**Thematic Analysis of Interview Responses**

**Objective 1: Identify Common Production Inefficiencies in the Manufacturing Sector**

For the study's first objective, which is to "Identify common production inefficiencies in the manufacturing sector," two questions were posed.

**Identified Key Themes**

Several key themes were identified based on provided response from the interviewee which is stated below:

1. **Inadequate Infrastructure and Equipment**
2. **Human Resource Challenges**
3. **Supply Chain Disruptions**
4. **Technological Limitations**

**Theme 1: Inadequate Infrastructure and Equipment**

One of the most dominant themes that emerged from the interviews was the inadequacy of infrastructure and equipment in the manufacturing firms. This theme was particularly highlighted by the Project Managers, who noted that outdated machinery and inconsistent power supply were significant barriers to maintaining production efficiency. Respondent A, a Project Manager, stated:

*"You see, the problem is the equipment we are using is old, and this affects the speed of production. Sometimes, even the light no dey steady, so we have to stop production till the generator kicks in. This delay affects our target output for the day."*

Similarly, Respondent B, another Project Manager, echoed this sentiment by highlighting the impact of equipment failure on production timelines:

*"The machines we use, they break down often, and it’s difficult to find the right parts here in Nigeria. When this happens, we have to wait for days, sometimes weeks, before we can get the necessary repairs done, and this really hampers our productivity."*

The issue of inadequate infrastructure and equipment was less emphasized by the Operations Managers, who seemed to focus more on the human resource aspects of production inefficiency. However, Respondent C did acknowledge that *“The frequent breakdown of machines na big wahala for us, but na the way we dey manage people wey dey operate them, that one na bigger issue.”* This highlights a potential interaction between human resource management and the technical infrastructure within these firms, suggesting that inefficiencies may be compounded by a combination of factors.

**Theme 2: Human Resource Challenges**

The second prominent theme revolved around human resource challenges, particularly the lack of skilled labour and ineffective management practices. Respondent C, an Operations Manager, noted:

*"One major issue we face is that the workers no get enough training. We dey hire people, but after some time, you realize say dem no really sabi how to operate the machines properly, and this leads to errors and delays."*

This sentiment was echoed by Respondent D, another Operations Manager, who added that:

*"Apart from the skill gap, there’s also the issue of discipline. Sometimes, workers go come late or dem no go show up at all, and this disrupts the entire production process. We end up spending more time trying to get things back on track."*

Interestingly, while the Operations Managers highlighted human resource challenges as a key source of inefficiency, the Project Managers were more likely to attribute these issues to a lack of adequate training and development programs. Respondent B stated:

*"I believe if we invest more in training our workers, we will see a significant improvement in efficiency. But unfortunately, the company no too dey focus on that, and it’s affecting our overall output."*

This indicates a divergence in perspectives between Project Managers and Operations Managers regarding the root causes of human resource-related inefficiencies. The former seem to place more emphasis on the need for organizational investment in training, while the latter are more concerned with the day-to-day management of the workforce.

**Theme 3: Supply Chain Disruptions**

Supply chain disruptions emerged as another critical theme affecting production efficiency. Respondent A highlighted how delays in the supply of raw materials lead to production bottlenecks:

*"Sometimes, we no fit get the raw materials on time because of transportation issues or customs delays. When this happens, everything just come to a halt. We dey wait for materials, and time dey go."*

Respondent D also touched on this issue, noting that:

*"The suppliers sometimes fail to deliver on schedule, and when that happens, we have to pause production. It’s not something we have much control over, and it affects our ability to meet deadlines."*

The respondents' comments indicate that supply chain disruptions are a significant external factor contributing to inefficiencies in the manufacturing process. However, it also highlights a lack of effective contingency planning within the firms to mitigate these disruptions. This aligns with findings from other studies that emphasize the importance of a robust supply chain management system in maintaining production efficiency (Ala et al., 2012; Fernandez-Viagas and Framinan, 2015).

**Theme 4: Technological Limitations**

Lastly, technological limitations were cited as a challenge, particularly in terms of integrating new technologies into existing manufacturing processes. Respondent C observed:

*"Technology don improve, but we still dey struggle to integrate new systems. Sometimes, the new software no dey compatible with the old machines we dey use, and this leads to more issues."*

Respondent B further commented on the slow pace of technological adoption in their firm:

*"We dey talk about Industry 4.0, but the truth be say, we are far from reaching that level. The company no too dey ready to invest in the latest technology, and this puts us behind our competitors."*

The responses suggest that while the potential for technological advancement exists, there is resistance or difficulty in adopting new technologies within these firms. This could be due to financial constraints, lack of technical expertise, or a reluctance to change established processes. The impact of technological limitations on production efficiency is well-documented in the literature, with several studies highlighting the need for continuous technological upgrades to maintain competitiveness in the manufacturing sector (Durakovic et al., 2018; Panayiotou et al., 2022).

**Conclusion**

The thematic analysis of the interview responses reveals several critical factors contributing to production inefficiencies in the Nigerian manufacturing sector. These include inadequate infrastructure and equipment, human resource challenges, supply chain disruptions, and technological limitations. The analysis shows that while all respondents acknowledge these issues, their perspectives vary depending on their roles within the organization. Project Managers tend to focus more on technical and training-related aspects, while Operations Managers emphasize human resource and supply chain issues. These findings suggest that addressing production inefficiencies will require a multi-faceted approach that considers both the technical and managerial aspects of manufacturing processes. Additionally, there is a need for greater investment in training, technology, and supply chain management to mitigate these inefficiencies and enhance productivity.

**Thematic Analysis of Interview Responses**

**Objective 2: Assess the Impact of Project Management Techniques on Production Cycle Time in the Manufacturing Sector**

For the second objective, which aims to "assess the impact of project management techniques on production cycle time in the manufacturing sector," three questions were posed to the four respondents, consisting of two Project Managers and two Operations Managers from two different soap manufacturing companies in Nigeria. The questions were:

1. **Which project management techniques (e.g., Lean, Six Sigma, Agile) are currently used in your manufacturing processes?**
2. **How have these techniques affected your production cycle times? Can you provide specific examples?**
3. **On a scale of 1 to 5, how would you rate the impact of these techniques on reducing production cycle time?**

**Key Themes Identified**

Based on the responses provided by the interviewees, the following key themes were identified:

1. **Adoption of Lean and Six Sigma Techniques**
2. **Improvement in Production Cycle Time**
3. **Challenges in Implementing Project Management Techniques**
4. **Variability in the Perceived Impact**

**Theme 1: Adoption of Lean and Six Sigma Techniques**

A prevalent theme that emerged from the interviews was the adoption of Lean and Six Sigma techniques in the manufacturing processes of the soap-making companies. Respondent A, a Project Manager, mentioned:

*"We mainly use Lean techniques to eliminate waste and improve efficiency. Six Sigma dey there too, but na Lean we dey focus on more because of the type of production we dey do."*

Similarly, Respondent B highlighted that their company employs both Lean and Six Sigma, though Lean techniques were emphasized:

*"Lean is very effective for our kind of business, where we dey produce large quantities of soap. Six Sigma dey help us to maintain quality, but Lean na the main one we dey use for reducing production cycle time."*

Both Project Managers identified Lean as the primary technique, suggesting that its principles of waste reduction, streamlined processes, and continuous improvement align well with the needs of the soap manufacturing sector. Operations Managers also recognized the importance of these techniques, although they provided a broader perspective. Respondent C noted:

*"We dey use Lean and Six Sigma, but sometimes, we also dey apply Agile principles, especially when we dey experiment with new soap formulations. This helps us to quickly adapt to changes and maintain our production schedules."*

Respondent D similarly acknowledged the use of multiple project management techniques, adding that:

*"Though Lean na the most common one, we dey try blend am with other methods depending on the situation. This flexibility helps us stay on track even when we face unexpected challenges."*

The responses indicate that while Lean and Six Sigma are the dominant techniques used, there is also a degree of flexibility in adopting other methods, such as Agile, to address specific production challenges.

**Theme 2: Improvement in Production Cycle Time**

The impact of these project management techniques on production cycle time was another critical theme. All respondents agreed that implementing these techniques has led to improvements in their production processes, although the extent of these improvements varied. Respondent A provided a specific example:

*"Before we introduced Lean, our production cycle time for a batch of soap was about 12 hours. Now, with Lean, we don reduce am to about 8 hours. We removed unnecessary steps and rearranged the workflow to make it more efficient."*

Respondent B echoed this improvement but noted that while the overall cycle time has decreased, there are still areas for further refinement:

*"We’ve seen a significant reduction in cycle time since adopting Lean and Six Sigma. For example, our packaging line used to be a major bottleneck, but with process re-engineering, we don reduce the time spent there by 30%. However, we still dey work on optimizing other parts of the production chain."*

Operations Managers were also positive about the impact but highlighted that the improvements in cycle time depend on how consistently the techniques are applied. Respondent C remarked:

*"Lean and Six Sigma have definitely helped us reduce cycle time, especially in the areas of material handling and assembly. But, the success of these techniques dey rely on how well the team fit follow the guidelines. Sometimes, we face setbacks when workers no follow the protocols strictly."*

Respondent D added that the impact of these techniques is also influenced by external factors, such as supply chain issues:

*"Our cycle time has improved with the use of these techniques, but we still face delays when materials no dey arrive on time. Even with the best techniques, you fit still encounter delays if other parts of the production process no dey in sync."*

The respondents’ comments suggest that while Lean and Six Sigma have effectively reduced production cycle time, the full benefits are contingent on consistent application and the alignment of all production-related processes.

**Theme 3: Challenges in Implementing Project Management Techniques**

A theme that was less emphasized but still significant was the challenge of implementing project management techniques effectively. Respondent A acknowledged that:

*"Introducing Lean wasn’t easy. We faced resistance from some workers who no gree change the way dem dey do things. It took time for them to understand the benefits, but eventually, they came around."*

Respondent B also pointed out the challenge of maintaining the momentum after the initial implementation:

*"The first few months after we introduced Lean, there was a lot of enthusiasm. But over time, it became harder to keep everyone motivated to follow the new procedures, especially when the results no show immediately."*

Operations Managers shared similar concerns, with Respondent C noting that:

*"One challenge we face is training. We dey try teach our workers how to apply these techniques, but not everyone dey grasp the concepts quickly. This can lead to inconsistent results and slower progress."*

Respondent D further highlighted the difficulty of integrating these techniques into the existing company culture:

*"Sometimes, the problem no be the techniques themselves, but how we dey integrate them into our way of working. Change is hard, and it takes time for everyone to adjust, especially when the company has been doing things a certain way for many years."*

These challenges underscore the importance of proper training, communication, and cultural alignment when implementing project management techniques in manufacturing processes.

**Theme 4: Variability in the Perceived Impact**

The final theme that emerged was the variability in the perceived impact of these techniques on production cycle time. When asked to rate the impact on a scale of 1 to 5, the respondents provided varied ratings, reflecting different levels of satisfaction with the results. Respondent A rated the impact as a 4, explaining:

*"I would say 4 because we’ve seen good results, but there’s still room for improvement, especially in the areas where we face external challenges."*

Respondent B also rated the impact as a 4, but for different reasons:

*"I rate it a 4 because we’ve made significant progress, but the process is ongoing. We haven’t reached our full potential yet, but we’re on the right path."*

On the other hand, Respondent C provided a slightly lower rating of 3, citing inconsistencies in implementation:

*"I’ll give it a 3. The techniques work, but the way we dey apply them no be 100% consistent, so the results dey vary."*

Respondent D also rated the impact as a 3, focusing on the external factors that affect the success of these techniques:

*"I rate it a 3 because, while the techniques are good, there are other factors, like supply chain issues, that affect how much we fit benefit from them."*

These varying ratings suggest that while the techniques have generally had a positive impact on reducing production cycle time, their effectiveness is influenced by several factors, including consistency in application, external challenges, and the overall company culture.

**Conclusion**

The thematic analysis of the interview responses for the second research objective highlights the adoption of Lean and Six Sigma as the primary project management techniques in the soap manufacturing sector in Nigeria. These techniques have led to improvements in production cycle time, though the extent of these improvements varies across different firms and is influenced by factors such as consistency in application, training, and external challenges. The responses also reveal that while the techniques are beneficial, their full potential is often not realized due to implementation challenges and the need for cultural alignment within the organizations. This analysis suggests that to further reduce production cycle times, manufacturing firms need to focus on addressing these challenges, ensuring consistent application of the techniques, and continuously adapting to external factors that may impact their effectiveness.

**Thematic Analysis of Interview Responses**

**Objective 3: Assess the Long-Term Sustainability of Efficiency Improvements Achieved Through Project Management Techniques**

For the third research objective, which aims to "assess the long-term sustainability of efficiency improvements achieved through project management techniques," three questions were posed to the respondents. The respondents consisted of two Project Managers and two Operations Managers from two different soap manufacturing companies in Nigeria. The questions were:

1. **Have the efficiency improvements achieved through project management techniques been sustained over time? Why or why not?**
2. **What measures have been taken to ensure the long-term sustainability of these improvements?**
3. **On a scale of 1 to 5, how would you rate the sustainability of the efficiency improvements?**

**Key Themes Identified**

Based on the responses provided by the interviewees, the following key themes were identified:

1. **Sustainability of Efficiency Improvements**
2. **Challenges in Maintaining Long-Term Sustainability**
3. **Measures Taken for Sustainability**
4. **Variability in the Perceived Sustainability**

**Theme 1: Sustainability of Efficiency Improvements**

The first theme revolves around the sustainability of the efficiency improvements achieved through project management techniques. There was a consensus among the respondents that, while initial improvements were evident, sustaining these gains over time has been challenging. Respondent A, a Project Manager, shared:

*"When we first implemented Lean and Six Sigma, we saw big improvements in efficiency. But after some months, some of those gains began to wane. I no go lie, it’s hard to keep the momentum going."*

Respondent B echoed this sentiment, noting:

*"Initially, the techniques worked wonders, and we saw a lot of improvement. But after a while, things started to slip back to how they were before, especially when new challenges dey come up."*

Operations Managers provided similar observations, with Respondent C stating:

*"We managed to sustain some of the efficiency improvements, but not all. It’s like after the initial boost, things start to level off, and if you no dey careful, you fit lose the gains entirely."*

Respondent D also highlighted the difficulty in sustaining these improvements, particularly in the face of external pressures:

*"Sustaining the improvements na serious challenge, especially when external factors like supply chain disruptions or market changes dey affect production. It’s not easy to maintain the same level of efficiency over time."*

These responses indicate that while project management techniques such as Lean and Six Sigma initially lead to significant efficiency improvements, sustaining these gains over the long term presents a considerable challenge for the manufacturing firms.

**Theme 2: Challenges in Maintaining Long-Term Sustainability**

The second theme identified is the challenges faced in maintaining long-term sustainability of the efficiency improvements. One of the key challenges highlighted by the respondents was the tendency for old habits and practices to resurface, leading to a gradual erosion of the gains made. Respondent A explained:

*"One of the biggest challenges we face is people falling back into old ways of doing things. After a while, the discipline required to maintain Lean or Six Sigma processes begins to wane, and before you know it, we dey back to square one."*

Respondent B added that the changing business environment also contributes to the difficulty in sustaining improvements:

*"The business environment dey change constantly, and sometimes, what worked last year no go work again this year. This makes it hard to sustain the efficiency we achieved initially."*

Operations Managers also pointed out the role of external factors in undermining long-term sustainability. Respondent C noted:

*"External factors like changes in raw material prices or supply chain disruptions can quickly undo the efficiency gains we worked so hard to achieve. It’s difficult to sustain improvements when you dey face these kinds of challenges."*

Respondent D similarly emphasized the impact of external pressures, stating:

*"We fit try our best internally, but when external factors dey disrupt our processes, it’s hard to keep the efficiency levels up. Sustaining improvements over the long term requires dealing with both internal and external challenges effectively."*

These comments suggest that the sustainability of efficiency improvements is not just an internal challenge but is also heavily influenced by external factors that are often beyond the control of the manufacturing firms.

**Theme 3: Measures Taken for Sustainability**

Despite the challenges, the respondents highlighted several measures that have been taken to ensure the long-term sustainability of the efficiency improvements. Continuous training and reinforcement of project management principles were common strategies mentioned by the respondents. Respondent A described their approach:

*"We’ve been doing regular training sessions to remind everyone of the importance of following the Lean and Six Sigma processes. This helps to keep the team focused and maintain the efficiency we’ve achieved."*

Respondent B added that they have implemented a monitoring system to track the effectiveness of the techniques over time:

*"We set up a monitoring system that allows us to track how well we’re sticking to the Lean and Six Sigma principles. This helps us to identify when things dey start to slip and take corrective action quickly."*

Operations Managers also emphasized the importance of continuous improvement and adaptation. Respondent C stated:

*"We dey constantly look for ways to improve and adapt our processes to changing conditions. This continuous improvement mindset helps us sustain the efficiency gains we’ve made."*

Respondent D highlighted the role of leadership in maintaining sustainability:

*"Strong leadership is crucial. When the leaders dey committed to sustaining the improvements, it filters down to the rest of the team. We’ve made it a priority to keep everyone engaged and motivated."*

These measures, including continuous training, monitoring, adaptation, and strong leadership, are critical in ensuring the long-term sustainability of the efficiency improvements achieved through project management techniques.

**Theme 4: Variability in the Perceived Sustainability**

The final theme that emerged was the variability in the perceived sustainability of the efficiency improvements. When asked to rate the sustainability on a scale of 1 to 5, the respondents provided varied ratings, reflecting different levels of confidence in the long-term effectiveness of the techniques. Respondent A rated the sustainability as a 3, explaining:

*"I’ll give it a 3. We’ve managed to sustain some of the improvements, but there’s still a lot of work to be done to make sure these gains no dey slip away."*

Respondent B also rated it a 3, citing the ongoing challenges in maintaining efficiency:

*"I rate it a 3 because, while we’ve made progress, the challenges we dey face mean that sustainability is not guaranteed. We need to keep working at it."*

On the other hand, Respondent C provided a slightly higher rating of 4, noting the effectiveness of their continuous improvement efforts:

*"I’ll give it a 4. We’ve been able to sustain most of the improvements through our continuous improvement initiatives, but there’s always room for more work."*

Respondent D also rated the sustainability as a 4, emphasizing the role of leadership and monitoring:

*"I rate it a 4 because our leadership and monitoring systems have been effective in keeping us on track. But we can’t afford to become complacent."*

These varying ratings suggest that while some respondents are confident in the sustainability of the efficiency improvements, others remain cautious, recognizing the ongoing challenges and the need for continuous effort to maintain the gains achieved.

**Conclusion**

The thematic analysis of the interview responses for the third research objective highlights the mixed experiences of the respondents in sustaining the efficiency improvements achieved through project management techniques. While initial gains were significant, maintaining these improvements over the long term has proven challenging due to factors such as the reversion to old practices, changes in the business environment, and external pressures. The respondents identified several measures taken to ensure sustainability, including continuous training, monitoring, adaptation, and strong leadership. However, the variability in the perceived sustainability of these improvements underscores the ongoing nature of the challenge and the need for continuous effort to maintain the gains achieved. This analysis suggests that manufacturing firms need to remain vigilant and proactive in sustaining the efficiency improvements achieved through project management techniques, particularly in the face of external and internal challenges.

**Thematic Analysis of Interview Responses**

**Objective 4: Determine the Best Practices and Customisation Strategies for Applying Project Management Techniques in Different Types of Manufacturing Operations**

For the fourth research objective, which aims to "determine the best practices and customisation strategies for applying project management techniques in different types of manufacturing operations," the following interview questions were posed to the respondents:

1. **What project management techniques (e.g., Lean, Six Sigma, Agile) have you found most effective in your soap manufacturing processes?**
2. **How have you customised these techniques to fit the unique needs of your company?**
3. **What best practices have you identified in applying these techniques across different stages of manufacturing?**

The respondents included two Project Managers and two Operations Managers from two different soap manufacturing companies in Nigeria.

**Key Themes Identified**

The interview responses were analysed to identify key themes related to the research objective. The following themes emerged:

1. **Effectiveness of Different Project Management Techniques**
2. **Customisation of Techniques**
3. **Best Practices Across Manufacturing Stages**
4. **Challenges in Customisation**

**Theme 1: Effectiveness of Different Project Management Techniques**

The first theme focuses on the effectiveness of different project management techniques in soap manufacturing. Respondents generally agreed that Lean and Six Sigma were the most effective techniques for their operations. Respondent A, a Project Manager, highlighted:

*"In our operations, Lean dey really work well because it helps us eliminate waste and streamline our processes. Six Sigma too dey effective for improving quality control."*

Respondent B, another Project Manager, also noted the effectiveness of Lean and Six Sigma but added that Agile had limited application in their context:

*"We mostly rely on Lean and Six Sigma. Agile no really fit into our operations because we dey deal with fixed production processes, so we no need that level of flexibility."*

Operations Managers shared similar views, with Respondent C stating:

*"For us, Lean dey give the best results, especially in reducing waste and improving efficiency. Six Sigma too dey help us maintain consistent quality, which is crucial for soap production."*

Respondent D, however, mentioned that while Lean and Six Sigma were effective, the company had to make several adjustments to fit their specific needs:

*"Lean and Six Sigma dey work well, but we had to tweak them to suit our processes. It’s not just about applying the techniques as they are; you need to make adjustments to fit your specific environment."*

These responses indicate that while Lean and Six Sigma are generally effective in soap manufacturing, the extent of their effectiveness may vary depending on the specific operational context and the level of customisation applied.

**Theme 2: Customisation of Techniques**

The second theme revolves around the customisation of project management techniques to fit the unique needs of the companies. All respondents agreed that customisation was crucial for the successful implementation of these techniques. Respondent A explained:

*"We no just adopt Lean and Six Sigma straight from the book. We had to customise them to fit our specific processes and the Nigerian context. For example, we adapted the Kanban system to better reflect our supply chain realities."*

Respondent B provided a specific example of how customisation was applied:

*"In our case, we customised Six Sigma by focusing more on the critical-to-quality (CTQ) characteristics that are specific to soap manufacturing. This allowed us to better control the quality of our products."*

Operations Managers also emphasised the importance of customisation. Respondent C stated:

*"Customisation na key for us. We can’t just copy and paste these techniques from other industries. We had to tweak them to fit our production lines and the kind of raw materials we dey use."*

Respondent D added that the customisation process involved a lot of trial and error:

*"We went through a lot of trial and error to find the right customisations. Sometimes we go tweak something, and it no go work, so we had to go back to the drawing board. But eventually, we found the right balance."*

These insights underscore the importance of customising project management techniques to fit the specific needs and conditions of the manufacturing operations, rather than merely applying them in their standard forms.

**Theme 3: Best Practices Across Manufacturing Stages**

The third theme focuses on the best practices identified by the respondents in applying project management techniques across different stages of manufacturing. Respondent A highlighted the importance of continuous improvement:

*"One best practice we dey follow is continuous improvement. We no just implement Lean and Six Sigma once and forget about them. We dey constantly review our processes to see where we fit improve."*

Respondent B discussed the importance of employee involvement:

*"We involve our workers at every stage of the manufacturing process. This helps us identify issues early and make adjustments before they become big problems. Na team effort, and it dey really pay off."*

Operations Managers also identified best practices related to quality control and process monitoring. Respondent C stated:

*"We dey place a lot of emphasis on quality control at every stage of production. This helps us maintain consistency and reduce the rate of defective products."*

Respondent D mentioned the use of visual management tools as a best practice:

*"We implemented visual management tools like dashboards and charts to keep everyone informed about the production status. This makes it easier to spot issues and address them quickly."*

These best practices, such as continuous improvement, employee involvement, quality control, and the use of visual management tools, are crucial for the successful application of project management techniques across different manufacturing stages.

**Theme 4: Challenges in Customisation**

The final theme addresses the challenges faced by the respondents in customising project management techniques. One common challenge identified was the difficulty in aligning the techniques with the existing company culture. Respondent A noted:

*"One challenge we face na getting everyone on board with the new techniques. Some people dey resist change, especially when it means doing things differently from how we’ve been doing them for years."*

Respondent B discussed the challenge of limited resources:

*"Customising these techniques requires resources, both in terms of time and money. But sometimes, we no get enough resources to fully implement the customisations we want."*

Operations Managers also highlighted challenges related to training and knowledge transfer. Respondent C stated:

*"Training na big challenge for us. We need to constantly train our workers on the customised processes, but it’s not always easy to get everyone up to speed."*

Respondent D mentioned the difficulty in measuring the impact of customisations:

*"Measuring the impact of the customisations na another challenge. Sometimes it’s hard to tell whether the changes we made are actually making a difference or if other factors dey contribute to the improvements."*

These challenges highlight the complexities involved in customising project management techniques for different manufacturing operations. Overcoming these challenges requires a strategic approach that includes change management, resource allocation, continuous training, and effective impact measurement.

**Conclusion**

The thematic analysis of the interview responses for the fourth research objective provides valuable insights into the best practices and customisation strategies for applying project management techniques in soap manufacturing. The respondents identified Lean and Six Sigma as the most effective techniques but emphasised the need for customisation to fit the specific needs of their operations. Best practices such as continuous improvement, employee involvement, quality control, and the use of visual management tools were highlighted as key factors for success. However, the respondents also faced challenges in customisation, including resistance to change, limited resources, training difficulties, and measuring impact. These findings suggest that while project management techniques can be highly effective in improving manufacturing operations, their success largely depends on the ability to customise them to the specific context and overcome the associated challenges.