A STUDY ON CONSUMER PREFERENCE FOR PAAS (PRODUCT-AS-A-SERVICE MODEL)

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ABSTRACT:

The Product-as-a-Service (PaaS) model is gaining traction as businesses shift from traditional ownership-based transactions to service-based consumption. This study explores consumer preferences for PaaS, analyzing factors influencing adoption, such as cost-effectiveness, convenience, sustainability, and perceived risks. The research aims to understand consumer motivations, barriers to acceptance, and how different demographics respond to this model. Through surveys and case studies, the study provides insights into the future of PaaS and its potential to reshape consumer behavior and business strategies. By analyzing consumer behavior, this research aims to understand the motivations and barriers influencing the adoption of PaaS models across various industries, such as electronics, automobiles, and home appliances.

Keywords: Product-as-a-Service (PaaS), consumer preference, subscription model, circular economy, sustainability, access-based consumption, business model innovation.

INTRODUCTION:

Product-as-a-Service refers to the concept of selling the services and outcomes that a product can provide, rather than selling the product itself. It is a business model where customers purchase the desired results or benefits offered by the product, instead of owning the physical product itself. This approach often involves a subscription-based model, where customers pay a recurring fee to access the product and the associated services. By shifting the focus from owning a product to accessing its benefits, Product-as-a-Service enables businesses to deliver value and outcomes more directly to their

customers. This model creates opportunities for increased customer engagement, customization, and ongoing service and support. PaaS is also a concept in which products are thought to be much more than just physical items to be owed by the consumer. Instead, they are enables of value, experience and outcomes that customers seek. Instead of focusing on the product itself, PaaS shifts the perspective towards the benefits it delivers.

STATEMENTOFTHEPROBLEM:

The board aim of studying consumer perception of the Product-as-a-Service (PaaS) model revolves around understanding the factors influencing consumer acceptance and adoption of this emerging business approach. While PaaS offers benefits such as cost savings, convenience, and sustainability, many consumers remain hesitant due to concerns about ownership, long-term costs, and service reliability. There is a need to examine how consumer trust, awareness, and perceived value affect their willingness to embrace PaaS across different industries. Additionally, factors such as digital literacy, brand reputation, and economic conditions may play a crucial role in shaping consumer attitudes. This study seeks to identify the key barriers and motivators influencing consumer perception, providing insights that can help businesses design more effective PaaS strategies to enhance adoption and customer satisfaction.

OBJECTIVES OF THE STUDY:

- To examine consumer awareness and perception of the Product-as-a-Service (PaaS)model.
- To identify key factors influencing consumer adoption of Products subscriptions (e.g., cost, convenience, sustainability, and brand reputation).
- To assess consumer satisfaction and willingness to continue using Product-as-a-Service (PaaS) based Services.

RESEARCHMETHODOLOGY:

The research methodology used to study consumer preferences, perceptions, and adoption factors of the Product-as-a-Service (PaaS) model. The research employs a mixed-methods approach, combining quantitative surveys to ensure a comprehensive analysisThe following methods are used

- Simple Percentage

- Chi-Square Test

- ANOVO

RESULTS AND FINDINGS:

TABLE 1 GENDER OF THE RESPONDENTS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	47	60.3	60.3	60.3
	Female	31	39.7	39.7	100.0
	Total	78	100.0	100.0	

TABLE 2 AGE OF THE RESPONDENTS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25 Years	10	12.8	12.8	12.8
	26-34 Years	41	52.6	52.6	65.4
	35-42 Years	17	21.8	21.8	87.2
	43-50 years	9	11.5	11.5	98.7
	Above 50 Years	1	1.3	1.3	100.0
	Total	78	100.0	100.0	

TABLE 3 FAMILY TYPE OF THE RESPONDENT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Nuclear Family	59	75.6	75.6	75.6
	Joint Family	19	24.4	24.4	100.0
	Total	78	100.0	100.0	

TABLE 4 NO OF MEMBER IN THE FAMILY OF THE RESPONDENT

		Frequency	Percent	Valid Percent	Cumulative Percent

Valid	2	1	1.3	1.3	1.3
	3	9	11.5	11.5	12.8
	4	47	60.3	60.3	73.1
	5	21	26.9	26.9	100.0
	Total	78	100.0	100.0	

TABLE 5 FAMILY MONTHLY INCOME OF THE RESPONDENT					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Below Rs.25,000	4	5.1	5.1	5.1
	Rs.25001 to Rs.45,000	10	12.8	12.8	17.9
	Rs.45,001 to Rs.65,000	24	30.8	30.8	48.7
	Rs.65,001 to Rs.80,000	25	32.1	32.1	80.8
	Above 80,000	15	19.2	19.2	100.0
	Total	78	100.0	100.0	

TABLE 6 DESIGNATION OF THE RESPONDENTS					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	23	29.5	29.5	29.5
	Employed	25	32.1	32.1	61.5
	Unemployed	15	19.2	19.2	80.8
	Professionals	9	11.5	11.5	92.3
	Business	6	7.7	7.7	100.0
	Total	78	100.0	100.0	

TABLE 7 EDUCATIONAL QUALIFICATION OF THE RESPONDENT					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Under Graduate	37	47.4	47.4	47.4
	Post Graduate	23	29.	29.5	76.9

			5		
Doctor of Philosophy	11	14.1	14.1	91.0
Diploma	6	7.7	7.7	98.7
No Formal Education	1	1.3	1.3	100.0
Total	78	100.0	100.0	

TABLE 8 FAMILY TYPE VS HOW SATISFIED ARE YOU WITH THE QUALITY PERFORMANCE AND RELIABILITY OF THE PRODUCT?

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.380	3	.127	.670	.573
Within Groups	13.992	74	.189		
Total	14.372	77			

Crosstabulation

WHAT TYPE OF PRODUCT HAVE YOU USED THIS PRODUCT-AS-A-SERVICE MODEL?						Total
		Electronics	Cars/Vehicles	Home Appliances	Software	TOTAL
	15-20 Years	0	7	2	1	10
	21-29 Years	8	11	17	5	41
	30-39 Years	1	8	7	1	17
	40-49 years	2	0	3	4	9
	Above 50 Years	0	0	1	0	1
	Total	11	26	30	11	78

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	21.602[a]	12	.042
Likelihood Ratio	23.635	12	.023
Linear-by-Linear Association	2.071	1	.150
N of Valid Cases	78		

a. 14 cells (70.0%) have expected count less than 5. The minimum expected count is .14.

9. WHAT TYPE OF PRODUCT HAVE YOU USED THIS PRODUCT-AS-A-SERVICE MODEL?

HOW SATISFIED ARE YOU WITH THE QUALITY PERFORMANCE AND RELIABILITY OF THE PRODUCT?	HOW SATISFIED ARE YOU WITH THE QUALITY PERFORMANCE AND RELIABILITY OF THE PRODUCT?	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Very Satisfied	Satisfied	-.14747	.12289	.629	-.4705	.1755
	Neutral	-.15714	.13586	.656	-.5142	.1999
	Dissatisfied	-.02381	.20129	.999	-.5529	.5053
Satisfied	Very Satisfied	.14747	.12289	.629	-.1755	.4705
	Neutral	-.00968	.12471	1.000	-.3375	.3181
	Dissatisfied	.12366	.19394	.920	-.3861	.6334
Neutral	Very Satisfied	.15714	.13586	.656	-.1999	.5142
	Satisfied	.00968	.12471	1.000	-.3181	.3375
	Dissatisfied	.13333	.20240	.912	-.3987	.6653
Dissatisfied	Very Satisfied	.02381	.20129	.999	-.5053	.5529
	Satisfied	-.12366	.19394	.920	-.6334	.3861
	Neutral	-.13333	.20240	.912	-.6653	.3987

FAMILY TYPE TUKEY HSD

HOW SATISFIED ARE YOU WITH THE QUALITY PERFORMANCE AND RELIABILITY OF THE PRODUCT?	N	Subset for alpha = 0.05
		1
Very Satisfied	21	1.1429
Dissatisfied	6	1.1667
Satisfied	31	1.2903
Neutral	20	1.3000
Sig.		.784
Means for groups in homogeneous subsets are displayed.		

FINDINGS:

1.AGE.The majority of respondents (52.6%) fall within the **26-34 years** category, suggesting that younger adults are more engaged with the Product-as-a-Service (PaaS) model.

2.NO OF MEMBER IN THE FAMILY: The majority respondents (60.3%) belong to families with 4 members, suggesting a predominant household structure.

3.FAMILY TYPE. The majority (75.6%) of the respondents belong to nuclear families, indicating a modern family structure trend

4.MONTHLY INCOME. The majority respondent (32.1%) falls in the mid to upper income brackets, indicating a high potential for PaaS adoption, especially for services offering flexibility, premium access, or cost-efficient upgrades.

5. EDUCATIONAL QUALIFICATION: The majority respondent (47.4%)of the respondents have at least an undergraduate degree, showing a strong educational background.

6. DESIGNATION: The majority of the respondent (32.1 %) suggesting strong representation from both income-earning and future consumer groups.

CHI SQUARE FINDINGS:

7.RELATION BETWEEN AGE AND WHAT TYPE OF PRODUCT HAVE YOU USED IN THIS PRODUCT AS A SERVICE MODEL?

H0: There is a significant relationship between age vs type of product used in this product-as-a-service model

H1: There is no significant relationship between age vs type of product used in this product-as-a-service model

INTERPRETATION:

As Chi- Square test was conducted to analyses the relationship between age vs type of product used in this product-as-a-service model. As per the table, the result of the Pearson Chi- Square test is .042 with significant value of 21.602 which is below the threshold of 0.05. As a result, it indicates there is significant relation between age vs type of product used in this product-as-a-service model. This suggests that Age significantly influences the type of product used in the PaaS model.

ANOVO FINDINGS:

INTERPRETATION:

The result suggest that the Family type does not significantly influence consumer satisfaction with product quality, performance, and reliability in product-as-a-service Overall, customer satisfaction appears relatively homogeneous across groups, indicating a generally consistent perception of the service. This means that individuals from different family type not satisfied with the Quality, Performance, and Reliability of the product-as-a-service.The Sig. value (0.784) in Tukey's HSD test is much higher than 0.05, confirming that there are no meaningful differences in satisfaction levels across family types.

HYPOTHESIS TESTING:

Based on results, we fail to reject the null hypothesis (HO), means that family type does not significantly impact satisfaction with the product's quality, performance, and reliability.

CONCLUSION:

The study on consumer preference toward the Product-as-a-Service (PaaS) model reveals a growing acceptance and interest, particularly among younger, educated, and employed individuals. The findings suggest that consumers in the 26–34 age group, primarily from nuclear families with moderate to high income levels, are more inclined toward the PaaS model due to its convenience, flexibility, and cost-effectiveness. A majority of respondents possess at least an undergraduate degree, indicating that awareness and understanding of the PaaS model play a significant role in its adoption. Additionally, employed individuals and professionals show a higher tendency to prefer service-based models, likely due to their exposure to technology and modern consumption trends. While the overall response is positive, the study also highlights certain barriers, such as limited awareness and a traditional preference for ownership among older or less-educated consumers. In conclusion, the PaaS model has significant growth potential in India, especially if businesses focus on targeted marketing, customization, and building trust among consumers across various demographics.

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