



Improving Call Center at UAGM

Author: Alex Roberto Sanchez Escalera
Advisor: Prof. Carlos Pons
Manufacturing Engineering



Abstract

In today's dynamic business environment, call centers serve as pivotal touchpoints between organizations and their stakeholders, necessitating constant optimization to meet evolving demands. This abstract presents a nuanced examination of strategies aimed at enhancing call center operations within the context of Universidad Ana G. Méndez (UAGM). Through the lens of methodologies such as DMAIC, Voice of the Customer analysis, and Value Stream Mapping, this study delves into the identification and resolution of key challenges such as high call abandonment rates and inefficient workflow processes. By synthesizing empirical research and industry best practices, the study offers actionable insights to transform UAGM's call center into a strategic asset, fostering improved customer satisfaction, operational efficiency, and organizational competitiveness. This research contributes to the broader discourse on call center management and underscores the importance of proactive adaptation to meet the demands of contemporary service provision.

Introduction

In today's dynamic business environment, call centers are crucial touchpoints between organizations and stakeholders, demanding continuous optimization. This study explores strategies to enhance call center operations at UAGM, utilizing methodologies like DMAIC, Voice of the Customer analysis, and Value Stream Mapping. By addressing challenges such as high abandonment rates and inefficient workflows, this research aims to transform UAGM's call center into a strategic asset, enhancing customer satisfaction and organizational competitiveness amidst evolving service expectations and technological advancements.

Background

At UAGM the call center serves as a vital component of the institution's commitment to providing exceptional service and support to its diverse community of stakeholders, including students, faculty, staff, and alumni. However, like many organizations, UAGM faces challenges in ensuring the efficiency, responsiveness, and overall effectiveness of its call center operations in meeting the evolving needs and expectations of its stakeholders.

Against this backdrop, the present project endeavors to undertake a comprehensive examination of UAGM's call center operations, with a focus on identifying key challenges and opportunities for improvement. Through the application of established methodologies such as DMAIC, Voice of the Customer analysis, and Value Stream Mapping, the project aims to develop actionable insights and recommendations to enhance the performance and strategic value of UAGM's call center.

Problem

The call center at UAGM faces challenges including high call abandonment rates, workflow inefficiencies, and suboptimal customer satisfaction. This research aims to:

1. Identify root causes of call abandonment and workflow inefficiencies.
2. Explore strategies to optimize call center operations.
3. Provide recommendations to transform the call center into a strategic asset.

Methodology

This study employs the DMAIC (Define, Measure, Analyze, Improve, Control) framework and the Voice of the Customer (VoC) to address challenges in call center operations at UAGM.

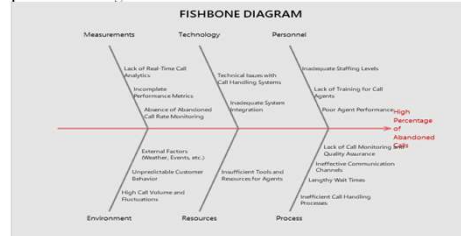
Define Phase: Utilizing the Kano Model, customer complaints are categorized into Basic Needs and Performance Needs. Critical-to-Quality (CTQ) attributes are identified to prioritize improvements, focusing on factors such as response time, communication, and staffing levels.

DATA FOR KANO MODEL		
Customer Complaint	Kano Model Classification	Importance (High/Medium/Low)
Response time is too slow	Performance Needs	High
Communication is not effective	Basic Needs	High
Unresolved issues with improper follow-up	Basic Needs	High
Insufficient staffing leading to long wait times	Basic Needs	High
Agents lacking knowledge	Basic Needs	High
Decreasing Income	Basic Needs	High
Contract terminations due to dissatisfaction	Basic Needs	High
Low profitability due to high cost	Basic Needs	High
Inefficient time management in hiring and training	Basic Needs	High

Measure Phase: Key Performance Indicators (KPIs) are established to quantify call center efficiency, including inbound calls, answered calls, abandoned calls, and outgoing calls. Data collection and analysis reveal trends and areas for improvement.

Year/2022-31	Inbound Call	AMA Call	Missed Call	Outgoing Call	Net Call
22-Aug	6000	5149	851	2324	8324
22-Sep	2743	2575	168	404	3147
22-Oct	3452	2961	491	795	4247
22-Nov	1883	1710	173	417	2300
22-Dec	1810	1676	134	348	2158
23-Jan	3286	2863	423	600	3886
23-Feb	2425	2299	126	332	2757
23-Mar	2589	2425	164	318	2907
23-Apr	1739	1541	198	208	1947
23-May	2259	1932	327	95	2354
23-Jun	1565	1367	198	139	1704
23-Jul	1045	867	178	85	1130

Analyze Phase: Value Stream Mapping (VSM) and Pareto analysis identify root causes of issues, such as high abandoned call rates. Fishbone diagrams categorize these causes, facilitating targeted problem-solving.



Improve Phase: Lean improvement strategies, including technology integration and training programs, are implemented to optimize call center workflow and reduce waste. A detailed improvement plan is devised and executed.

Lean Improvement Plan				
No.	Improvement Action	Responsible Party	Timeline (months)	Expected Outcome
1	Implement Lean Training for Call Agents	Training Department	1	Improved efficiency in issue resolution
2	Optimize Call Routing and Escalation Processes	Operations Team	2	Reduced wait times and improved call flow
3	Enhance Real-Time Call Analytics Integration	IT Department	3	Better monitoring and proactive response
4	Performance Metrics for Continuous Monitoring	Quality Assurance	1	Regular assessment for ongoing improvement
5	Introduce Automated Customer Callback System	Technology Team	4	Reduced customer frustration and abandoned calls
6	Streamline Communication Channels	Communication Team	2	Improved customer-agent interaction
7	Conduct Regular Gemba Walks for Process Observation	Improvement Team	Ongoing	Real-time identification of process inefficiencies

Control Phase: Continuous monitoring and feedback mechanisms ensure the sustainability of improvements. A control plan outlines ongoing management procedures to maintain efficiency and drive continuous improvement.

CONTROL PLAN					
No.	Control Parameter	Concerned Department	Frequency of Review	Monitoring Metric	Action Plan for Deviations
1	Regular Training Sessions for Call Agents	Training Department	Monthly	Agent Efficiency and Issue Resolution Metrics	Reinforce training, conduct refresher courses if needed
2	Reviewing call routing and escalation procedures on a regular basis	Operations Team	Bi-Weekly	Average Wait Time, Call Flow Metrics	Adjust routing algorithms, optimize escalation procedures
3	Continuous Monitoring of Real-Time Call Analytics	IT Department	Daily	Real-Time Analytics Dashboard	Immediate response to anomalies, address technical issues
4	Performance Metrics Monitoring	Quality Assurance	Weekly	Scorecards, Customer Satisfaction Surveys	Conduct root cause analysis, implement corrective actions
5	Automated Customer Callback System	Technology Team	Monthly	Abandoned Call Rate, Customer Feedback	Optimize callback algorithms, address technical issues
6	Examination of Regular Channels of Communication	Communication Team	Bi-Weekly	Customer Feedback, Communication Channel Metrics	Adjust channels based on customer preferences
7	Gemba Walks as a Means of Ongoing Process Monitoring	Improvement Team	Quarterly	Direct Observation, Gemba Walk Reports	Immediate corrective actions, update Lean improvement Plan

Results and Discussion

Overall Call Center Performance:

- Analysis of key performance indicators (KPIs) reveals trends in call volume, abandonment rates, and agent productivity.
- Graphs demonstrate fluctuations in call volume over time and highlight areas of improvement.

Impact of Implemented Strategies:

- Evaluation of Lean improvement strategies, such as training programs and technology integration, on call center efficiency.
- Graphs illustrate changes in response times, call resolution rates, and customer satisfaction scores post-implementation.

Customer Satisfaction and Retention:

- Examination of customer feedback and satisfaction surveys to gauge the effectiveness of implemented changes.

Discussion on the correlation between improved call center performance and customer loyalty.

Operational Efficiency and Cost Reduction:

- Assessment of cost-saving measures, such as streamlined processes and optimized staffing levels.
- Analysis of the financial implications of efficiency improvements and their impact on organizational profitability.

Future Directions and Recommendations:

- Identification of areas for further improvement, based on ongoing data analysis and stakeholder feedback.

Conclusions

In conclusion, the exploration of strategies and innovations to enhance the call center operations at UAGM underscores the critical importance of efficient and effective customer service in the contemporary business landscape. Through methodologies such as DMAIC, Voice of the Customer analysis, Kano Model, and Value Stream Mapping, we have identified key issues such as high call abandonment rates, ineffective communication, and inefficient workflow processes. By addressing these challenges, UAGM can transform its call center into a strategic asset that enhances customer satisfaction, operational efficiency, and overall organizational success.

Future Work

Based on the findings and analysis, the following recommendations are proposed for UAGM to improve its call center operations:

- Implement targeted training programs for call center agents to enhance communication skills, product knowledge, and problem-solving abilities.
- Integrate advanced technology solutions such as automated call routing and CRM software to streamline call handling processes and reduce wait times.
- Foster a culture of continuous improvement and employee empowerment within the call center team to drive sustainable performance enhancements.
- Prioritize customer-centric strategies and leverage feedback mechanisms to identify and address evolving customer needs and expectations.
- Establish robust monitoring and evaluation mechanisms to track key performance indicators and ensure the sustained effectiveness of implemented improvements.

By implementing these recommendations, UAGM can position its call center as a strategic asset that delivers exceptional service to its stakeholders, thereby enhancing its competitive advantage and reputation in the higher education sector.

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References

1. DMAIC Process: The 5 Phases Of Lean Sigma You Must Know [Available: <https://www.simplilearn.com/dmaic-process-article>]
2. Choudhary, A. K., Harding, J. A., & Tiwari, M. K. (2019). A study on the impact of call center services on customer satisfaction. *International Journal of Quality & Reliability Management*, 36(2), 271-287.