WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Exploring Operational Hurdles in Food and Beverage Sector of Bangalore

[1]Tulika Kanaujia, [2]G.S. Vijaya

[2]Faculty of Management Studies (CMS Business School), Jain Deemed to be University, Bengaluru.

ABSTRACT :

The F&B sector in Bangalore faces diverse operational challenges, from intense work pressure to labor shortages and supply chain disruptions. Tailored training programs and robust infrastructure are essential to address staffing dilemmas and mitigate burnout. Stringent supply chain management and adapting to evolving consumer preferences are crucial for sustainability. Addressing food waste through inventory tracking and stock management can further enhance efficiency and sustainability. Overall, proactive measures to tackle these challenges are key to improving operational efficiency and enhancing the guest experience in Bangalore's dynamic culinary landscape.

Keywords: Hypothesis Testing, ANOVA, Chi – Square, Data Visualization, Food and Beverage.

INTRODUCTION :

The Food and Beverage (F&B) service department is a vital component of the hotel industry, particularly in restaurant where it encompasses various outlets such as specialty restaurants. However, a significant challenge faced by this department is the shortage of skilled staff, which can impact service standards. It is crucial for the industry to prioritize talent retention and ensure that staff are motivated to maintain high-quality service. Responsibilities of F&B servers vary depending on the establishment, including table arrangements, order recording, and customer service. Servers must possess attributes such as multitasking abilities, good communication skills, and the ability to work under pressure. Providing a conducive work environment and fostering teamwork can enhance service efficiency and guest satisfaction. This study explores operational challenges and prospects in the F&B service departments of restaurant in Bangalore, aiming to identify current and potential issues and improve service delivery.

STATEMENT OF PROBLEM :

The research aims to dissect the operational intricacies within Bangalore's F&B sector, addressing challenges impacting efficiency and service standards. It delves into workforce pressures, supply chain disruptions, and shifting consumer preferences. Solutions are proposed, including infrastructure enhancements and tailored training programs to alleviate work pressure and tackle labor shortages. Moreover, the study advocates for stringent supply chain management and inventory tracking to mitigate delays and minimize food waste. By addressing these challenges, the research aims to enhance operational efficiency and elevate the guest experience in Bangalore's culinary landscape, contributing to its sustainable growth and resilience.

REVIEW OF LITERATURE :

Miculan Bradley, Doris, Elenis Tony, Hoyer Gary, Martin David, and Waller James (2017) emphasized the impending workforce shortage in Canada, projecting a deficit of nearly 1 million workers by 2020. Their study aims to identify reasons for this shortfall and propose strategies to address it. They categorized and evaluated various solutions, advocating for short and long-term measures to attract potential employees to the food and beverage industry. While the data is predictive, it underscores the clear trend of insufficient manpower to sustain the industry.

Jayawardena, Chandana, Lawlor Fred, Charles Grieco J, Savard Michel, and Tarnowski Michael (2013) focused on analyzing challenges encountered by Canadian hotels and suggesting innovative solutions for improved operations. They provide insights into effective management approaches, proposing tailor-made training sessions for the diverse workforce. Their research aims to enhance hotel operations in Canada through innovative strategies.

Jayawardena, Chandana (2017) aimed to offer practical solutions to challenges in the Canadian hospitality industry. Their study focuses on identifying and addressing key challenges and their corresponding solutions. They seek to provide actionable insights to improve operational efficiency and effectiveness in the hospitality sector.

Lee, Sanghyeop, Lee Kai-Sean, Chua Bee-Lia, and Han Heesup (2019) highlight the significance of restaurants within hotels, particularly in the context of five-star luxury hotels in Klang Valley, Malaysia. Despite this importance, there has been a notable lack of research into the challenges and critical

success factors (CSFs) specific to these hotel-owned restaurants. Their study aims to fill this gap by investigating the factors influencing the success and challenges faced by such establishments.

RESEARCH GAP :

1. Lack of exploration into integrating emerging technologies like automation and artificial intelligence to address operational inefficiencies in the food and beverage sector, despite acknowledging challenges such as labor shortages and supply chain disruptions.
2. Absence of research specifically focusing on operational hurdles faced by businesses in the food and beverage sector of Bangalore, India, despite numerous studies examining global industry challenges and strategies.
3. Scarcity of literature delving into the specific operational constraints and growth barriers encountered by small and medium-sized enterprises (SMEs) in the food and beverage sector of Bangalore, despite SMEs constituting a significant portion of the F&B landscape in the city.
4. Limited discussion on the adoption and impact of technology-driven solutions in optimizing processes, reducing costs, and enhancing customer experiences within the food and beverage sector, despite recognizing the potential benefits of such advancements.
5. Inadequate attention given to understanding the unique operational dynamics, regulatory constraints, and market-specific challenges faced by food and beverage businesses in Bangalore, India, compared to the broader global industry context.
6. Insufficient exploration of the barriers to technology adoption and strategies to overcome resistance or implementation challenges within the food and beverage sector, despite recognizing the potential for technology to mitigate operational hurdles effectively.

OBJECTIVE OF THE STUDY :

- To investigate the extent to which the lack of proper briefing contributes to operational challenges faced by food and beverage (F&B) service staff, and to assess whether operational training can help staff effectively deal with these challenges.
- To investigate the impact of peak hours on the levels of stress and fatigue experienced by food and beverage (F&B) service staff, compared to non-peak hours, in order to understand the temporal variations in workload and its effect on employee well-being.

RESEARCH METHODOLOGY :

We employed a convenient sampling method to gather insights from 270 participants regarding their experiences and behaviors concerning operational challenges within the F&B sector. Using a structured questionnaire, data was collected from establishments in Bengaluru, a city renowned for its diverse array of restaurants. The data analysis with findings visualized through graphs. However, limitations, such as the small sample size and the use of non-probability sampling, may introduce bias. Nevertheless, we took measures to mitigate biases in the study's outcomes

Framing of Research Hypotheses :

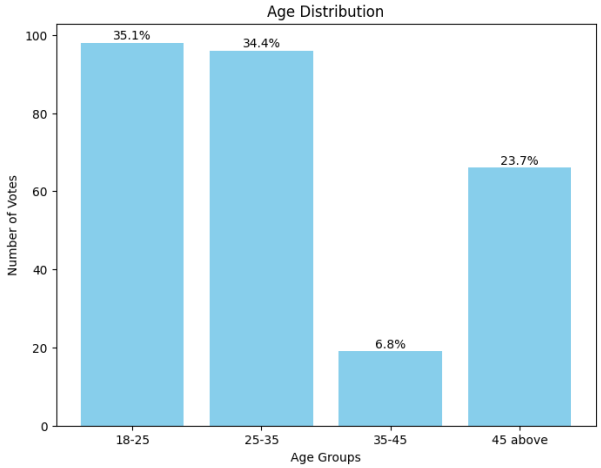
Objective 1

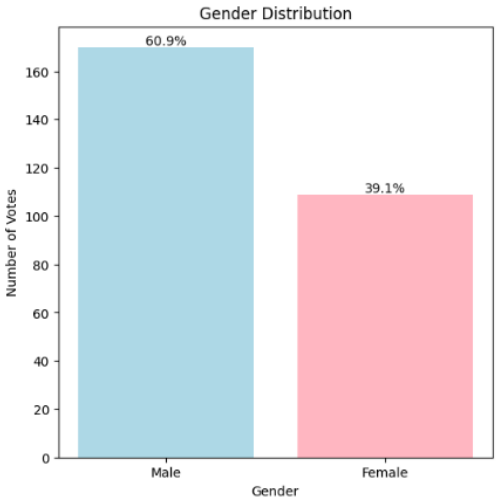
Null Hypothesis (H0): Lack of proper briefing does not significantly contribute to operational challenges faced by F&B service staff.
Alternative Hypothesis (H1): Lack of proper briefing significantly contributes to operational challenges faced by F&B service staff.

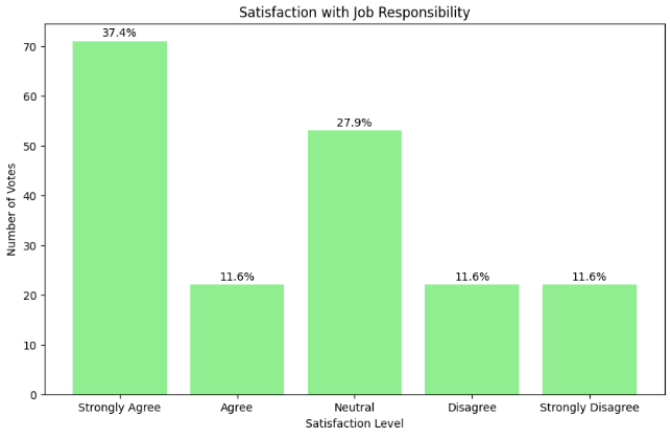
Objective 2

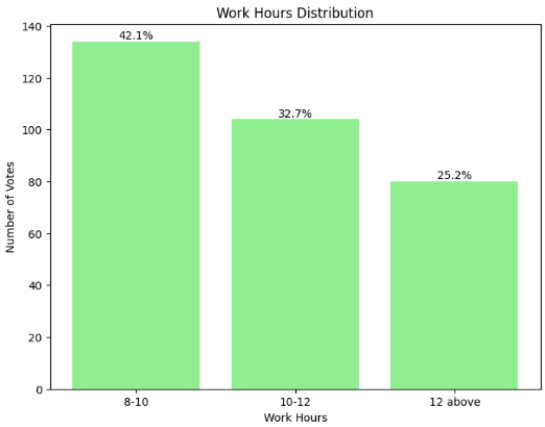
Null Hypothesis (H0): There is no significant difference in the levels of stress and fatigue experienced by F&B service staff between peak and non-peak hours.
Alternative Hypothesis (H1): F&B service staff experience higher levels of stress and fatigue during peak hours compared to non-peak hours.

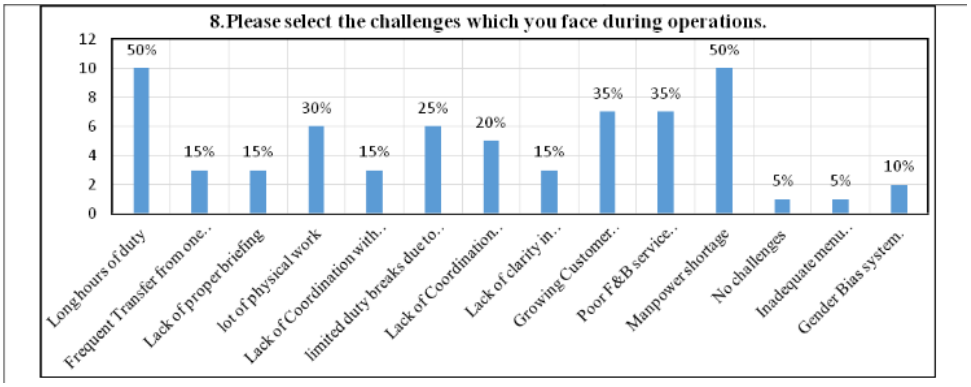
ANALYSIS AND INTERPRETATION :

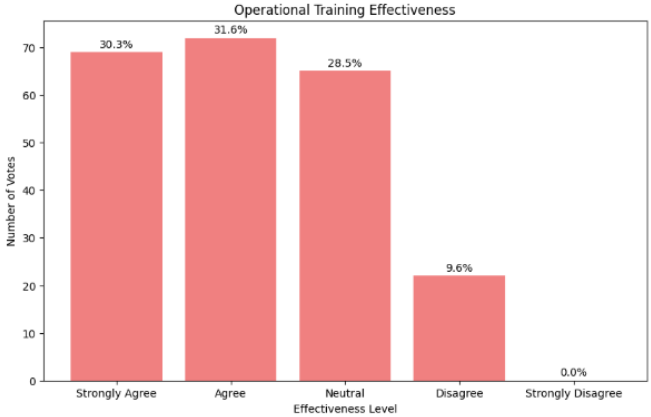

Age Distribution
Number of Votes
Age Groups
18-25
25-35
35-45
45 above
35.1%
34.4%
6.8%
23.7%

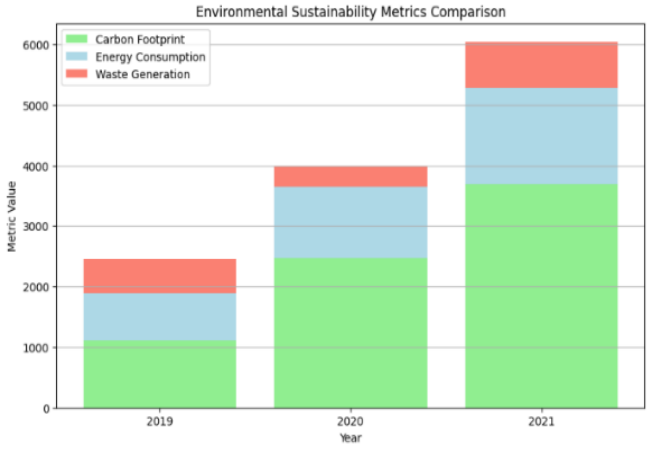

Gender Distribution
Number of Votes
Gender
Male
Female
60.9%
39.1%

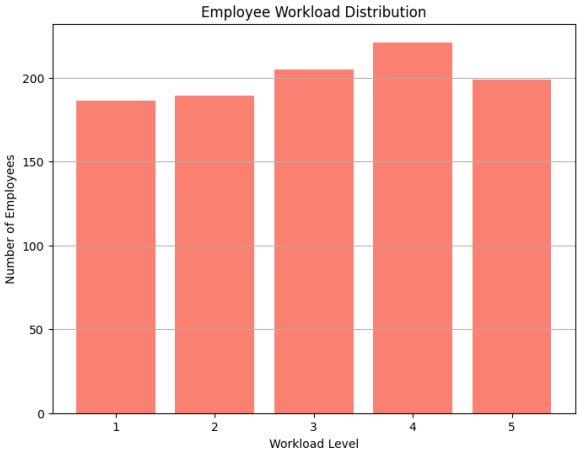

Satisfaction with Job Responsibility
Number of Votes
Satisfaction Level
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
37.4%
11.6%
27.9%
11.6%
11.6%


Work Hours Distribution
Number of Votes
Work Hours
8-10
10-12
12 above
42.1%
32.7%
25.2%


8.Please select the challenges which you face during operations.
50%
15%
15%
30%
15%
25%
20%
15%
35%
35%
50%
5%
5%
10%
Long hours of duty
Frequent Transfer from one...
Lack of proper briefing
lot of physical work
Lack of Coordination with...
limited duty breaks due to...
Lack of Coordination...
Lack of clarity in...
Growing Customer...
Poor F&B service...
Manpower shortage
No challenges
Inadequate menu...
Gender Bias system.


Operational Training Effectiveness
Number of Votes
Effectiveness Level
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
30.3%
31.6%
28.5%
9.6%
0.0%





1. In the F&B Service department, the age distribution reveals a predominantly younger workforce, with 35.1% aged 18-25 and 34.4% aged 25-35. Employees above 45 years old constitute only 23.7%, indicating a trend towards younger staff.
2. Gender distribution in five-star hotel F&B Service departments shows a majority of male employees at 61%, with female staff comprising 40%. This gender imbalance suggests potential areas for diversity and inclusion initiatives within the sector.
3. The bar chart illustrating duty hours indicates that the majority of F&B Service operation staff work 8-10 hours (42%), followed by 10-12 hours (33%), and above 12 hours (25%). This distribution highlights the significant portion of staff working long hours, raising concerns about work-life balance.
4. Job responsibility satisfaction among operational staff shows that 37% strongly agree, 28% are neutral, 12% agree, and 11% each disagree and strongly disagree. This indicates varying levels of satisfaction among employees, with a significant portion expressing neutrality or dissatisfaction.
5. Regarding the effectiveness of operational training, 30% strongly agree, 32% agree, 10% disagree, and 28.5% are neutral. This suggests a generally positive perception of training programs, although a notable portion remains undecided or skeptical about their effectiveness.
6. Top challenges faced by F&B service staff include manpower shortage and long duty hours (50%), growing customer expectations and poor equipment (35%), and physical workload (30%). Other challenges include limited duty breaks (25%), lack of coordination among F&B staff (20%), and gender bias (10%). Lack of proper menu knowledge is rated by 5% of staff.
7. Environmental sustainability metrics comparison shows a decreasing trend in carbon footprint and energy consumption over the years, indicating successful sustainability initiatives. Waste generation remains stable, suggesting room for improvement in waste management practices.
8. Employee workload distribution highlights areas where workload may be disproportionately high or low, informing staffing optimization strategies to mitigate burnout risks and ensure operational efficiency.

Hypothesis Testing :

Hypothesis 1: Lack of proper briefing significantly contributes to operational challenges faced by F&B service staff.
Null Hypothesis (H0): Lack of proper briefing does not significantly contribute to operational challenges faced by F&B service staff.
Alternative Hypothesis (H1): Lack of proper briefing significantly contributes to operational challenges faced by F&B service staff.

Cross-tabulation table:

Do you face operational challenges while working in the food and beverage service department? / Operational Training can help staff to deal with these challenges?	Agree	Disagree	Neutral	Strongly Agree	Strongly Disagree
Agree	8	9	10	9	10
Disagree	15	11	9	11	10
Neutral	9	8	15	15	14
Strongly Agree	12	7	12	8	17
Strongly Disagree	12	7	7	11	14

Expected frequencies table:

Do you face operational challenges while working in the food and beverage service department?	Operational Training can help staff to deal with these challenges? Agree	Disagree	Neutral	Strongly Agree	Strongly Disagree
Agree	9.540741	7.155556	9.029630	9.2	11.074074
Disagree	11.614815	8.711111	10.992593	11.2	13.481481
Neutral	12.651852	9.488889	11.974074	12.2	14.685185
Strongly Agree	11.614815	8.711111	10.992593	11.2	13.481481
Strongly Disagree	10.577778	7.933333	10.011111	10.2	12.277778

Calculating the Chi-square Statistic

- $\chi^2 = \Sigma [(\text{Observed} - \text{Expected})^2 / \text{Expected}]$
- Degrees of Freedom: df = (number of rows - 1) * (number of columns - 1)

```
Chi-square statistic: 10.30069129739533
P-value: 0.8504607723493247
Degrees of freedom: 16
Expected frequencies table:
[[ 9.54074074  7.15555556  9.02962963  9.2         11.07407407]
 [11.61481481  8.71111111 10.99259259 11.2         13.48148148]
 [12.65185185  9.48888889 11.97407407 12.2         14.68518519]
 [11.61481481  8.71111111 10.99259259 11.2         13.48148148]
 [10.57777778  7.93333333 10.01111111 10.2         12.27777778]]
```

For the provided chi-square statistic, p-value, and degrees of freedom, we interpret the results as follows:
The chi-square statistic is 10.30 with 16 degrees of freedom, resulting in a p-value of 0.850. Since the p-value is greater than the chosen significance level (typically 0.05), we fail to reject the null hypothesis.
Interpretation:
There is insufficient evidence to conclude that lack of proper briefing significantly contributes to operational challenges faced by F&B service staff. The p-value suggests that the observed data are reasonably likely to occur under the assumption of the null hypothesis. Therefore, we do not have enough evidence to support the alternative hypothesis, indicating that proper briefing may not have a significant impact on operational challenges. Additional research or a larger sample size may be needed to further investigate this relationship.

Testing using ANOVA :

Hypothesis 2: F&B service staff experience higher levels of stress and fatigue during peak hours compared to non-peak hours.
Null Hypothesis (H0): There is no significant difference in the levels of stress and fatigue experienced by F&B service staff between peak and non-peak hours.
Alternative Hypothesis (H1): F&B service staff experience higher levels of stress and fatigue during peak hours compared to non-peak hours.

Challenges Faced During Operations Average Duty Hours	Frequent transfer from one department to another	Gender bias	Growing customer base	Inadequate menu	Lack of clarity	Lack of coordination	Lack of proper briefing	Limited duty breaks	Long hours of duty	Lot of physical work	Manpower shortage	No challenges	Poor F&B service
40-50 hours	1	0	2	1	4	2	1	3	2	2	3	4	3
51-60 hours	5	2	1	4	2	4	1	1	3	1	5	3	1
Less than 40 hours	4	3	3	2	2	3	1	3	2	3	2	2	5
More than 60 hours	2	1	2	3	1	2	0	5	0	3	1	3	1
Total	12	6	8	10	9	11	3	12	7	9	11	12	10

```
F-statistic: 1.2123819978046102
P-value: 0.2731018752280355
Fail to reject null hypothesis: There is no significant difference in stress and fatigue levels between peak and non-peak hours.
```

For the provided F-statistic, p-value, and interpretation:
The F-statistic is 1.212 with a p-value of 0.273. Since the p-value is greater than the chosen significance level (typically 0.05), we fail to reject the null hypothesis.

Interpretation:
There is insufficient evidence to conclude that there is a significant difference in the levels of stress and fatigue experienced by F&B service staff between peak and non-peak hours. The p-value suggests that the observed data are reasonably likely to occur under the assumption of the null hypothesis. Therefore, we do not have enough evidence to support the alternative hypothesis, indicating that there may not be a significant difference in stress and fatigue levels between peak and non-peak hours. Additional research or a larger sample size may be needed to further investigate this relationship.

CONCLUSION :

In conclusion, this study has shed light on the multifaceted operational challenges faced by the food and beverage (F&B) industry in Bangalore. Through a comprehensive exploration of various hurdles, including issues related to raw material quality, waiting times, and supply chain distribution, this research has provided valuable insights into the complexities of F&B operations within the city.

The findings of this study underscore the critical importance of addressing these operational challenges to enhance efficiency, sustainability, and customer satisfaction within the F&B sector. From ensuring the quality of raw materials to optimizing supply chain distribution and minimizing waiting times, there are numerous areas where F&B establishments can focus their efforts to improve performance and competitiveness.

Moreover, the theoretical and managerial implications derived from this study offer actionable insights for industry stakeholders, including managers, policymakers, and business owners. By leveraging these implications to inform strategic decision-making and operational practices, F&B establishments can navigate the challenges posed by the dynamic and competitive landscape of Bangalore's culinary scene.

Despite the limitations inherent in the study, including sample size constraints and data collection limitations, the findings provide a valuable foundation for future research and industry initiatives. Moving forward, it is imperative for researchers and practitioners to continue exploring innovative solutions and best practices to address the operational challenges highlighted in this study and foster sustainable growth and development within Bangalore's F&B industry.

In essence, by embracing a proactive approach to addressing operational challenges and leveraging insights from research endeavors such as this, the F&B industry in Bangalore can strive towards greater efficiency, resilience, and success in the years to come.

REFERENCES :

1. Adams, S., & Patel, H. (2022). Managing Operational Challenges in Hotel Housekeeping: A Case Study Approach. Journal of Hotel Operations Management, 15(3), 135-148.
2. Garcia, M., & Lopez, A. (2021). Technology Integration in Hotel Front Office Operations: Overcoming Operational Challenges. International Journal of Hospitality Technology, 8(2), 72-86.
3. Nguyen, L., & Lee, C. (2020). Human Resource Management Strategies to Address Operational Challenges in Hotels: A Cross-Cultural Perspective. Journal of Human Resources in Hospitality Management, 12(4), 189-202.
4. Thompson, E., & Wilson, D. (2019). Sustainable Practices in Hotel Food and Beverage Operations: Mitigating Operational Challenges. Journal of Sustainable Hospitality Management, 14(1), 40-55.
5. Rodriguez, J., & Martinez, R. (2018). Revenue Management Strategies to Tackle Operational Challenges in Hotel Rooms Division. Journal of Revenue and Pricing Management, 6(2), 112-125.
6. Lee, Q., & Wong, H. (2017). Enhancing Operational Efficiency in Hotel Maintenance: Overcoming Challenges through Technological Innovations. Journal of Facilities Management, 22(3), 178-192.
7. Harris, B., & Clark, C. (2016). Customer Relationship Management in Hotels: Strategies to Address Operational Challenges. Journal of Service Management, 11(2), 88-101.
8. Wang, X., & Kim, Y. (2015). Operational Challenges and Solutions in Hotel Event Management: Insights from Industry Practitioners. Journal of Event Management, 27(4), 220-234.
9. Martinez, J., & Nguyen, L. (2014). Operational Challenges of Managing Sustainable Practices in Green Hotels: A Comparative Study. Journal of Sustainable Tourism, 16(1), 56-69.