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### ENHANCING BUSINESS PERFORMANCE IN THE POWER GENERATION INDUSTRY: EXPLORING DETERMINANT FACTORS THROUGH OPERATIONAL TURNAROUND STRATEGIES

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#### ABSTRACT

This research examines the implementation of operational turnaround strategies in a power generation company to enhance the organization's business performance. The company seeks to increase the profitability of its assets by improving operational efficiency. Operational turnaround strategies, including cost reduction, revenue generation, and asset reduction, were implemented in the company to achieve operational excellence and revitalize underperforming assets. This study aims to determine the extent of operational turnaround strategy implementation, evaluate its impact on business performance, and fill existing research gaps. A self-administered questionnaire was distributed to 102 personnel involved in the company's turnaround program, including experts, managers, and power plant engineers. The collected data were analysed using Statistical Package for Social Science (SPSS) software. The findings indicate a positive relationship between the implemented operational turnaround strategies and the company's business performance. This study provides valuable insights for the power generation industry, emphasizing the significance of effective asset management practices to enhance business performance. By implementing operational turnaround strategies, organizations can optimize operational efficiency and increase profitability. The findings contribute to closing the research gap on the link between business performance and operational turnaround strategies. The company and other power generation companies can utilize the practical implications from this study to guide their efforts in achieving operational excellence and maximizing profitability.

**Keywords:** operational turnaround strategy, cost reduction, revenue generation, asset reduction, business performance, power generation industry.

## 1.0 INTRODUCTION

In today's fast-paced and competitive business environment, organizations often face challenges that require them to implement effective operational turnaround strategies. This is especially true in industries such as power generation, where companies play a crucial role in providing reliable and efficient electricity to consumers (Ansoff & McDonnell, 1990). To ensure sustainable growth and adapt to changing market dynamics, these companies have likely employed various operational turnaround strategies aimed at enhancing its operational efficiency and overall performance (Bhasin, 2021). In this research study, we aim to investigate the operational turnaround strategies implemented in a company in the power generation industry. Specifically, we will address three research questions to gain a comprehensive understanding of the topic. First, we will explore the specific operational turnaround strategies that the company has adopted to overcome operational challenges and improve its performance. By examining these strategies, we can identify the specific initiatives and approaches that the company has employed to revitalize its operations. Second, we will assess the extent to which these operational turnaround strategies have been implemented within the power generation company. This analysis will provide insights into the degree of adoption and integration of these strategies across the organization. Understanding the level of implementation will allow us to evaluate the effectiveness and impact of these strategies on the company's operational performance. Lastly, we will examine how the operational turnaround strategies implemented by the power generation company have influenced the overall business performance of the organization. By evaluating key performance indicators such as profitability, efficiency, customer satisfaction, and market share, we can gauge the outcomes and benefits derived from the implementation of these strategies (Kumar & Ramani, 2022). This assessment will shed light on the relationship between operational turnaround efforts and organizational performance, ultimately highlighting the effectiveness of these strategies in achieving desired business outcomes.

## 2.0 LITERATURE REVIEW

### Business Performance

Business performance is of utmost importance in the power generation industry, where organizations strive to meet the increasing demand for reliable and efficient electricity. This literature review aims to provide an overview of key research findings and insights related to business performance in the power generation industry, including its drivers, measurement approaches, and factors influencing organizational success. Operational excellence is a significant driver of business performance in the power generation industry. Efficient operational processes, effective maintenance practices, and optimized asset utilization contribute to improved performance and cost-effectiveness (Soderholm & Sundqvist, 2018). Organizations that excel in operational efficiency can deliver electricity reliably and at competitive prices, gaining a competitive advantage. Innovation also plays a crucial role in enhancing business performance in the power generation industry. Innovations in renewable energy technologies, grid management systems, and energy storage solutions enable organizations to meet sustainability goals, reduce environmental impact, and adapt to changing market dynamics (Chmutina et al., 2020). Embracing technological advancements and innovative business models can drive profitability and growth in this industry. Customer-centricity is increasingly important in the power generation industry as customers seek greater control over their energy choices. Organizations that prioritize customer satisfaction, personalized services, and energy conservation initiatives can differentiate themselves and attract and retain a loyal customer base (Steffen et al., 2020). Understanding customer needs and providing tailored solutions can lead to improved business performance.

Measuring business performance in the power generation industry involves a combination of financial and non-financial metrics. Financial metrics such as revenue, net income, and return on investment are commonly used to evaluate profitability and financial health (Hertz et al., 2020). These metrics provide insights into the organization's ability to generate sustainable profits and create value for stakeholders. Non-financial metrics specific to the power generation industry include capacity utilization rates, plant availability, and power plant efficiency (Lee et al., 2019). These metrics assess the operational performance, reliability, and effectiveness of power generation assets. Additionally, environmental indicators such as carbon emissions, renewable energy capacity, and energy efficiency measures are becoming increasingly important in evaluating sustainability performance (D'Amato et al., 2019). Several factors influence business performance in the power generation industry. Regulatory frameworks and government policies significantly impact operational strategies and financial performance (Feldman et al., 2016). Regulations related to renewable energy targets, emissions reduction, and grid reliability influence investment decisions and operational practices, shaping the industry's performance landscape. Technological advancements and innovation ecosystems also play a vital role in shaping business performance. Access to cutting-edge technologies, research and development initiatives, and collaboration with industry partners enable organizations to drive efficiency gains, enhance generation capacity, and stay competitive in a rapidly evolving market (Chouhan et al., 2021). Business performance in the power generation industry is driven by operational excellence, innovation, and customer-centric approaches. Measurement approaches encompass financial metrics, operational indicators, and sustainability performance measures. External factors such as regulatory frameworks and technological advancements influence business performance outcomes. Understanding these drivers and factors is crucial for organizations in the power generation industry to achieve sustained success and meet the evolving needs of customers and stakeholders. Operational excellence serves as the foundation for a company's success. A recent survey conducted among 1,300 CEOs, as reported in the Annual Global CEO Study, revealed that 77% of respondents rely on operational excellence to drive revenue growth (Buzinkey, 2022). This highlights the collective effort required across an organization to enhance operational performance. Scholars have widely recognized the pivotal role of operational performance in gaining a competitive advantage (Maletić et al., 2020). The company "Turnaround program" aims to enhance the operational performance and financial returns of its existing core generation assets, ultimately improving the company's overall business performance. The concept of business performance encompasses the alignment and attainment of competitive advantage, profitability, cost reduction, and expansion of the customer base over a specified timeframe (Anwar & Hasnu, 2016).

### **Operational Turnaround Strategy**

At some point in their lifecycle, many established organizations undergo a significant decline in performance. The implementation of operational turnaround strategies is often associated with companies experiencing a decline in business performance over a period of time and requiring financial recovery. However, it is proposed that taking a preventative approach by implementing turnaround strategies early on, as an alternative to a potentially traumatic rescue, can reduce an organization's vulnerability to performance decline (Gotteiner et al., 2019). Therefore, operational turnaround strategies can be employed not only in declining companies but also to enhance organizational business performance. Gotteiner et al. (2019) suggest that future research should focus on obtaining empirical evidence regarding the effectiveness of turnaround strategies in non-crisis situations. Operational turnaround strategy refers to a series of deliberate and decisive measures aimed at swiftly reversing a decline in business performance, including asset reduction, cost-cutting, and revenue generation (Cater & Schwab, 2008). In the turnaround process, the operational aspect is considered the most critical objective. Achieving operational recovery and excellence determines the overall performance of the company (Johan & Handika, 2018). The literature review reveals a two-level hierarchy of turnaround activities: activity categories that indicate "what changes need to be accomplished" and specific activities that illustrate "how to accomplish" those changes. These activities can be categorized as turnaround strategies and turnaround tactics (Hoffman, 1989). "Turnaround strategy" refers to the

primary set of actions used to halt the decline and initiate an upturn cycle, while "turnaround tactics" refer to individual targeted actions aimed at implementing the strategy (Gotteiner et al., 2019). The researchers suggest that future studies should focus on a more practical level of turnaround tactics, as most previous research has primarily analyzed turnaround stages and strategies. Consequently, this study aims to analyze the operational turnaround strategies and tactics implemented in the power generation company's turnaround program, specifically focusing on cost reduction, revenue generation, and asset reduction strategies.

### ***Cost Reduction***

A cost reduction strategy entails implementing measures to decrease discretionary expenses within an organization. When faced with a decline in performance, organizations often prioritize in cost reduction to reverse poor financial results and attain or sustain a desired level of profitability. Conducting a comprehensive cost analysis is typically necessary to identify areas where cost centers can be eliminated or unnecessary expenditures significantly reduced. Examples of cost reduction measures include minimizing maintenance costs, decreasing supply usage shrinkages, opting to lease tools and machinery instead of purchasing them, and trimming expenses in marketing and research and development activities (Tikici et al., 2011). Additional tactics for cost reduction encompass various actions such as downsizing the workforce, trimming non-essential capital and current expenditures, engaging in negotiations with key suppliers to secure lower prices, introducing performance-based bonuses as alternatives to certain salaries and benefits, outsourcing processes, transitioning fixed costs to variable costs, strengthening cost controls, fostering awareness of cost reduction initiatives, involving employees in cost-cutting endeavors, encouraging innovation for cost reduction purposes, and discontinuing unprofitable products within profitable product lines (Gotteiner et al., 2019). In the context of organizational turnaround, reducing operational costs is often favored over generating additional revenue through core business operations. This preference stems from the recognition that cutting costs is generally easier to implement and can yield more immediate results compared to revenue generation strategies (Chacha, 2019).

### ***Revenue Generation***

In order to boost revenue generation, organizations can employ strategies to enhance capacity usage and improve production processes. These actions can have a positive impact on the overall financial performance of the company. One approach to revenue generation involves focusing on existing product lines and exploring ways to increase sales. This can be achieved through tactics such as introducing price reductions or raising prices for price-sensitive products. Furthermore, companies can implement measures to increase sales without incurring additional expenses, such as implementing strict inventory control measures, optimizing debt turnover, and improving accounts receivable and stock turnover rates (Tikici et al., 2011). In the pursuit of revenue generation, companies can adopt an operational revenue generation strategy that encompasses a range of approaches aimed at increasing revenue from existing product lines. This may involve adjusting prices to attract more customers, offering discounts or promotional offers, allocating increased marketing expenditures to effectively promote products, intensifying selling efforts through targeted sales campaigns, and extending operational hours to capture additional market opportunities (Gotteiner et al., 2019). By strategically implementing these revenue generation tactics, organizations can tap into the potential of their existing product lines and optimize their revenue streams. It is important for companies to carefully analyze market dynamics, customer preferences, and competitive factors to identify the most effective revenue generation strategies for their specific business context. Adopting a proactive approach to revenue generation can help organizations overcome challenges and drive sustainable growth in a highly competitive business environment.

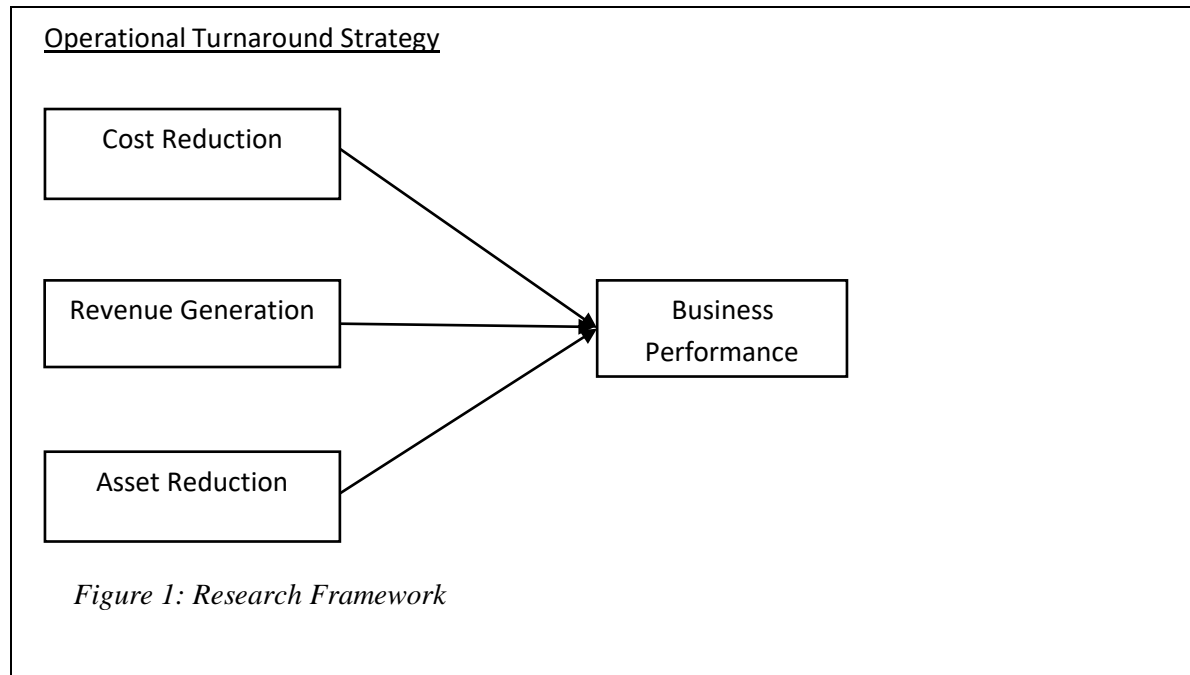
### ***Asset Reduction***

An asset reduction strategy is based on the principle that eliminating underperforming assets can halt a company's decline and potentially enhance organizational performance (Chacha, 2019). In situations where a company's core values are at significant risk and strategic alternatives are limited, asset reduction becomes necessary. The objective of asset reduction is to optimize the efficiency of the company's current operations by maximizing asset utilization. This can be achieved through various means, such as reducing short-term assets, closing non-profitable facilities, integrating fixed assets, selling equipment and fixtures, disposing of unused land and buildings, narrowing the scope of business operations, divesting unprofitable investments, and even selling off certain business units (Tikici et al., 2011). In severe decline scenarios with substantial and immediate risks, a company may need to sell its least productive operations and assets to mitigate cash drain and generate more cash flow. Selling unproductive plant and equipment, as well as divesting from unprofitable subsidiaries, is a common approach within the asset reduction strategy. In well-established companies, fixed assets that have already undergone significant depreciation may be considered for mortgages or liquidation (Gotteiner et al., 2019). Previous literature primarily focused on turnaround case studies of declining organizations, the turnaround process, and frameworks supporting empirical research. However, there is a need for further investigation into the effectiveness of turnaround tactics in non-crisis situations, supported by empirical evidence (Gotteiner et al., 2019). Most existing turnaround studies have predominantly examined turnaround stages and strategies, lacking in-depth analysis of tactical levels of turnaround approaches (Gotteiner et al., 2019). Building upon the research gaps identified in the literature, this study aims to explore operational turnaround strategies and tactics and assess the extent to which these strategies have been implemented in non-crisis situations. Specifically, the study focuses on identifying the factors that contribute to the improvement of business performance in the company's power plant through the implementation of operational turnaround strategies and tactics.

## **3.0 MATERIALS AND METHODS**

### **Research Model and Hypotheses Development**

The research study presents a framework consisting of operational turnaround strategies as independent variables, namely cost reduction, revenue generation, and asset reduction. The dependent variable in this framework is organization business performance. Figure 1 visually illustrates the research framework adopted in this study.



### ***Cost reduction strategy relationship with business performance***

In the realm of business management, cost reduction holds significant importance as it directly affects a company's profitability and overall performance. The ability to effectively reduce costs enables businesses to enhance their bottom line, achieve greater operational efficiency, and gain a competitive advantage within the market. The relationship between cost reduction and business performance is intricately intertwined, as implementing measures to reduce costs can yield improvements in a company's financial performance, operational efficiency, and overall competitiveness. One specific example of the impact of cost reduction on business performance is evident in the context of production costs. By effectively reducing production costs, a company can offer its products at a lower price point, thereby enhancing its competitive position within the market and potentially increasing sales volume (Kaplan & Cooper, 1998). This, in turn, can lead to improved financial performance, expanded market share, and better long-term growth prospects. Given the critical role of cost reduction in business management and its close association with business performance, it is proposed that:

*H1: Cost reduction strategy has a positive impact on the organization's business performance.*

This hypothesis suggests that implementing cost reduction strategies will have a beneficial effect on a company's overall business performance. By actively seeking opportunities to reduce costs, organizations can enhance their financial performance and operational efficiency, ultimately positioning themselves for sustained success in a competitive business environment.

### ***Revenue generation strategy relationship with business performance***

Revenue generation plays a pivotal role as a driver of business performance. It encompasses the process of generating income or sales from a company's products or services, thereby contributing to its financial health and overall success. The level of revenue generated by a company directly influences its financial performance, which can be measured through key indicators such as revenue growth, profitability, and return on investment (ROI). Companies that are able to generate higher revenue tend to be more profitable, possess greater resources to invest in growth opportunities, and exhibit resilience in the face of economic downturns or other challenges (Sánchez-García & Rodríguez-Domínguez,

2017). To illustrate this relationship, a study conducted by Deloitte revealed that companies experiencing substantial revenue growth also demonstrated higher profit margins and returns on equity (ROE) compared to companies with lower revenue growth (Deloitte, 2019). Similarly, research conducted by McKinsey & Company found that companies consistently outperforming their peers in terms of revenue growth also enjoyed higher stock returns (McKinsey & Company, 2017). Based on these findings, it is proposed that:

*H2: Revenue generation strategy has a positive impact on the organization's business performance.*

This hypothesis suggests that implementing effective revenue generation strategies can enhance a company's overall business performance. By focusing on generating higher levels of revenue, organizations can improve their profitability, resource allocation for growth initiatives, and overall financial strength, positioning themselves for sustainable success in the competitive business landscape.

### ***Asset reduction strategy relationship with business performance***

Asset reduction is a strategic approach aimed at enhancing a company's financial performance by selling off non-core assets or streamlining its asset base. This strategy enables companies to unlock cash flow, reduce debt, and increase profitability. The primary goal of asset reduction is to improve the company's financial performance, which can be measured using key indicators such as return on assets (ROA), return on equity (ROE), and earnings per share (EPS). There exists a robust correlation between asset reduction and business performance. Companies that effectively implement asset reduction strategies can significantly improve their financial performance. By divesting non-core assets or underperforming business units, companies can enhance cash flow and reduce debt, leading to improved balance sheets and enhanced financial stability. Moreover, by streamlining operations and focusing on core business areas, companies can bolster profitability and operational efficiency. A study conducted by PwC examined the impact of asset reduction strategies on financial performance and their findings revealed that companies successfully divesting non-core assets experienced a remarkable 20% increase in EPS over a three-year period, compared to a mere 5% increase for companies that did not engage in divestment (PwC, 2016). Based on these insights, the following proposition is proposed:

*H3: Asset reduction strategy has a positive impact on the organization's business performance.*

This proposition suggests that implementing effective asset reduction strategies can yield positive outcomes for a company's overall business performance. By strategically disposing of non-core assets and streamlining operations, organizations can unlock financial resources, reduce debt burden, and improve profitability, ultimately positioning themselves for sustainable growth and success.

## **Method**

The selection of an appropriate research design depends on various factors, including the research question, data requirements, and available resources. A well-designed study is crucial for obtaining valid and reliable results. In this particular study, a survey design utilizing questionnaires has been chosen as the research approach. The research methodology employed is quantitative in nature. Quantitative research, as highlighted by William (2011), focuses on the examination and testing of pre-existing hypotheses. It aligns with a pessimistic and empiricist perspective (Creswell & Creswell, 2018). Describing the research setting in detail within the research report is essential for readers to comprehend the study's context and assess the external validity of the findings. Moreover, a comprehensive description of the research setting facilitates potential replication of the study in future research endeavors. For this study, data will be collected from executives and management-level employees involved in the Turnaround program at the Turnaround Central Team and the company's power stations. These individuals were selected as the unit of analysis to investigate their awareness of turnaround

strategies and the implemented initiatives' impact on the company power generation's business performance.

To ensure a representative sample, simple random sampling with a probability sampling approach were employed. Probability sampling is recognized as a reliable method for obtaining accurate results regarding a target population (Lavarkas, 2008). The questionnaire used in this research consists of closed-ended questions, which provide respondents with predetermined response options to choose from. This type of question format facilitates ease of response and reduces completion time. The questionnaire comprises three main sections. Section A gathers demographic information about the respondents, such as their station, work position, and length of service in the company. Section B focuses on surveying respondents about the operational turnaround strategies implemented in the company power generation power stations, specifically addressing cost reduction, revenue generation, and asset reduction as independent variables. Lastly, Section C measures the company's business performance as the dependent variable. Adapted and modified questions were incorporated into the questionnaire for this study. In total, the questionnaire consists of 29 items divided into four parts, encompassing cost reduction, revenue generation, asset reduction, and business performance. The subsequent section provides a comprehensive explanation of the measurements and survey questions associated with each variable.

### Cost Reduction Instruments

The definition of cost reduction and the measurement items used in this study were adapted from Tikici et al. (2011) and subsequently modified slightly in terms of wording for better comprehension. Tikici et al. (2011) described a cost-cutting strategy as the implementation of measures aimed at reducing discretionary expenses. When organizations encounter a decline in performance, their focus often shifts towards cost reduction in order to improve their overall financial performance and achieve a desired level of profitability. Typically, a cost analysis is conducted to identify areas where cost centres can be eliminated or unnecessary expenses can be significantly reduced. In this study, respondents will be asked to indicate the extent of their agreement with each item related to the implementation of initiatives within the cost reduction strategy. The cost reduction strategy comprises 12 items that serve as indicators for the independent variable. Table 1 provides an explanation of the items used to measure this construct. All items are measured using a 5-point Likert scale, ranging from (1) none to (5) very high, allowing respondents to express the degree to which the initiatives have been implemented in the cost reduction strategy.

**Table 1**

#### *Adopted and Modified Items for Cost Reduction*

Code	Original Item	Modified Item	Source
CR01	Reducing staff	Downsizing excessive workforce	Tikici et al. (2011)
CR02	Improving employee productivity	Improving employee productivity through cost reduction awareness and involvement	
CR03	Improving supply conditions	Improving supply conditions through improvement in supply chain process efficiency	
CR04	Eliminating shrinkages in supply usage	Eliminating shrinkages in supply usage (inventory control)	
CR05	Reducing maintenance costs	Reducing maintenance costs through excellent O&M practice	
CR06	Reducing administrative expenses	Reducing administrative expenses	



CR07	Leasing tools & machinery instead of purchasing	Leasing equipment and machinery instead of purchasing
CR08	Reducing marketing expenses	Reducing marketing expenses
CR09	Reducing R&D expenses	Reducing Research & Development expenses including plant modifications/ improvements
CR10	Negotiation with credit grantors on falling interest rates	Negotiation with credit grantors on falling interest rates
CR11	Reducing costs by focusing on few customers	Reducing costs by focusing on few customers
CR12	Innovation for cost reduction	Innovation for cost reduction

### ***Revenue Generation Instruments***

The definition of revenue generation and the measurement items used in this study were adapted from Tikici et al. (2011) and subsequently modified. Tikici et al. (2011) stated that enhancing capacity utilization and improving production processes can have positive effects on revenue generation. Revenue can be increased by focusing on existing product lines, implementing price reductions, or adjusting prices for products that are price-sensitive. Additionally, other measures that can contribute to revenue generation include increasing sales without incurring additional expenses, implementing strict inventory control, reducing debt turnover, and improving turnover rates for accounts receivables and stock. In this study, respondents will be asked to indicate their level of agreement with each item, assessing the extent to which the initiatives have been implemented in the revenue generation strategy. The revenue generation strategy consists of six items that serve as indicators for the independent variable. Table 2 provides an explanation of the items used to measure this construct. All items are measured using a 5-point Likert scale, ranging from (1) none to (5) very high. This allows respondents to express their perception of the extent to which the initiatives have been implemented in the revenue generation strategy.

**Table 2:**

#### *Adopted and Modified Items for Revenue Generation*

Code	Original Item	Modified Item	Source
RG01	Increasing accounts receivables turnover rate	Increasing account receivables turnover rate	Tikici et al. (2011)
RG02	Decreasing debt turnover rate	Decreasing debt turnover rate	
RG03	Increasing sales without running up expenses	Increase sale without running up expenses	
RG04	Implementation of price strategies to increase sales	Implementation of price strategies to increase sales Optimization in inventory control	
RG05	Strict inventory control	Optimization in inventory control	
RG06	Increasing stock turnover rate	Increase stock turnover rate (reduce inventory level)	

### ***Asset Reduction Instruments***

The definition of asset reduction and the measurement items used in this study were adapted from Tikici et al. (2011) and subsequently modified. According to Tikici et al. (2011), asset reduction in operations can be achieved through various approaches, such as selling business units at the unit level, decreasing short-term assets, closing down operations, and integrating fixed assets. Examples of asset reduction

strategies include selling equipment and fixtures, disposing of unused land and buildings, narrowing the scope of business operations, divesting unprofitable investments, and even selling off certain business units. In this study, respondents will be asked to indicate their level of agreement with each item, reflecting the extent to which the initiatives have been implemented in the asset reduction strategy. The asset reduction strategy consists of five items that serve as indicators for the independent variable. Table 3 provides an explanation of the items used to measure this construct. All items are measured using a 5-point Likert scale, ranging from (1) none to (5) very high. This allows respondents to express their perception of the extent to which the initiatives have been implemented in the asset reduction strategy.

**Table 3:**

*Adopted and Modified Items for Asset Reduction*

Code	Original Item	Modified Item	Source
AR01	Selling equipment and fixtures	Selling equipment and machineries	Tikici et al. (2011)
AR02	Selling useless land and building	Selling useless land and building	
AR03	Reduction in unprofitable investments	Reduction in unprofitable investment or expenses	
AR04	Narrowing scope of business	Narrowing scope of business	
AR05	Selling some business units	Selling some business unit	

***Business Performance Instruments***

The definition of business performance used in this study was adapted from Anwar and Hasnu (2016), while the measurement items were adapted from Tikici et al. (2011) and subsequently modified. According to Anwar and Hasnu (2016), business performance encompasses the alignment and achievement of competitive advantage, profitability, lower cost of business, and an increase in the client base over a specific period of time. In this study, respondents will be asked to indicate their level of agreement with each item, reflecting the extent to which the business improvement items were realized in the company power generation. The business performance construct consists of five items that serve as indicators for the dependent variable. Table 4 provides an explanation of the items used to measure this construct. All items are measured using a 5-point Likert scale, ranging from (1) none to (5) very high. This allows respondents to express their perception of the extent to which the business improvement items were achieved in the company's power generation.

**Table 4:**

*Adopted and Modified Items for Business Performance*

Code	Original Item	Modified Item	Source
BP01	Increase in sales	Increase in sale	Tikici et al. (2011)
BP02	Return on investment (ROI)	Increase in return of investment (ROI)	
BP03	Operating profit margin	Increase in operating profit margin	
BP04	Cash flow	Increase in cash flow	
BP05	Employee morale	Increase in employee morale and capability	
BP06	Decrease in unit labour costs	Decrease in staff cost	

## 4.0 RESULTS

### Reliability Analysis

In this study, a reliability analysis was conducted on the collected data to assess the consistency and stability of the measures or items included in the questionnaire. The purpose of reliability analysis is to determine the extent to which a set of items consistently and accurately measures the same construct or concept. Various measures of internal consistency and inter-item reliability, including Cronbach's Alpha, were calculated. The questionnaire used in this study consisted of 29 measurement items designed to capture the respondents' responses regarding the study's construct. A total of 102 samples were collected, and the reliability of the data was evaluated. Cronbach's Alpha coefficient was employed to assess the reliability or consistency of the statistics. Cronbach's Alpha values range from 0 to 1, with higher values indicating greater reliability (Pallant, J., 2016). A Cronbach's Alpha coefficient greater than 0.7 is generally considered acceptable for use in this study, while a coefficient greater than 0.8 is considered very good. The findings of the reliability analysis are summarized in Table 5. The Cronbach's Alpha values for all variables were above 0.70, with the revenue generation construct exceeding 0.80. These results indicate a high level of internal consistency in the reliability analysis of the data statistics.

**Table 5:**

#### *Reliability Analysis Result*

Construct	Cronbach's Alpha	Sample Size
Cost Reduction	0.799	102
Revenue Generation	0.831	102
Asset Reduction	0.776	102
Business Performance	0.777	102

### Descriptive Analysis

#### *Demographics Data*

Table 6 presents the results of the descriptive analysis conducted on the demographic data obtained from the distribution of online questionnaires. A total of 102 respondents participated in the survey. Regarding the demographic location of the respondents, employees from both the all 14 power stations in power generation took part in the survey. The distribution of participants is as follows: South 3 power station (35.3%), Turnaround Central Team (8.8%), Central 3 power station (6.9%), North 3 power station (5.9%), South 2 power station (4.9%), East 1 power station (4.9%), North 1 power station, North 2 power station, Central 2 power station, North 4 power station, Central 4 power station (3.9%) each, Central 1 power station, and South 1 power station (2.9%). Additionally, 7.8% of the respondents were the power generation employees from other departments who were previously involved in and aware of the Turnaround program. Regarding the work positions of the respondents, 37.3% held managerial or senior engineering roles, 30.4% were executives or engineers, 20.6% were senior managers or principal engineers, and 11.8% were in management positions. Furthermore, the demographic survey included an assessment of the length of service of the respondents in the company. The largest group of participants had been working with the company for 11-20 years (43.1%), followed by those with service lengths of over 20 years (22.5%), 6-10 years (20.6%), 1-5 years (10.8%), and less than 1 year (2.9%). Overall, the demographic survey indicates that the survey included employees from all power stations in the company power generation, covering various positions from executives to management levels. The participants' work experience, as reflected by their length of service, shows that 86.2% of the respondents had been employed by the company power generation for more than 5 years. Therefore,

the survey results provide valuable insights into the implementation of operational turnaround strategies and their impact on the company power generation's business performance.

**Table 6:**

*Demographic Analysis of Respondents*

Characteristics	Frequency	Percentage
<i>Location</i>		
Central 1	3	2.9
North 1	4	3.9
East 1	5	4.9
Others	8	7.8
North 2	4	3.9
Central 2	4	3.9
North 3	6	5.9
Central 3	7	6.9
North 4	4	3.9
Central 4	4	3.9
South 1	3	2.9
South 2	5	4.9
South 3	36	35.3
Turnaround Central Team	9	8.8
Total	102	100
<i>Position</i>		
Management	12	11.8
Senior manager/ Principal engineer	21	20.6
Manager/ Senior engineer	38	37.3
Executive/ Engineer	31	30.4
Total	102	100
<i>Length of service in THE COMPANY</i>		
< 1 year	3	2.9
1 – 5 years	11	10.8
6 – 10 years	21	20.6
11 – 20 years	44	43.1
> 20 years	23	22.5
Total	102	100

**Descriptive Results**

Descriptive statistics were employed to analyse the responses obtained from the distributed questionnaires, specifically through the calculation of the mean and standard deviation. These statistical measures provide valuable insights into the central tendency and dispersion of the dataset. The mean, or average, represents the central value of the dataset and is commonly used to summarize data. It provides an indication of where the data points tend to cluster or concentrate. On the other hand, the standard deviation quantifies the spread or dispersion of the dataset around the mean. It measures how much the data points deviate from the average value, reflecting the variability within the dataset. A smaller standard deviation suggests that the data points are closely clustered around the mean, while a larger standard deviation indicates greater dispersion. Together, the mean and standard deviation offer comprehensive information about both the centre and spread of the dataset, allowing for a deeper understanding of the data characteristics. In this study, a total of 102 valid samples were analysed, involving a questionnaire consisting of 29 items related to three independent variables and one dependent variable. For each measurement item associated with the variables, the mean and standard deviation were computed and presented in the table below.

### ***Cost Reduction Strategy***

The study includes a set of 12 measurement items that pertain to the cost reduction strategy. The data statistics derived from the respondents' responses are presented in Table 7. Among the measurement items, the highest mean value is observed for "CR05 - Reducing maintenance costs through excellent O&M practice" with a mean value of 4.54. The corresponding standard deviation for this item is 0.624, indicating a relatively low level of dispersion around the mean. This suggests that, on average, the respondents highly endorsed the reduction of maintenance costs through excellent operation and maintenance practices. Conversely, the lowest mean value is associated with "CR01 - Downsizing excessive workforce" with a mean value of 3.04. The standard deviation for this item is 1.089, indicating a greater degree of dispersion. This suggests that there is more variability in the responses regarding downsizing the excessive workforce, with some respondents expressing stronger disagreement or lower levels of implementation compared to others. These findings provide insight into the respondents' perceptions and experiences regarding the specific measurement items related to the cost reduction strategy.

**Table 7:**

#### *Descriptive Analysis Results – Cost Reduction Strategy*

Item Code	Item	Frequency	Mean	Standard Deviation
CR01	Downsizing excessive workforce	102	3.04	1.089
CR02	Improving employee productivity through cost reduction awareness and involvement	102	4.28	0.695
CR03	Improving supply conditions through improvement in supply chain process efficiency	102	4.33	0.635
CR04	Eliminating shrinkages in supply usage (inventory control)	102	4.00	0.758
CR05	Reducing maintenance costs through excellent O&M practice	102	4.54	0.624
CR06	Reducing administrative expenses	102	4.03	0.724
CR07	Leasing equipment and machinery instead of purchasing	102	3.94	0.781
CR08	Reducing marketing expenses	102	3.52	0.887
CR09	Reducing Research & Development expenses including plant modifications/ improvements	102	3.39	0.946
CR10	Negotiation with credit grantors on falling interest rates	102	3.80	0.833
CR11	Reducing costs by focusing on few customers	102	3.43	0.990
CR12	Innovation for cost reduction	102	4.33	0.680

### ***Revenue Generation***

The study includes 6 measurement items that are relevant to the revenue generation strategy. Table 8 presents the data statistics pertaining to these measured items. Among the measurement items, the highest mean value is observed for "RG01 - Increasing account receivables turnover rate" with a mean value of 4.19. The associated standard deviation for this item is 0.754, indicating a moderate level of dispersion around the mean. This suggests that, on average, the respondents generally agreed or perceived a relatively high level of implementation in increasing the account receivables turnover rate. On the other hand, the lowest mean value is obtained for "RG02 - Decreasing debt turnover rate" with a mean value of 3.84. The standard deviation for this item is 0.780, indicating a comparable level of dispersion. This implies that there is more variability in the responses concerning decreasing the debt turnover rate, with some respondents expressing stronger disagreement or perceiving lower levels of

implementation compared to others. Overall, the standard deviation values for the revenue generation measurement items range from 0.754 to 0.912, demonstrating relatively consistent levels of dispersion. This suggests that there is moderate variability in the responses across the different measured items related to revenue generation strategy.

**Table 8:**

*Descriptive Analysis Results – Revenue Generation Strategy*

Item Code	Item	Frequency	Mean	Standard Deviation
RG01	Increasing account receivables turnover rate	102	4.19	0.754
RG02	Decreasing debt turnover rate	102	3.84	0.780
RG03	Increase sale without running up expenses	102	4.12	0.708
RG04	Implementation of price strategies to increase sales	102	3.94	0.755
RG05	Optimization in inventory control	102	4.14	0.912
RG06	Increase stock turnover rate (reduce inventory level)	102	4.05	0.860

**Asset Reduction**

The asset reduction strategy in this study consists of 5 measurement items. Table 9 presents the data statistics associated with these measured items. Among the measurement items related to asset reduction, the highest mean value is observed for "AR03 - Reduction in unprofitable investment or expenses" with a mean value of 3.89. The standard deviation for this item is 0.922, indicating a moderate level of dispersion around the mean. This suggests that, on average, the respondents generally agreed or perceived a relatively high level of implementation in reducing unprofitable investments or expenses as part of the asset reduction strategy. On the other hand, the lowest mean value is obtained for "AR05 - Selling some business unit" with a mean value of 3.00. The standard deviation for this item is 1.090, indicating a higher level of dispersion. This implies that there is greater variability in the responses regarding the selling of business units, with some respondents expressing stronger disagreement or perceiving lower levels of implementation compared to others. Overall, the standard deviation values for the asset reduction measurement items range from 0.922 to 1.090, indicating varying levels of dispersion. This suggests that there is relatively more variability in the responses across the different measured items related to the asset reduction strategy, particularly for the item "AR05 - Selling some business unit."

**Table 9:**

*Descriptive Analysis Results – Asset Reduction Strategy*

Item Code	Item	Frequency	Mean	Standard Deviation
AR01	Selling equipment and machineries	102	3.33	1.111
AR02	Selling useless land and building	102	3.15	1.047
AR03	Reduction in unprofitable investment or expenses	102	3.89	0.922
AR04	Narrowing scope of business	102	3.43	0.960
AR05	Selling some business unit	102	3.00	1.090

### ***Business Performance***

Business performance is the dependent variable in this study, and it is measured using 6 items. Table 4.5 presents the data statistics for these measured items, which are related to business performance. Among the measurement items related to business performance, the highest mean value is observed for "BP03 - Increase in operating profit margin" with a mean value of 4.53. The standard deviation for this item is 0.592, indicating a relatively low level of dispersion around the mean. This suggests that, on average, the respondents perceived a high level of achievement or implementation in increasing the operating profit margin as an indicator of business performance. On the other hand, the lowest mean value is obtained for "BP06 - Decrease in staff cost" with a mean value of 3.48. The standard deviation for this item is 1.022, indicating a higher level of dispersion. This implies that there is greater variability in the responses regarding the decrease in staff cost, with some respondents expressing stronger disagreement or perceiving lower levels of implementation compared to others. Overall, the standard deviation values for the business performance measurement items range from 0.592 to 1.022, indicating varying levels of dispersion. This suggests that there is relatively more variability in the responses across the different measured items related to business performance, particularly for the item "BP06 - Decrease in staff cost."

**Table 10:**

#### *Descriptive Analysis Results – Business Performance*

Item Code	Item	Frequency	Mean	Standard Deviation
BP01	Increase in sale	102	4.34	0.850
BP02	Increase in return of investment (ROI)	102	4.49	0.609
BP03	Increase in operating profit margin	102	4.53	0.592
BP04	Increase in cash flow	102	4.29	0.752
BP05	Increase in employee morale and capability	102	4.36	0.830
BP06	Decrease in staff cost	102	3.48	1.022

### **Analysis of variance (ANOVA)**

To compare the mean scores of different variable groups and determine the impact of independent variables (cost reduction, revenue generation, and asset reduction) on the dependent variable (business performance), a one-way analysis of variance (ANOVA) was conducted. The results of the ANOVA are presented in Table 11. The significance of the relationship between variables is assessed based on the p-value. A p-value less than 0.05 indicates a significant difference and suggests that the independent variables have an impact on the dependent variable. On the other hand, a p-value greater than or equal to 0.05 suggests that the relationship is not significant, indicating that the independent variables do not have a significant impact on the dependent variable. Based on the findings presented in Table 11, it can be observed that, at a significance level of  $p < 0.05$ , the relationship between business performance and all independent variables (cost reduction, revenue generation, and asset reduction) is found to be significant. This indicates that these independent variables have a significant impact on the dependent variable, business performance. In summary, the results of the one-way analysis of variance suggest that there is a significant relationship between business performance and the independent variables of cost reduction, revenue generation, and asset reduction.

**Table 11:***One-Way ANOVA Analysis (All Variables)*

	F value	p-value (Sig.)
Business Performance *Cost Reduction	4.018	< 0.001
Business Performance*Revenue Generation	7.047	< 0.001
Business Performance*Asset Reduction	2.200	0.016

### Hypotheses Testing

To examine the relationship between the four variables, namely business performance, cost reduction, revenue generation, and asset reduction, the Pearson correlation coefficient was computed. The results of the correlation analysis are presented in Table 12. The Pearson correlation coefficient measures the strength and direction of the linear relationship between two variables. A positive correlation coefficient indicates a positive linear relationship, while a negative correlation coefficient indicates a negative linear relationship. The coefficient ranges from -1 to 1, with values closer to -1 or 1 indicating a stronger correlation, and a value of 0 indicating no correlation. Based on the findings presented in Table 12, the Pearson correlation coefficient revealed the following relationships:

1. Business performance and cost reduction: There is a positive correlation between business performance and cost reduction, with a correlation coefficient of 0.531 ( $p < 0.01$ ). This suggests that as the extent of cost reduction increases, business performance tends to improve.
2. Business performance and revenue generation: There is a positive correlation between business performance and revenue generation, with a correlation coefficient of 0.652 ( $p < 0.01$ ). This indicates that as the level of revenue generation increases, business performance tends to be higher.
3. Business performance and asset reduction: There is a positive correlation between business performance and asset reduction, with a correlation coefficient of 0.286 ( $p = 0.004$ ). Although the correlation coefficient is smaller compared to the other variables, it still indicates a positive relationship. This suggests that as the level of asset reduction increases, business performance may improve to some extent.

In summary, the Pearson correlation coefficient analysis indicates significant positive correlations between business performance and the independent variables of cost reduction and revenue generation. Additionally, there is a smaller but still significant positive correlation between business performance and asset reduction. These findings suggest that these three variables are positively associated with business performance.



**Table 12:***Correlation Analysis Business Performance and Operational Turnaround Strategy*

		Business Performance
Cost Reduction	Correlation Coefficient Sig. (2-tailed)	0.531** < 0.001
Revenue Generation	Correlation Coefficient Sig. (2-tailed)	0.652** < 0.001
Asset Reduction	Correlation Coefficient Sig. (2-tailed)	0.286** 0.004

\*\*Correlation is significant at the 0.05 level (2-tailed)

Based on the correlation analysis result, the results for hypotheses testing are presented in Table 13 below.

**Table 13:***Hypothesis Testing Result*

Hypothesis	r-value	p-value	Test results
H1: Cost reduction strategy has a positive impact on the organization business performance	0.531	<0.001	Supported
H2: Revenue generation strategy has a positive impact on the organization business performance	0.652	<0.001	Supported
H3: Asset reduction strategy has a positive impact on the organization business performance	0.286	0.004	Supported

## 5.0 DISCUSSION

The discussion section of this study explores the findings and implications of the research, providing a critical analysis and interpretation of the results. The analysis focused on the determinant factors for improving business performance through the implementation of operational turnaround strategies in the power generation industry, with a specific emphasis on the company power generation with aims to present a concise overview of the key findings, highlight their significance, and set the stage for a comprehensive discussion of their implications. Below is specific discussion of each of the said strategies.

### *Impact of cost reduction strategy on business performance.*

The findings of this study provide strong support for the implementation of the cost reduction strategy within the company power generation. The analysis revealed that the extent of implementation of this operational turnaround strategy ranged from moderate to very high, with mean values ranging from 3.04 to 4.54. Moreover, a significant positive relationship was observed between the cost reduction strategy and business performance. The correlation analysis indicates that an increase in the level of implementation of the cost reduction strategy leads to an improvement in business performance. Based on these findings, it is highly recommended that the company power generation carefully considers the

implementation of cost reduction strategies. This could include various measures such as downsizing excessive workforce, enhancing employee productivity, improving supply conditions, eliminating shrinkages, reducing maintenance costs, optimizing administrative expenses, leasing equipment and machinery, minimizing marketing expenses, streamlining research and development activities including plant modifications or improvements, negotiating with credit grantors, reducing costs by focusing on a select group of customers, and fostering innovation for cost reduction purposes. Such measures have the potential to significantly enhance the business performance of the company power generation.

#### ***Impact of revenue generation strategy on business performance.***

The findings of this study provide compelling evidence for the successful implementation of the revenue generation strategy within the company power generation. The analysis demonstrates that the extent of implementation of this operational turnaround strategy is high, with mean values ranging from 3.89 to 4.19. Additionally, a significant positive relationship was observed between business performance and the revenue generation strategy. The correlation analysis indicates that an enhancement in the implementation of the revenue generation strategy leads to an improvement in the business performance of the company power generation. Based on these noteworthy findings, it is highly recommended that the company power generation continues to prioritize and pursue the revenue generation strategy. To effectively implement this strategy, several key initiatives can be undertaken. These may include increasing the account receivable turnover rate, reducing the debt turnover rate, optimizing sales without incurring excessive expenses, implementing effective pricing strategies, optimizing inventory control, and increasing the stock turnover rate. By focusing on these initiatives, the company power generation can capitalize on the positive relationship between revenue generation strategy implementation and business performance, thus fostering further improvements in their overall performance.

#### ***Impact of asset reduction on business performance***

The findings of this study confirm the successful implementation of the asset reduction strategy within the company power generation. The analysis reveals that the extent of implementation of this operational turnaround strategy ranges from moderate to high, with mean values ranging from 3.00 to 3.89. Furthermore, a positive relationship is observed between business performance and the asset reduction strategy. The correlation analysis indicates that an improvement in the implementation of the asset reduction strategy will lead to enhancements in the business performance of the company power generation. Based on these significant findings, it is recommended that the company power generation continues to prioritize and implement asset reduction strategies. Several key initiatives can be pursued to effectively implement this strategy. These may include selling equipment and machinery that are no longer needed, divesting useless land and buildings, reducing unprofitable investments or expenses, narrowing the scope of business operations, and selling underperforming business units. By undertaking these initiatives, the company power generation can capitalize on the positive relationship between asset reduction strategy implementation and business performance, thereby further improving their overall performance.

#### **Research Contribution**

This study contributes significantly to the power generation industry by providing valuable insights into effective asset management practices that enhance business performance. The findings confirm the positive impact of implementing operational turnaround strategies, such as cost reduction, revenue generation, and asset reduction, in the power generation sector. The study highlights the importance of revenue generation strategies in attracting investors and achieving consistent revenue growth, offering practical recommendations for aligning strategies with long-term goals. Additionally, the research emphasizes the relevance of asset management practices beyond power generation, providing insights into optimizing asset utilization, maintenance, and replacement. Overall, this study enriches the existing

literature by providing empirical evidence and practical implications for organizations, including the company power generation, seeking to enhance business performance and competitiveness through effective asset management and strategic implementation of turnaround strategies.

## 6.0 CONCLUSION

In this study, we examined the determinant factors that impact business performance through the implementation of operational turnaround strategies in power generation business particularly in the company power generation. Our findings suggest that the three key operational turnaround strategies - cost reduction, revenue generation, and asset reduction have positive relationship with business performance. Out of the three strategies, revenue generation strategy had the most significant impact on business performance compared to the other two strategies. Despite its valuable contributions, this study has a few limitations that should be acknowledged. First, the research focused specifically on the company power generation, which limits the generalizability of the findings to other power generation companies or industries. Therefore, caution should be exercised when applying these findings to different organizational contexts. Additionally, the study relied on self-reported data from respondents, which may introduce response biases and potential inaccuracies. Future studies could consider utilizing objective performance measures and alternative data collection methods to enhance the validity of the findings. Furthermore, this study primarily examined the impact of operational turnaround strategies on business performance without considering potential moderating variables or contextual factors. Future research could explore the influence of factors such as organizational culture, leadership style, or market conditions to provide a more comprehensive understanding of the relationship between operational turnaround strategies and business performance. Lastly, there is a growing recognition that operational turnaround strategies can also be beneficial in non-crisis situations, and there is a need for more research in this area. This is because non-crisis situations can also present challenges and opportunities for organizations that require them to change and improve their operational performance. For example, changes in technology, customer preferences, or market conditions may require organizations to adapt and transform in order to remain competitive and sustainable over the long term. Therefore, it is important to continue to conduct research on operational turnaround strategies in non-crisis situations, in order to better understand how these strategies can be applied in different contexts and situations. By doing so, researchers can provide a more comprehensive understanding of the factors that contribute to successful implementation of operational turnaround strategies, and practitioners can gain insights into best practices for improving organizational performance in both crisis and non-crisis situations.

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