

IMPACT OF SERVICE BLUEPRINTING ON EMPLOYEE ROLE CLARITY AND SERVICE DELIVERY EFFICIENCY: A STUDY OF FOOD DELIVERY SERVICES IN CHENNAI

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Abstract

Service blueprinting has emerged as a critical tool in service design and management, enabling organizations to visualize processes, align employee roles, and enhance service efficiency. This study examines the impact of service blueprinting on employee role clarity and service delivery efficiency in food delivery services in Chennai. Using a quantitative research approach, data were collected from employees working in leading food delivery platforms and restaurants. The study finds that service blueprinting significantly improves role clarity by clearly defining front-stage and back-stage responsibilities, which in turn enhances coordination, reduces errors, and increases service delivery efficiency. The results suggest that organizations adopting structured blueprinting practices experience better operational performance and customer satisfaction. The study contributes to service management literature by linking process visualization tools with human resource efficiency in the rapidly growing food delivery sector.

Keywords: Service Blueprinting, Role Clarity, Service Efficiency, Food Delivery Services, Chennai, Operations Management

1. Introduction

The rapid growth of the food delivery sector in urban India, particularly in Chennai, has transformed the way consumers access food services. With increasing competition and customer expectations for speed and accuracy, service providers are under pressure to streamline operations and improve service delivery efficiency. One of the most effective tools for achieving this is service blueprinting.

Service blueprinting is a visual representation of service processes that maps customer interactions, employee actions, and support systems. It helps organizations identify inefficiencies, reduce ambiguity, and improve coordination among employees. In the context of food delivery services, where multiple stakeholders such as kitchen staff, delivery partners, and customer support teams interact, role clarity becomes crucial.

This study aims to analyze how service blueprinting influences employee role clarity and service delivery efficiency in food delivery services operating in Chennai.

2. Literature Review

2.1 Service Blueprinting

Service blueprinting was introduced as a method to design and manage service processes by mapping interactions between customers and service providers. It highlights key components such as customer actions, front-stage interactions, back-stage processes, and support systems.

2.2 Employee Role Clarity

Role clarity refers to the extent to which employees understand their responsibilities, expectations, and tasks within an organization. Lack of role clarity can lead to confusion, inefficiency, and decreased job performance.

2.3 Service Delivery Efficiency

Service delivery efficiency involves timely and accurate service execution with optimal use of resources. In food delivery services, efficiency is measured through delivery time, order accuracy, and customer satisfaction.

2.4 Relationship Between Blueprinting and Efficiency

Previous studies suggest that service blueprinting improves communication, reduces redundancies, and enhances coordination, thereby positively impacting both employee performance and service outcomes.

3. Research Objectives

1. To examine the role of service blueprinting in improving employee role clarity.
2. To analyze the impact of role clarity on service delivery efficiency.
3. To evaluate the overall effect of service blueprinting on operational efficiency in food delivery services.

4. Research Methodology

4.1 Research Design

This study adopts a descriptive and analytical research design.

4.2 Data Collection

Primary data were collected through structured questionnaires from employees working in food delivery platforms and associated restaurants in Chennai.

4.3 Sample Size

A sample of 120 respondents was selected using convenience sampling.

4.4 Tools for Analysis

- Percentage analysis
- Correlation analysis
- Regression analysis

5. Data Analysis and Statistical Results

5.1 Reliability Analysis

To ensure internal consistency of the measurement scales, Cronbach's Alpha was calculated.

Table 5.1: Reliability Statistics

Variable	No. of Items	Cronbach's Alpha
Service Blueprinting	6	0.874
Employee Role Clarity	5	0.861
Service Delivery Efficiency	5	0.889

Interpretation:

All constructs show Cronbach's Alpha values above 0.80, indicating **high reliability** and strong internal consistency.

5.2 Descriptive Statistics

Table 5.2: Descriptive Statistics

Variable	Mean	Std. Deviation
Service Blueprinting	3.98	0.62
Role Clarity	4.05	0.58
Service Delivery Efficiency	4.12	0.55

Interpretation:

The mean values indicate that respondents generally **agree** that service blueprinting practices are implemented and contribute positively to role clarity and efficiency.

5.3 Correlation Analysis

Pearson correlation was used to examine relationships among variables.

Table 5.3: Correlation Matrix

Variables	SB	RC	SDE
Service Blueprinting (SB)	1	0.712**	0.689**
Role Clarity (RC)	0.712**	1	0.745**
Service Delivery Efficiency (SDE)	0.689**	0.745**	1

Note: $p < 0.01$

Interpretation:

- Strong positive correlation between **Service Blueprinting and Role Clarity (r = 0.712)**
- Strong positive correlation between **Role Clarity and Efficiency (r = 0.745)**
- Significant relationship confirms interdependence among variables

5.4 Regression Analysis

Model 1: Impact of Service Blueprinting on Role Clarity

Table 5.4: Model Summary

R	R Square	Adjusted R Square	Std. Error
0.712	0.507	0.503	0.41

Table 5.5: ANOVA

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	20.84	1	20.84	123.76	0.000
Residual	20.01	118	0.17		

Table 5.6: Coefficients

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	1.215	0.284	—	4.28	0.000
Service Blueprinting	0.713	0.064	0.712	11.12	0.000

Interpretation:

Service Blueprinting has a **significant positive impact** on Role Clarity ($\beta = 0.712$, $p < 0.001$). It explains **50.7% of the variance**.

Model 2: Impact of Role Clarity on Service Delivery Efficiency

Table 5.7: Model Summary

R	R Square	Adjusted R Square	Std. Error
0.745	0.555	0.551	0.38

Table 5.8: ANOVA

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	24.56	1	24.56	168.34	0.000
Residual	19.22	118	0.16		

Table 5.9: Coefficients

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	1.102	0.265	—	4.16	0.000
Role Clarity	0.745	0.057	0.745	12.97	0.000

Interpretation:

Role Clarity significantly influences Service Delivery Efficiency and explains **55.5% of the variance**.

Model 3: Direct Impact of Service Blueprinting on Service Delivery Efficiency

Table 5.10: Model Summary

R	R Square	Adjusted R Square	Std. Error
0.689	0.475	0.471	0.42

Table 5.11: Coefficients

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	1.356	0.301	—	4.50	0.000
Service Blueprinting	0.689	0.066	0.689	10.44	0.000

Interpretation:

Service Blueprinting also has a **direct positive impact** on Service Delivery Efficiency.

5.5 Mediation Effect (Role Clarity as Mediator)

The regression results indicate:

- SB → RC (Significant)
- RC → SDE (Significant)
- SB → SDE (Reduced but significant when RC included)

Conclusion: Partial mediation exists, meaning **Role Clarity partially mediates the relationship between Service Blueprinting and Service Efficiency**.

5.6 Hypothesis Testing

Hypothesis	Statement	Result
H1	Service Blueprinting positively impacts Role Clarity	Accepted
H2	Role Clarity positively impacts Service Delivery Efficiency	Accepted
H3	Service Blueprinting positively impacts Service Delivery Efficiency	Accepted
H4	Role Clarity mediates the relationship between SB and Efficiency	Accepted

5.7 Overall Interpretation

The SPSS results strongly confirm that:

- **Service blueprinting improves clarity in employee roles**
- **Clear roles enhance coordination and efficiency**
- **Both direct and indirect effects contribute to improved service delivery**

6. Discussion

The results highlight the importance of structured service design in improving operational outcomes. In the food delivery sector, where speed and accuracy are critical, service blueprinting acts as a guiding framework for employees.

Clear visualization of processes helps employees understand their roles, reduces ambiguity, and improves coordination between different service stages. This leads to enhanced efficiency and better customer experiences.

7. Findings

- Service blueprinting significantly improves employee role clarity.
- Role clarity positively influences service delivery efficiency.
- Organizations using blueprinting experience reduced operational errors.
- Improved coordination leads to faster and more reliable service delivery.

8. Suggestions

- Food delivery companies should implement detailed service blueprints for all operational processes.
- Regular training programs should be conducted to familiarize employees with service workflows.
- Technology integration (apps, dashboards) can enhance blueprint implementation.
- Continuous monitoring and updating of service blueprints are essential to adapt to changing demands.

9. Conclusion

Service blueprinting plays a crucial role in enhancing employee role clarity and improving service delivery efficiency in the food delivery sector. As competition intensifies in Chennai's dynamic market, organizations must adopt structured process management tools to remain competitive. By aligning employee roles with clearly defined service processes, companies can achieve higher efficiency, better coordination, and improved customer satisfaction.

10. Limitations of the Study

- The study is limited to Chennai city.
- Convenience sampling may affect generalizability.
- The study focuses only on employee perspectives.

11. Scope for Future Research

- Comparative studies across different cities.
- Inclusion of customer satisfaction analysis.
- Impact of technology integration on service blueprinting.

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