECHNOLOGY CO LTD	MAN	MAN
9	BioLite	MAN	MAN
10	[illegible] SARL	DIS	DIS
11	Bright Products AS	MAN	-
12	[illegible] Solar	-	MAN
13	d.light design, Inc.	MAN	MAN
14	Davis & Shirtliff Ltd	-	MAN
15	[illegible] Green Energy Ltd	DIS	-
16	Devidayal Solar Solutions Pvt. Ltd.	-	MAN
17	Earth Technologies	MAN	-
18	Easy Solar [illegible]	DIS	DIS
19	Energy + [illegible]	DIS	DIS
20	ENGIE Energy Access	MAN	MAN
21	[illegible]	-	MAN
22	[illegible]	DIS	DIS
23	Fosera Solarsysteme GmbH & Co. KGaA	MAN	MAN
24	FUTUREPUMP LIMITED	-	MAN
25	[illegible] AG	-	MAN
26	[illegible] Investments/ [illegible] Power	DIS	-
27	Green [illegible] Energy PLC	DIS	DIS
28	GREENLIGHT PLANET INCORPORATED	MAN	MAN&DIS
29	JUA Energy Company Limited	MAN	MAN
30	[illegible] Farm	-	MAN
31	[illegible]	-	MAN
32	Lagazel	MAN	-
33	[illegible] Solar	DIS	DIS
34	[illegible]	DIS	DIS
35	[illegible] GmbH	MAN	-
36	M-KOPA	MAN	MAN
37	[illegible] Solar Lights Limited	MAN	-
38	[illegible] Energy	DIS	DIS
39	[illegible]	MAN	-
40	Offgridbox	MAN	MAN
41	[illegible] SOLAR PTY LTD	MAN	-
42	OmniVoltaic Energy Solutions Company Limited	MAN	MAN
43	Oolu Solar	DIS	DIS
44	PEG Africa	DIS	DIS
45	Plug The Sun Limited	MAN	-
46	[illegible] Distributions	DIS	DIS
47	Qotto	MAN&DIS	MAN
48	SDG Collective	MAN&DIS	MAN&DIS
49	SECAPO Solar Systems	DIS	DIS
50	SelfChill	-	MAN
51	SHENZHEN [illegible] NEW ENERGY TECHNOLOGY CO.,LTD	MAN	-
52	SHENZHEN POWEROAK NEWENER CO.,LTD	MAN	MAN
53	Shenzhen Power-solution Ind. Ltd.	MAN	MAN
54	Shenzhen Solar Run Energy Co. Limited	MAN	MAN
55	[illegible] Technology Co. Ltd	MAN	-
56	Smarter Grid International	MAN	MAN
57	Solar Panda	MAN	MAN
58	Solar Sister	DIS	DIS
59	Solar Village [illegible]	MAN	MAN&DIS
60	SolarHome	DIS	DIS
61	SOLARNOW	-	DIS
62	SolarWorks! BV	DIS	DIS
63	[illegible]	MAN	MAN
64	[illegible] Farm	-	MAN
65	StarTimes Solar	MAN	MAN
66	SunCulture	MAN	MAN
67	SunDanzer	-	MAN
68	[illegible] LIMITED	-	DIS
69	Sunny Irrigation Ltd	-	DIS
70	SunnyMoney (SolarAid)	DIS	DIS
71	Super Star Renewable Energy Limited	MAN	MAN&DIS
72	[illegible]	-	MAN
73	The Sure Chill Company	-	MAN
74	TotalEnergies Offgrid Solar Solutions SAS	MAN&DIS	DIS
75	[illegible] Green S.p.A.	MAN	-
76	[illegible]	MAN	-
77	VITALITE Senegal	DIS	DIS
78	[illegible] Solar Systems Ltd	MAN	DIS
79	[illegible] GmbH & Co KG	MAN	MAN&DIS
80	Zola Electric	MAN	MAN

NOTE:

Companies are classified as either distributors (DIS) of other companies' branded products, or as manufacturers (MAN) if they are selling their own-brand products. There may be companies classified as both manufacturers and distributors, as companies may sell both their own branded appliances, while also distributing other companies' products.

All data in this report is self-reported by the companies. Although it is cross-checked for consistency, the companies are ultimately responsible for accurate reporting of product specifications, pricing information, sales volumes, and locations of sales.

Source; Gogla sales and impact report 2022

APPENDIX 4 : LIST OF PAY AS YOU GO COMPANIES IN KENYA

1. Agsol Kenya ltd.
2. Bboxx ltd
3. BioLite
4. Dlight Design Inc.
5. Davis and Shirtliff Ltd.
6. Deevabits Green EnergyLtd
7. ENGIE Energy Access
8. Fosera Solarsystems GmbH & Co. KGaA
9. GREENLIGHT PLANET INCORPORATED
10. Koolboks
11. M-Kopa
12. Omn/Voltaic Energy solutions Company Limited
13. Solar Panda
14. SOLARNOW
15. Startimes Solar
16. SunCulture
17. SunnyMoney (SolaraAid)
18. Azuri Solar

Source; Gogla sales and impact report 2022

APPENDIX 5 WORK PLAN

S/N	Date	Activity Carried Out	Physical Place
1.	March 2023	Title moderation	Maseno University
2.	April 2023	Title presentation and proposal preparation	Maseno university
3.	May 2023	Proposal presentation to allocated supervisor	Maseno university
4.	June 2023	Adjustment and department submission of the proposal	Maseno university
5.	Late June 2023	Data collections	Nairobi
6.	July 2023	Data Analysis	Homestay, Kisumu
7.	August 2023	Submission of the project to the panelist	Maseno university

Table 6.1

APPENDIX 6: BUDGET

S/N	Particular	Unit	Unit cost (Ksh)	Amount (Ksh)
1.	Transport			20,000
2.	Stationery (Consumables)		10000	10,000
3.	Stationery (Non-Consumables) Laptop and Printer	1x1	60,000	60,000
4.	Miscellaneous Expenses		40,000	40,000
5.	Accommodation	14 days	2000	28,000
6.	Hotel Expenses (Data Analysis)	7	1500	10,500
	TOTAL			**168,500**

Table 6.2