

Enhancing Performance Metrics: A Google Looker Studio Approach to Key Performance Indicator (KPI) Management System for Homecorp Offshore Drafting Team

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ABSTRACT: The Homecorp Offshore Drafting Key Performance Indicator (KPI) Management System is a comprehensive process that aims to improve the management and monitoring of key performance indicators within the drafting department. This system utilizes Google Looker Studio, which provides a user-friendly real-time data analysis and visualization platform. It enables managers to make well-informed decisions and enhance departmental performance. The process begins with collecting daily task data, logged manually or through automated Google Apps Scripts into a Google Sheets database. This data includes task details such as type, status, and completion time. A KPI-pointing system, developed through focus group discussions, also assigns point values to tasks based on their complexity and time requirements.

Integrating Google Looker Studio with Google Sheets allows real-time synchronization and web-based monitoring of key performance indicators (KPIs). The dashboard offers detailed insights such as task counts, average KPIs, and monthly performance graphs, providing a comprehensive performance evaluation. The implementation of this system has been well-received by the team, with survey results indicating improvements in tracking performance metrics, ease of use, and enhanced collaboration. While these outcomes are positive, there is still a recognized need for further refinement, particularly in incorporating qualitative data and improving IT support. The KPI Management System has significantly enhanced performance monitoring and management for the drafting team. To keep the system up-to-date and effective, ongoing feedback and iterative improvements must be maintained. Potential future enhancements could include extending the system's use company-wide to foster a culture of continuous improvement and accountability.

KEYWORDS: Management, Engineering Management, Key Performance Indicator, Business Process Outsourcing, Google Looker Studio, Management System

I. INTRODUCTION

In today's fiercely competitive business landscape, performance management systems are vital to the success of organizations that aim to optimize employee productivity and maximize their effectiveness. Key Performance Indicators (KPIs) are indispensable metrics for assessing individual and collective performance, aligning operational activities with overarching organizational objectives, and catalyzing continuous improvement efforts. The integration of cutting-edge analytics tools, exemplified by Google Looker Studio, presents a transformative opportunity for organizations to elevate their performance management protocols by harnessing data-driven insights and real-time monitoring capabilities.

This research aims to establish a systematic framework for KPI management and streamline processes within the Homecorp offshore drafting team. The study aims to develop and implement a KPI monitoring system by leveraging Google Looker Studio's robust capabilities. The research examines the impact of KPI management practices on

employee productivity within Homecorp's offshore drafting team. It determines whether the implemented system has been effective and what its implications are for organizational performance.

Literature Review

Organizations face escalating demands to enhance performance metrics to remain competitive (Wu, 2020). Effective performance management systems are instrumental in this endeavor, facilitating the monitoring and improving employee productivity and organizational performance (Armstrong & Taylor, 2014). Key Performance Indicators (KPIs) are indispensable for evaluating individual and team performance, aligning activities with organizational objectives, and driving continuous improvement initiatives (Bourne et al., 2015).

Advanced analytics tools represent a significant stride toward optimizing performance management processes through data-driven insights (Chen et al., 2018). Notably, Google Looker Studio emerged as a prominent platform that allows

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organizations to harness data analytics to enhance performance metrics (Google Cloud, 2020). By leveraging real-time monitoring capabilities and robust analytics functionalities, Google Looker Studio empowers organizations to make informed decisions and drive performance improvements (Chen et al., 2019).

Research within the field underscores the importance of developing systematic frameworks for KPI management to optimize organizational performance (Neely et al., 2002). A well-defined KPI management system enables organizations to effectively track progress toward strategic objectives, identify areas for improvement, and allocate resources judiciously (Parmenter, 2015). Furthermore, studies highlight the significance of aligning KPIs with organizational goals to ensure relevance and effectiveness (Lareau & Smith, 2017).

Due to geographical dispersion and cultural differences, managing performance metrics within offshore teams may present unique challenges (Hinds & Bailey, 2003). Therefore, organizations must adopt tailored approaches to KPI management that account for offshore teams' specific needs and dynamics (Hu et al., 2020). Leveraging advanced analytics tools like Google Looker Studio can facilitate effective KPI management in overseas settings by providing real-time visibility and actionable insights (Rezvani et al., 2017).

Theoretical/Conceptual Framework

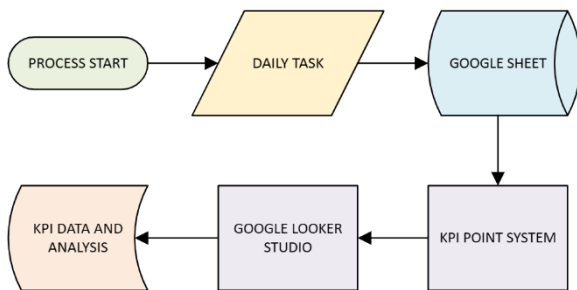


Figure 1.0 Conceptual Framework Flowchart

The conceptual framework for the study involving the Homecorp offshore drafting team begins with a listing of daily tasks. These tasks are recorded and stored in a Google Sheet database. These daily tasks serve as primary input data for the KPI monitoring system. The Google Sheets database will collect various metrics on task type, name, notes, and KPIs.

A Google Sheets database is used to analyze daily tasks based on KPIs. The KPI point system assigns scores or points to each task based on predefined criteria and performance indicators. These criteria may include task complexity, deadline adherence, accuracy, and client satisfaction. The KPI point system aggregates and quantifies the performance of individual team members or the team, providing a standardized performance measure.

After the data has been analyzed using the KPI point system, the results are presented using Google Looker Studio. Google Looker Studio is a data visualization and analytics platform that allows interactive dashboards and reports. The platform will enable users to explore and visualize data in real time, making it an ideal tool for KPI monitoring.

General Problem

The general problem addressed in this study is the design and implementation of a comprehensive key performance indicator (KPI) monitoring system and associated process that enables both the management and employees of the Homecorp drafting team to track and monitor their performance metrics effectively. This system aims to facilitate continuous performance monitoring and evaluation across the organization.

In addition, the study aims to leverage Google Looker Studio's data collection and analysis capabilities to create a web-based KPI monitoring platform tailored to the team's needs. Team members can monitor their monthly progress online and make informed decisions to improve performance through this Google Looker Studio-based system.

Specific Problems

1. What are the best methods to track and evaluate employee performance in the Homecorp offshore drafting department?
2. How can offshore Homecorp drafting team management and members collaborate to improve the efficiency and effectiveness of managing daily tasks and KPIs?
3. How can the Homecorp drafting team design and implement a point-based KPI system that accurately reflects employee contributions and aligns with organizational goals?
4. How can the Homecorp drafting team leverage Google Looker Studio effectively to monitor and evaluate KPIs?

Scope and Delimitations

The offshore drafting team within Homecorp will be the focus of the scope of the research. The offshore drafting team has fourteen members, and the study will investigate the development and deployment of a KPI monitoring system based on Google Looker Studio tailored to the needs of this team. In this paper, we discuss how this system impacts different aspects of performance management. This includes introducing a KPI-pointing system to quantify and evaluate all team tasks and projects. Moreover, the study will examine employee perceptions and attitudes regarding the system's usability, effectiveness, and benefits. This will include factors such as user-friendliness, the accuracy of data, and alignment with job functions. The study will cover team output for three months, from February to April. During this period, the KPI monitoring system was initially implemented as a dry run within the Homecorp drafting team.

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While the study aims to provide valuable insights into implementing the KPI system within Homecorp's drafting team, several factors may limit its scope. In the first place, the small size and composition of the team may limit the generalizability of the findings. In addition, the three-month timeframe for data collection, analysis, and interpretation may limit the depth and breadth of insights generated. Furthermore, resource constraints, including access to technology, data, and expertise, may limit the scope of the study. Finally, participants' responses to surveys and interviews may be subject to subjective bias.

This study explores implementing a KPI system in the Homecorp offshore drafting team during the data collection period from February to April. Despite the value of this approach, it is essential to acknowledge the limitations imposed by the number of participants and the scope of the study.

Significance of the Study

The significance of this study is multifaceted and directly addresses critical needs within the Homecorp offshore drafting team. By focusing on creating and implementing a Google Looker Studio-based KPI monitoring system, the research aims to revolutionize performance management practices within the organization. Firstly, the study holds promise for enhancing performance management by providing a structured framework for tracking and evaluating employee performance metrics. With real-time visibility into key performance indicators, management can identify areas for improvement and drive continuous enhancement efforts. Moreover, a transparent KPI monitoring system promotes accountability among team members. This promotes a culture where employees take ownership of their performance and strive for excellence. By fostering collaboration between management and employees, the research also seeks to streamline workflow processes, enhance teamwork, and achieve collective goals more efficiently. Additionally, understanding employees' perceptions and attitudes toward the KPI monitoring system is crucial for fostering engagement and buy-in. By addressing user concerns and optimizing system usability, Homecorp can enhance employee satisfaction and motivation, ultimately driving organizational success. In summary, the study's significance lies in its potential to transform performance management practices, drive organizational success, and position Homecorp for sustained growth and competitiveness in the industry.

II. METHODS AND PROCEDURES

Research Design

The research design for this study will use a mixed-methods approach, integrating both quantitative and qualitative methodologies. This approach will provide comprehensive insights into the implementation and impact of the KPI monitoring system within Homecorp's offshore drafting team.

Additionally, the study will involve creating and implementing the KPI monitoring system, which all the team members will use to provide data for the data-gathering procedure.

The research will focus on collecting numerical data to quantify the effectiveness and efficiency of the Key Performance Indicator (KPI) monitoring system. To achieve this, surveys or questionnaires will be administered to team members to gather quantitative feedback on various aspects of the system, such as usability, satisfaction, and perceived impact on performance. Additionally, quantitative data will be collected from the KPI monitoring system, including employee performance and KPI attainment metrics. Statistical analysis techniques, such as descriptive statistics, correlation analysis, and regression analysis, will be used to analyze the quantitative data and identify patterns, trends, and relationships.

In addition to the quantitative approach, we will conduct semi-structured interviews or focus group discussions with management and team members to understand the KPI monitoring system better. This will allow us to gather qualitative data on their experiences, attitudes, and suggestions regarding the system. We will use qualitative data analysis techniques such as thematic or content analysis to identify recurring themes, patterns, and insights from the interview transcripts or focus group discussions to analyze this data.

Locale of the Study

The study is conducted within the Homecorp offshore drafting team, which comprises fourteen members who mostly hold degrees in architecture. The team is based in the Philippines Business Process Outsourcing (BPO) company located at the Clark Freeport Zone, Pampanga. Although Homecorp Australia is onshore, the offshore drafting team's operations are centralized within the Philippines BPO company. This geographic location and organizational setting are the main backdrop for implementing and assessing the KPI monitoring system.

The study's locale influences various aspects of the research, including participant demographics, organizational structure, and operational processes. By focusing on this locale, the research aims to provide insights and recommendations tailored to the specific needs and challenges of the Homecorp offshore drafting team operating within the Philippines BPO company at Clark Freeport Zone, Pampanga.

Respondents

For the study involving the Homecorp offshore drafting team, the respondents or participants will primarily consist of team members, including management and employees. Given the team's composition of fourteen members with backgrounds in architecture, the sampling procedure will involve selecting all members of the offshore drafting team as the sample population.

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The sample population will include all fourteen Homecorp offshore drafting team members working within the Philippines BPO company at Clark Freeport Zone, Pampanga. This encompasses management personnel overseeing team operations and employees directly drafting tasks.

By including all members of the offshore drafting team as participants, the study aims to capture diverse perspectives and experiences within the team, ensuring comprehensive insights into the implementation and impact of the KPI monitoring system. Additionally, voluntary participation and informed consent procedures will uphold ethical standards and safeguard participant rights throughout the research process.

Data Gathering Instruments

We will use various data collection tools to fully understand the Homecorp offshore drafting team's experience with the KPI monitoring system. First, we will administer structured questionnaires to gather quantitative data on system usability, satisfaction levels, and perceived impact on performance. These questionnaires will feature closed-ended questions with predefined response options, ensuring systematic data collection.

Additionally, semi-structured interviews will be conducted with team members to gather qualitative insights. Guided by a flexible interview protocol, these interviews will delve into system effectiveness, challenges faced, and suggestions for improvement. Open-ended questions encourage detailed narratives, facilitating a deeper understanding of individual perspectives. Lastly, direct observations of team members using the KPI monitoring system in their work environment may be conducted to supplement the data collection process. By employing this diverse array of data-gathering instruments, the study aims to capture a comprehensive range of perspectives and insights, enriching the analysis and interpretation of the research findings.

Data Gathering Procedure

The data-gathering procedure for the study involving the Homecorp offshore drafting team's KPI monitoring system will commence with the daily task monitoring process. Beginning in February and extending through April, each team member will be tasked with documenting their daily activities, encompassing a comprehensive range of tasks undertaken within the drafting department. This documentation process will be the primary data source for assessing the team's daily KPI performance across various job categories and task types.

The data collected through this process will be used to develop the KPI pointing system, allowing the researchers to identify key performance indicators relevant to different job functions and activities within the team. Furthermore, the data gathered on daily tasks will provide essential insights into the information requirements for the subsequent analysis and

integration of the KPI monitoring system with Google Looker Studio.

Data will be gathered using structured questionnaires, interview protocols, and focus group discussion guides that align with the research objectives. The structured questionnaires will be distributed electronically through Google Forms. Additionally, semi-structured interviews and focus group discussions will be conducted with selected team members. To supplement the data collection process, direct observations of team members utilizing the KPI monitoring system in their work environment will be carried out. During the data-gathering phase, all responses, discussions, and observations will be accurately recorded to ensure data integrity and confidentiality. All collected data will be meticulously organized and securely stored for analysis. The quantitative data gathered from questionnaires will undergo statistical analysis, whereas the qualitative data obtained from interviews, discussions, and observations will be subjected to thematic or content analysis. Finally, we will interpret the data analysis findings and report them comprehensively, drawing on valuable insights into the experiences of Homecorp's offshore drafting team with the KPI monitoring system. By following this systematic data-gathering procedure, our study aims to derive meaningful conclusions and recommendations that can enhance organizational performance management practices.

Data Analysis Technique

A mixed-methods approach will gather comprehensive data for the study involving the Homecorp offshore drafting team. Structured questionnaires will be distributed to all team members to systematically assess their perceptions and experiences with the KPI monitoring system. These questionnaires will feature closed-ended questions to facilitate straightforward data collection. In addition to quantitative data, qualitative insights will be gathered through semi-structured interviews with selected team members. The survey questionnaires are separated into five sections:

Section 1: KPI Management Practices: This section will explore the team's processes and methodologies for KPI management, aiming to identify strengths, weaknesses, and areas for improvement.

Section 2: Collaboration and Communication: This section will assess how effectively team members collaborate and communicate, focusing on how these factors influence the utilization and effectiveness of KPIs.

Section 3: Utilization of Analytics Tools: This section will evaluate the team's familiarity and experience with various analytics tools, including Google Looker Studio, to determine the level of competency and identify any training needs.

Section 4: Training and Support: This section will gather information on the training and support provided for KPI management, aiming to understand how well-prepared team members feel in using the KPI monitoring system and what additional support may be required.

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Section 5: Post-Implementation Feedback on KPI Monitoring System: This section will collect feedback on the new KPI monitoring system post-implementation, focusing on its usability, effectiveness, and any encountered challenges to guide future improvements. The researchers will also interview selected new and senior team members to explore individual experiences and perspectives in-depth, providing a nuanced understanding of the system's impact. Focus group discussions will further complement the qualitative data collection, fostering interactive conversations among Homecorp drafting team members. Additionally, direct observations of team members using the KPI monitoring system in their work environment will provide valuable contextual insights. Meaningful conclusions and recommendations will be derived by meticulously recording and analyzing quantitative and qualitative data. This mixed-methods approach ensures a comprehensive understanding of the KPI monitoring system's implementation and impact within the Homecorp offshore drafting team, facilitating informed decision-making and continuous improvement efforts.

Ethical Consideration

As mandated by the Data Privacy Act, ethical considerations are pivotal in the research endeavor concerning the Homecorp offshore drafting team's KPI monitoring system. This legislation underscores the importance of safeguarding individuals' personal information and ensuring their right to privacy in data processing activities. In alignment with this law, stringent measures will be implemented to uphold data privacy and confidentiality throughout the research process.

Participants will be provided with comprehensive information about the research objectives, procedures, and the intended use of their data. Informed consent will be obtained from each participant, emphasizing their autonomy in deciding whether to participate or withdraw from the study. Furthermore, all data collected, including details on daily tasks and performance metrics, will be treated with utmost confidentiality.

Privacy safeguards will be implemented at every stage of the research process, from data collection to analysis and reporting. Data collection procedures will be conducted in private settings to uphold participants' privacy, and stringent access controls will be enforced to restrict access to sensitive information.

III. RESULTS AND DISCUSSION

Google Looker Studio Key Performance Indicator (KPI) Management

The Homecorp Offshore Drafting Key Performance Indicator (KPI) Management System is a management system process developed by the researchers. The system is designed to manage and monitor key performance indicators for Homecorp Offshore's drafting department. It uses Google

Looker Studio, a powerful data analytics tool, to analyze and visualize data in a user-friendly way. The system provides real-time insights and performance metrics, allowing managers to make informed decisions and take proactive measures to improve the drafting department's performance. The Homecorp Offshore Drafting KPI Management System is a valuable tool for any organization to streamline its performance monitoring and management processes.

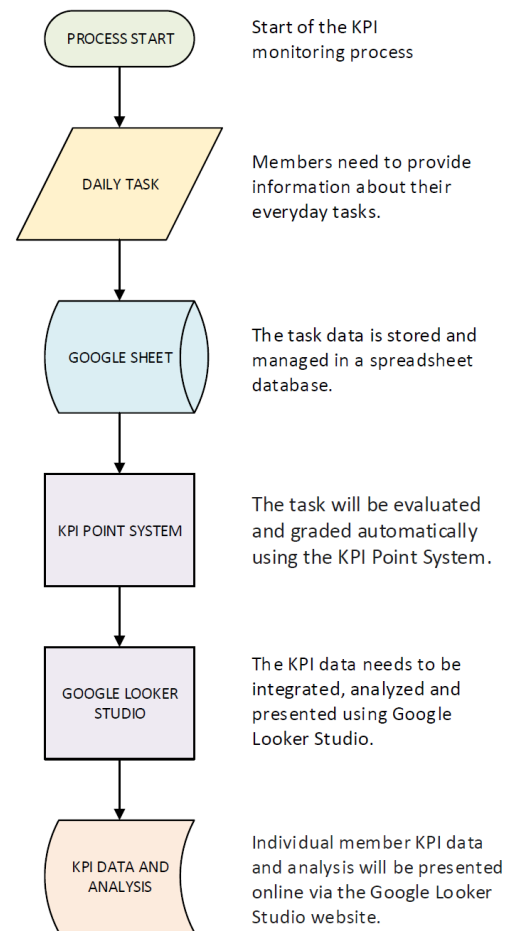


Figure 2.0 KPI Management System Process Flowchart

As illustrated in Figure 2.0, the KPI management process begins with collecting daily task data that each team member logs. These data include the name of the job or task, start date, end date, date taken to finish the task, status, type, and requirements as per Table 1.0.

Table 1.0 KPI Data Daily Task Information

<i>Data Type</i>	Description
<i>Task Name/Lot Address</i>	Lot address or brief description/title of the task.
<i>Task Type</i>	Task type based on the team and scope of work: e.g., working drawings, site-ups, renders, customs, etc.
<i>Task Detail</i>	Specific details of the task or task notes.

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<i>KPI Point</i>	To be automated as the fourth step of this process.
<i>Month</i>	Specify the month in which the task was undertaken.
<i>Start Date</i>	The start date of the task.
<i>End Date</i>	The end date of the task.
<i>Day</i>	Total number of days for the task completion.
<i>Status</i>	Current task status

This part includes the demographic profile of the employees in terms of age, gender, and education. To track their key performance indicators (KPIs), each member manually logs the data on either Google Sheets or Microsoft Excel. However, the process has been simplified using Google Apps Scripts. Members can now automate the task selection by choosing the task detail from a drop-down menu based on the task type.

The focus group discussions were conducted to gather qualitative data and encourage interactive conversations. These discussions led to the creation of a KPI-pointing system table that lists all possible task types and details within the team. The table also includes the daily metrics and targets of each team member. Researchers were able to assign a point equivalent per task, which is computed using the KPI point formula shown below:

$$KPI\ Point = \frac{Hours / task\ type}{Eight\ hours / day} \div Target\ KPI / day\ (3\ pts)$$

Table 2.0 KPI Pointing System Data Table

<i>Task Type</i>	<i>Task Detail</i>	<i>#Task</i>	<i>Hour</i>	<i>KPI</i>
<i>CUSTOM DESIGN</i>	Lowset Prelim Plan	1.0	8.0	3
<i>CUSTOM DESIGN</i>	Duplex / Highset / Split Slab Prelim Plan	0.7	12.0	4.5
<i>WORKING DRAWING S</i>	Lowset	1.0	8.0	3
<i>WORKING DRAWING S</i>	Highset / Duplex	0.7	12.0	4.5
<i>WORKING DRAWING S</i>	Split Level / Custom Design	0.5	16.0	6
<i>FULLSITE UP</i>	With a master plan less than 1m fall	3.0	2.7	1
<i>FULLSITE UP</i>	With a master plan, more than 1m fall	2.0	4.0	1.5

<i>SIZE CHECK</i>	Excel File / Feasibility Check / Tender Request	10.0	0.8	0.3
<i>SIZE CHECK</i>	Siting Compliance - services, setbacks, etc.	4.0	2.0	0.75
<i>SIZE CHECK</i>	Siting Compliance, including site works and elevations	3.0	2.7	1
<i>QUALITY CHECK</i>	Lowset / Primary Secondary / Highset / Duplex	5.0	1.6	0.6
<i>QUALITY CHECK</i>	Split Slab / Highset Dual Occ	4.0	2.0	0.75
<i>QUALITY CHECK</i>	QA Refresh - 5 to 10 changes	6.0	1.3	0.5
<i>QUALITY CHECK</i>	QA Refresh - 10 or more (siteworks, upgrades, etc..)	3.0	2.7	1
<i>RENDERS</i>	Facade Render (Lowset, Highset, Duplex, Split Slab)	2.0	4.0	1.5
<i>RENDERS</i>	Facade Render Townhouse	1.0	8.0	3
<i>RENDERS</i>	Internal Render	2.0	4.0	1.5
<i>RENDERS</i>	Motion Render	0.2	40.0	15
<i>RENDERS</i>	Estate Plan	1.0	8.0	3
<i>RENDERS</i>	Site/Maps	4.0	2.0	0.75
<i>RENDERS</i>	Photoshop Render	8.0	1.0	0.375
<i>RENDERS</i>	Facade Update	6.0	1.3	0.5

Once the data have been gathered into the Google Sheet database, they are ready to be analyzed and presented using Google Looker Studio. This allows efficient, web-based monitoring of the team’s KPI. Utilizing the Google Sheet integration function of Google Looker Studio will enable the researchers to synchronize the Google Sheet data to the Looker Studio Dashboard in real time.



Figure 3.0 Google Looker Studio KPI Management System Page

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Based on Figure 3.0, the data is displayed using Google Looker Studio to analyze and evaluate each team member's key performance indicators (KPIs). The following content corresponds to the label number shown in Figure 3.0:

1. *Member Information:* contains member information, including name, job title, team, email address, and photo.
2. *Task Count and Average KPI:* This part shows the member task count and average KPI per the date selected on the web page.
3. *Task Type Count:* This shows the specific task type count for the given date range.
4. *Monthly KPI Table:* A table that shows the monthly KPI average of the members is presented.
5. *Task Type Count Pie Chart:* Pie chart representation of the total task type count
6. *Monthly KPI Graphs:* A bar and line graph that compares the monthly KPIs of members is presented, allowing evaluation of their increase and decrease in KPI output.
7. *Task List:* This shows all the specific tasks/jobs and KPI points undertaken for the given date range.

With the completion of the Google Looker Studio KPI Management System, the researchers created a process that would track and evaluate the team’s performance. This can also serve as a way for the Homecorp drafting team management and members to collaborate and improve the efficiency and effectiveness of managing daily tasks and KPIs.

Demographic Profile of the Respondents

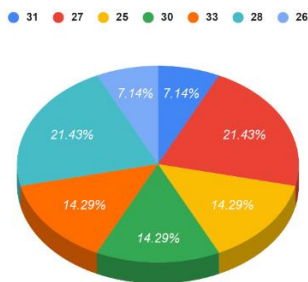


Table 3.0 & Figure 4.0 Respondent Age Distribution

Age	Count	Percentage
31	1	7.14%
27	3	21.43%
25	2	14.29%
30	2	14.29%
33	2	14.29%
28	3	21.43%
26	1	7.14%

The age distribution of the respondents in this study is an essential factor that can significantly influence the outcomes

and interpretations of the research on the KPI monitoring system. Among the respondents, 57.15% are younger employees, aged 25 to 28, who are likely to be more adaptable to new technologies such as Google Looker Studio and may show higher acceptance and satisfaction with modern KPI systems due to their familiarity with digital tools. The remaining 42.85% are older employees, aged 30 to 33, who bring valuable work experience and might have been exposed to traditional KPI monitoring methods. While they may initially be more skeptical of new systems, their extensive experience can provide practical insights into the challenges and benefits of the new system.

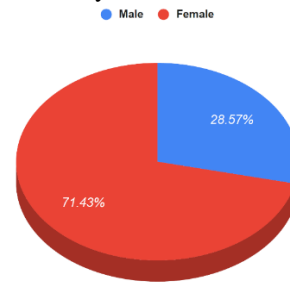


Table 4.0 & Figure 5.0 Respondent Gender Distribution

Gender	Count	Percentage
Male	4	28.57%
Female	10	71.43%

The gender distribution in the Homecorp Offshore Drafting Team was 71.43% females and 28.57% males. This imbalance may affect research outcomes through diverse perspectives, communication styles, and decision-making dynamics. To mitigate gender bias, the research design should ensure input from both male and female team members. Striving for balanced representation and providing gender sensitivity training will help recognize and mitigate biases, leveraging the strengths of the diverse team to achieve robust results in enhancing performance metrics using Google Looker Studio.

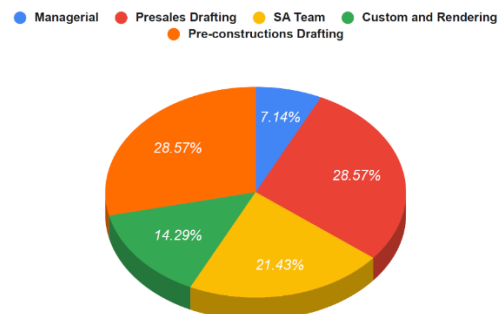


Table 5.0 & Figure 6.0 Respondent Team Distribution

The Homecorp Offshore Drafting Team is composed of various roles: managerial (7.14%), presales drafting (28.57%), SA team (21.43%), custom and rendering (14.29%), and pre-constructions drafting (28.57%). Each role provides unique insights crucial for developing a

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Team	Count	Percentage
Managerial	1	7.14%
Presales Drafting	4	28.57%
SA Team	3	21.43%
Custom and Rendering	2	14.29%
Pre-constructions Drafting	4	28.57%

comprehensive KPI management system. The limited managerial representation offers strategic oversight, while the substantial presence of presales and pre-construction drafting teams emphasizes the importance of early-stage project metrics. The SA team's technical expertise and the custom and rendering team's focus on tailored solutions ensure that the KPI system addresses performance across different phases and functions. Forming cross-functional teams and establishing regular feedback loops will promote collaboration and continuous improvement. By considering the unique contributions of each role, the research can develop a robust and relevant KPI management system that enhances performance across the drafting process.

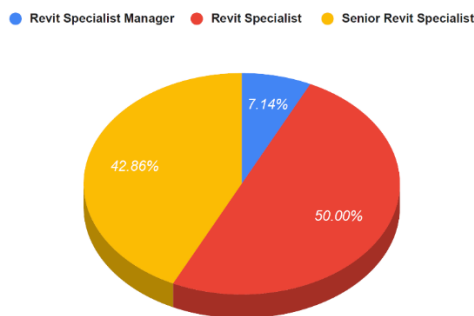


Table 6.0 & Figure 7.0 Respondent Job Title Distribution

The job title distribution among Homecorp Offshore Drafting Team respondents comprised 7.14% Revit Specialist Managers, 50% Revit Specialists, and 42.86% Senior Revit Specialists. The Revit Specialist Manager provides strategic insights aligning KPIs with organizational goals. The Revit Specialists, forming the majority, offer practical, frontline perspectives crucial for identifying relevant performance metrics. Senior Revit Specialists bridge the gap between strategic management and operational execution, ensuring the practical and strategically sound KPI system. Engaging all job titles through structured interviews, surveys, and role-specific workshops will ensure that the KPI system reflects the diverse needs and perspectives of the entire team. By integrating comprehensive input and establishing continuous feedback loops, the research can develop a robust, balanced KPI management system that enhances operational efficiency and aligns with strategic objectives, ultimately supporting overall team performance and adaptability.

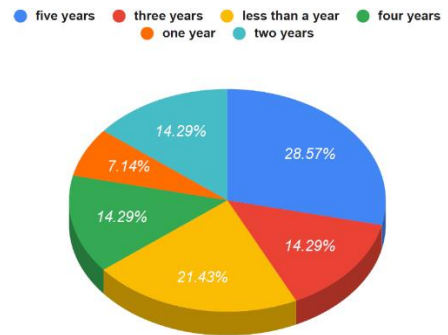


Table 7.0 & Figure 8.0 Year of Service with Homecorp Distribution

Years of Service	Count	Percentage
five years	4	28.57%
three years	2	14.29%
less than a year	3	21.43%
four years	2	14.29%
one year	1	7.14%

The team’s distribution by years of service at Homecorp Offshore—comprising members with five years (28.57%), three years (14.29%), less than a year (21.43%), four years (14.29%), one year (7.14%), and two years (14.29%) of experience. As the largest group, the five years of service members provide substantial experience and historical perspective, essential for addressing long-term trends and challenges. Meanwhile, those with less than a year offer fresh perspectives, ensuring the KPI system is user-friendly and innovative. The blend of experience levels can balance traditional approaches with new methods, aiding in the adaptation and implementation of the KPI system.

Job Title	Count	Percentage
Revit Specialist Manager	1	7.14%
Revit Specialist	7	50.00%
Senior Revit Specialist	6	42.86%

To leverage this diversity, the research should engage all team members through structured interviews and surveys, Implement mentorship programs to blend seasoned insights with fresh ideas and establish feedback loops inclusive of all experience levels.

Survey Questionnaire Results and Discussion

Table 8.0 Section 1: KPI Management Practices Response Summary

Section 1: KPI Management Practices						
Questions	1	2	3	4	5	Mean
The Homecorp drafting team has a clearly defined set of key performance indicators	0	0	1	6	7	4.43

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<i>(KPIs) relevant to our roles and responsibilities.</i>						
<i>The KPI monitoring system improved your ability to track and monitor performance metrics.</i>	0	0	2	4	8	4.43
<i>It is easy to navigate and use the KPI monitoring system.</i>	0	0	0	7	7	4.50
<i>The KPI pointing system accurately caters to all my daily task requirements.</i>	0	0	3	8	3	4.00
<i>Management provides adequate support and resources for managing and monitoring KPIs.</i>	0	0	1	8	5	4.29
<i>Team members know their KPIs and how they contribute to overall team goals.</i>	0	0	2	5	7	4.36
	Average Mean					4.33

The responses from Section 1 of the survey, which focuses on Current KPI Management Practices, indicate that team members view the KPI system favorably. The overall mean score for this section is 4.33, showing substantial agreement with the provided statements. Team members agree that the Homecorp drafting team has clearly defined KPIs relevant to their roles, with a mean score of 4.43. They also believe the KPI monitoring system has improved their ability to track and monitor performance metrics, scoring 4.43. The ease of navigating and using the KPI system received the highest score of 4.50, suggesting it is user-friendly. However, the KPI system's accuracy in catering to daily task requirements scored slightly lower at 4.00, indicating room for improvement. Management's support and resources for managing and monitoring KPIs scored 4.29, showing general satisfaction but suggesting potential for further enhancement. Lastly, team members understood how individual KPIs contribute to overall goals, scoring 4.36, reflecting solid alignment with team objectives. Overall, the survey responses indicate a positive perception of the current KPI management practices, with some areas identified for improvement.

Table 9.0 Section 2: Collaboration and Communication Response Summary

<i>Section 2: Collaboration and Communication</i>						
<i>QUESTIONS</i>	1	2	3	4	5	MEAN
<i>Clear communication within the Homecorp drafting team regarding individual and team KPIs exists.</i>	0	0	1	10	3	4.14

<i>Team members actively collaborate to achieve KPI targets and objectives.</i>	0	0	1	8	5	4.29
<i>Management solicits feedback from team members regarding KPI management practices and processes.</i>	0	0	2	7	5	4.21
<i>Team members feel empowered to provide suggestions for improving KPI management practices.</i>	0	0	3	6	5	4.14
<i>The feedback received on individual KPI performance is constructive and actionable.</i>	0	0	1	10	3	4.14
<i>Team members have opportunities to discuss and address challenges related to KPI performance with management.</i>	0	0	2	7	5	4.21
	Average Mean					4.19

The findings from Section 2 of the survey demonstrate that team members generally perceive communication and collaborative efforts within the Homecorp drafting team positively. The overall average mean score for this section is 4.19. Communication regarding individual and team KPIs scored a mean of 4.14, indicating that most team members feel informed about their performance indicators. Collaboration to achieve KPI targets received a slightly higher mean score of 4.29, suggesting a strong collaborative spirit among team members. Management's solicitation of feedback regarding KPI practices and processes scored 4.21, indicating that team members feel their input is valued. Similarly, opportunities to discuss and address KPI-related challenges with management also scored 4.21. Team members feel empowered to suggest improvements to KPI management practices, with a mean score of 4.14, and find the feedback on individual KPI performance to be constructive and actionable, scoring 4.14. Overall, these responses highlight effective communication and collaboration within the team, with management actively engaging team members in the KPI management process and providing constructive feedback.

Table 10.0 Section 3: Utilization of Analytics Tools Response Summary

<i>Section 3: Utilization of Analytics Tools</i>						
<i>QUESTIONS</i>	1	2	3	4	5	MEAN
<i>The Homecorp drafting team utilizes analytics tools</i>	0	0	1	9	4	4.21

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<i>to analyze and interpret KPI data effectively.</i>						
<i>Google Looker Studio, if utilized, enhances the team's ability to monitor and evaluate KPIs.</i>	0	0	2	10	2	4.00
<i>The KPI monitoring system provides adequate support for analyzing and interpreting performance data.</i>	0	0	0	11	3	4.21
	Average Mean					4.14

The findings from Section 3 of the survey show that the Homecorp drafting team positively views the use of analytics tools. The overall average mean score for this section is 4.14. The team believes they effectively use analytics tools to analyze and interpret KPI data, with a mean score of 4.21. This indicates a high level of competency and effectiveness in using these tools for performance analysis. The specific use of Google Looker Studio is also seen positively, though slightly lower, with a mean score of 4.00, suggesting it enhances the team's ability to monitor and evaluate KPIs. Additionally, the KPI monitoring system is considered to provide adequate support for analyzing and interpreting performance data, scoring a mean of 4.21. Overall, these responses demonstrate a strong confidence in the tools available for KPI analysis and interpretation, indicating that the team's analytics capabilities are well-supported and effectively utilized.

Table 11.0 Section 4: Training and Support Response Summary

Section 4: Training and Support						
<i>QUESTIONS</i>	1	2	3	4	5	MEAN
<i>I received sufficient training and support to use the KPI monitoring system effectively.</i>	0	0	1	9	4	4.21
<i>Team members receive adequate training on effectively interpreting and utilizing KPI data.</i>	0	0	3	8	3	4.00
<i>Based on KPI feedback, management provides ongoing support and guidance to help team members improve their performance.</i>	0	0	1	9	4	4.21
<i>I am satisfied with the level of support provided by the IT department for the KPI monitoring system.</i>	0	2	3	8	1	3.57
	Average Mean					4.00

The responses from Section 4 of the survey, which evaluates Training and Support, suggest that team members feel adequately trained and supported using the KPI monitoring system. The overall average mean score for this section is 4.00. Respondents feel they have received sufficient training and support to use the KPI monitoring system effectively, with a mean score of 4.21. Additionally, there is a sense that team members receive adequate training on interpreting and utilizing KPI data, although this statement scored slightly lower with a mean of 4.00. Management is perceived as providing ongoing support and guidance to help improve performance based on KPI feedback, which scored 4.21. However, satisfaction with the IT department's support level for the KPI monitoring system is somewhat lower, with a mean score of 3.57, indicating room for improvement. These responses reflect a positive view of the training and support provided but highlight the need for enhanced IT support for the KPI system.

Table 12.0 Section 5: Post-Implementation Feedback on KPI System Response Summary

Section 5: Post-Implementation Feedback on KPI Management System						
<i>QUESTIONS</i>	1	2	3	4	5	MEAN
<i>I am satisfied with the overall design and functionality of the KPI monitoring system.</i>	0	0	4	6	4	4.00
<i>I keep my KPI monitoring sheet updated and accurate based on my actual daily tasks.</i>	0	0	3	8	3	4.00
<i>The KPI monitoring system helped you identify areas for performance improvement more effectively.</i>	0	0	1	9	4	4.21
<i>I use the KPI monitoring system to review my performance metrics.</i>	0	0	1	10	3	4.14
<i>The KPI monitoring system impacted my productivity and efficiency in performing my tasks.</i>	0	0	1	10	3	4.14
<i>The KPI monitoring system has improved team collaboration and communication regarding performance goals.</i>	0	0	1	11	2	4.07
<i>I am satisfied with the accessibility of KPI data and reports the monitoring system generates.</i>	0	0	2	9	3	4.07

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<i>The KPI monitoring system has led to any noticeable changes in the team's performance culture or behavior.</i>	0	0	1	11	2	4.07
<i>Overall, I am satisfied with the current KPI management practices within the Homecorp drafting team.</i>	0	0	2	8	4	4.14
<i>There are opportunities for improvement in how KPIs are managed and monitored within the team.</i>	0	0	0	12	2	4.14
	Average Mean					4.10

The responses from Section 5 of the survey, which focused on Post-Implementation Feedback on the KPI Management System, indicate a generally positive perception of the system's effectiveness and impact. The overall average mean score for this section is 4.10. Respondents are satisfied with the overall design and functionality of the KPI monitoring system, with a mean score of 4.00. They also indicate that they keep their KPI monitoring sheet updated and accurate based on their daily tasks, scoring another mean of 4.00. Furthermore, the KPI monitoring system effectively identifies areas for performance improvement, with a mean score of 4.21. Respondents use the system to review their performance metrics and believe it has positively impacted their productivity and efficiency, scoring 4.14. The system is also credited with improving team collaboration and communication regarding performance goals, with a mean score of 4.07. Similarly, respondents are satisfied with the accessibility of KPI data and reports generated by the system, scoring a mean of 4.07. Additionally, the system has led to noticeable changes in the team's performance culture or behavior, scoring another mean of 4.07. Overall, respondents are satisfied with the current KPI management practices within the Homecorp drafting team, but they also recognize opportunities for improvement, with a mean score of 4.14. These responses highlight the effectiveness of the KPI monitoring system in facilitating performance improvement and fostering a positive team culture while also indicating areas for further enhancement in KPI management and monitoring processes.

Interview Results and Discussion

The team interviews offered valuable insights into the effectiveness and usability of the KPI management system within the Homecorp offshore drafting team. Participants expressed contentment with the system's capability to track quantitative KPIs effectively. However, they unanimously agreed that there is room for improvement, particularly in integrating qualitative data into the monitoring system.

Participants emphasized the system's impact on their day-to-day work, highlighting its role in assessing daily output and identifying areas for improvement through additional training.

Participants generally found the KPI monitoring system easy to navigate and use, commending its effectiveness in organizing data. They identified the system's strengths in accurately tracking individual progress and daily tasks. However, they noted weaknesses in its utilization efficiency and effectiveness in supporting the onboarding and improvement of new team members.

They concurred that the KPI monitoring system promotes accountability and collaboration within the team by allowing visibility into each member's tasks and progress. This transparency facilitates interaction and collaboration among team members, contributing to a cohesive working environment.

Several suggestions were proposed for enhancing the effectiveness and usability of the KPI monitoring system, such as conducting regular KPI audits, implementing monthly reviews and updates, incorporating qualitative feedback, and ensuring strict implementation of feedback and analysis.

Interview participants envisioned the future evolution of the KPI monitoring system extending beyond the drafting team to be implemented company-wide. This expansion would further enhance performance tracking and management across different departments within Homecorp, fostering a culture of continuous improvement and accountability.

IV. CONCLUSIONS & RECOMMENDATIONS

Summary of Findings

The findings from both the survey and interview results provide a comprehensive understanding of the effectiveness and usability of the KPI management system within the Homecorp offshore drafting team. Overall, team members are content with the system's ability to effectively track performance metrics and acknowledge its role in facilitating performance evaluation. However, there is a persistent call for enhancements, particularly in integrating qualitative data into the system for a more comprehensive assessment.

The survey highlighted the system's data organization's strengths and effectiveness in tracking quantitative KPIs. However, it also identified areas for enhancement, such as improving support for new team members and ensuring efficient system utilization. Similarly, the interviews underscored the impact of the system on daily work and decision-making processes, emphasizing its role in identifying areas for improvement and fostering accountability and collaboration within the team.

The survey and interviews provided valuable recommendations for improving the system's effectiveness and usability, including conducting regular audits, implementing monthly reviews, and incorporating qualitative feedback. Additionally, participants envisioned the system's

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future evolution extending beyond the drafting team to be implemented company-wide, contributing to a culture of continuous improvement and accountability throughout Homecorp.

Conclusions

The research on Homecorp Offshore Drafting Team's Key Performance Indicator (KPI) Management System has concluded, indicating the system's successful development and implementation. The system includes advanced tools such as Google Looker Studio for robust data analysis and visualization and streamlined data collection through automated daily task logging using Google Apps Scripts. The analysis covers various demographic insights, including age, gender, team, job title, and tenure, highlighting the importance of balanced representation across these parameters.

The survey responses indicate a positive sentiment toward the system's functionality and design. They emphasize its effectiveness in performance tracking and point out areas for improvement in KPI management practices and support mechanisms. Qualitative interviews echo these sentiments, acknowledging the system's proficiency in tracking quantitative KPIs and advocating for improvements in qualitative data integration and support for new team members.

The system implementation has played a crucial role in promoting accountability and teamwork within the team. It has fostered a unified work environment that contributes to achieving shared objectives. This comprehensive analysis highlights the significant positive impact of the system on performance monitoring and team dynamics within Homecorp. It demonstrates the achievements and identifies valuable opportunities for continuous improvement and adaptation, ensuring the system remains flexible and responsive to evolving organizational needs.

Recommendations

To enhance the efficiency of the Key Performance Indicator (KPI) Management System within the Drafting Team at Homecorp Offshore, the researchers have developed the following recommendations for improvement:

1. Integrate the KPI Management System with the company's existing employee or task management system; this would provide additional automated information directly from the central company server/database.
2. Add threshold alerts and automation for critical KPIs to notify stakeholders when performance falls behind predefined targets.
3. Provide regular KPI audits and feedback loops to identify areas for refinement and enhancement. We are involving all stakeholders, including team members and managers.

4. Integrating qualitative data alongside quantitative metrics is essential. This entails capturing qualitative feedback from team members and incorporating it into the monitoring process.
5. Conduct training and support to ensure that all team members are proficient in using the system effectively.
6. Regular meetings or forums should be established to discuss KPI performance, share best practices, and address any challenges or concerns that may arise.
7. Explore opportunities to expand the system's use beyond the drafting team to other departments within Homecorp, which could further enhance organizational performance.
8. The upper management team should promote using the KPI Management System and drive accountability for performance improvement.
9. Coordination with the company IT department to improve the system programming and automation and raise concerns regarding the system's security and data privacy.
10. Review the KPI pointing system, schedule a review with the team's KPI, improve the system, and create a systematic way of monitoring KPI.

Implementing these recommendations will optimize the KPI Management System, driving continuous improvement and enhancing team performance within Homecorp Offshore.

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