Digital Convergence

Indian Consumers' Perception of Bundled Telecom, Media & Entertainment, and E-commerce Services

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ABSTRACT

India is rapidly transitioning into a digitally connected economy and has become the world's 3rd largest digitized country, leaving behind emerging economies like the UK, Japan, and Germany. Additionally, GOI's ambitious milestone of reaching a \$30 trillion economy mark by 2047 (Viksit Bharat) and initiatives like Digital India have spurred India's fastest-growing industries, Telecom, Media & Entertainment, and E-commerce, to come together on a single platform (digital convergence). The present study endeavors to understand consumers' perception of this convergence, which has enabled telecom companies to offer bundle service plans including telecom, M&E, and e-commerce services, which provide consumers with seamless access to these indispensable services under a single umbrella. The responses from 234 respondents gathered through the questionnaire were analyzed using Microsoft Excel and IBM SPSS (v26) software. Using hypothesis testing, the study explored consumers' viewpoints on several research statements by applying the ANOVA test and identified statistically significant differences w.r.t demographic variables like age, education, occupation, and monthly-family-income.

Keywords: Digital Convergence, Digitalization, Telecom, Media & Entertainment, E-Commerce, Services Bundling.

INTRODUCTION

or a prolonged period, Telecom, Media & Entertainment (M&E), and E-commerce have operated and developed as separate industries while retaining their special attributes. However, due to technological advancements, specifically in digital technology and the increasing internet penetration, have led to the emergence of a new phenomenon called "Digital Convergence"— the integration of media and e-commerce services with telecom services in the context of our study. This, in turn, has led to shaping a new business model "convergence-based business model" that operates on the sole corporate strategy of bringing together telecom, M&E, and e-commerce industries, which historically were serviced separately. In India, leading telecom providers like Reliance Jio and Bharti Airtel are bundling broadband and mobile services with access to OTT platforms (such as JioTV, JioHotstar— after the recent historic Reliance-Disney mega-merger in 2024 and Airtel Xstream play), and also telecom operators are venturing into e-commerce, such as Jio Mart, Reliance Digital, Ajio, Tira, etc., thereby creating a one-stop-shop solution for all these services for consumers. By virtue of this convergence, consumers can access all these essential services on a single platform, "Smartphone." India's largest telecom operator Reliance Jio with a 476.58 million as of Q3 FY2024-25 subscriber base has created such an ecosystem for consumers, by leveraging its large telecom infrastructure and advanced technologies such as (cloud and edge computing, augmented/virtual reality, Internet of things, natural language processing, blockchain et al.) and 5G internet services, that all the indispensable services required for daily course of

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events (connectivity, media & entertainment, retail/ecommerce, education, health, financial services) are all accessible on a single touch on a smartphone, making Reliance Jio a number one digital service provider in India. The bundling of these essential services is a masterstroke by Reliance Jio and is a big part of its customer acquisition strategy, as its other competitors, namely Airtel and Vodafone-Idea, have no stake in e-commerce at all. This phenomenon of digital convergence by employing the strategy of bundled services is visible in its existing telecom subscription plans. Taking the example of a recently launched prepaid plan "New Year Welcome Plan 2025" which is priced at ₹2,025 and offers 500 GB of 5G data (2.5 GB/day) to its subscribers with unlimited voice calls and SMS, and with additional complementary access to OTT streaming platforms such as JioTV, JioHotstar, and also includes partner coupons worth ₹2,150, which encompass discounts like ₹500 off on Ajio for purchases above ₹2,500, ₹150 off on Swiggy orders exceeding ₹499, and ₹1,500 off on flight bookings made via EaseMyTrip (Jio, 2024). This "New Year Welcome Plan 2025" from Reliance Jio perfectly demonstrates digital convergence as it combines this array of services in one convenient package, including telecom, media & entertainment, and e-commerce (all in one). As a result, consumers do not have to wander to different service providers to avail these services, and they get the unique advantage of accessing them from a single service provider (telecom operator).

Past research shows a growing preference for bundled offerings, especially the post-COVID-19 pandemic. According to a joint report by the Internet and Mobile Association of India (IAMAI) and Nielsen (2022), 65% of Indian digital consumers prefer bundled subscriptions for telecom, OTT, and shopping services due to their convenience and cost-effectiveness. These bundles reduce subscription fatigue, simplify access, and provide enhanced user experiences, thereby strengthening customer loyalty. These studies show how closely digital integration of services from initially separated industries (Telecom, M&E, and *E-commerce*) is affecting consumers' day-to-day lives. And, therefore, it is essential to investigate consumers' perception of this growing phenomenon of digital convergence, making our study relevant from both managerial and researcher lenses.

REVIEW OF LITERATURE

The concept of digital convergence has been extensively studied in the context of global markets, highlighting its transformative potential. Saba and David (2023) carried out a study in 205 countries to investigate the factors that influenced convergence of telecommunication infrastructures during the period 2000-2018. The findings suggested that economic, human, demographic, and financial deepening are the key variables that are instrumental in convergence of telecommunication infrastructure across the countries. Additionally, Gupta and Singharia (2021) aimed to study the impact of technological advancement in telecommunication services on the changes in the media consumption habits of consumers in India. The results of the study established that consumer engagement and quality of service experience played a significant role in influencing customers' willingness to consume media on OTT platforms such as Amazon Prime, Netflix, and Disney Hotstar. Another study highlighted that digital convergence drives market efficiencies by creating ecosystems where consumers can access multiple services through a single platform. This is particularly beneficial in emerging markets where digital infrastructure is still developing. The extant research has established that the entry of Reliance Jio in the Indian telecom industry has been a game changer for digitalization in India. For instance, a study discussed how the launch of Jio caused disruption in the Indian telecom operations and its impact on mobile phone customers. The study claimed that the disruption caused by Jio led to the development of infrastructural systems by the other telecom players and made millions of Indians to enter the digital world not with PCs or laptops but through their phones (Mukherjee, 2019). Furthermore, researchers have espoused how digital convergence and divergence have affected digital media business models. Based on the thorough review of literature, the author stated that while the media distribution platforms are converging, content consumption is diverging due to increasing media production houses and their content delivery. In other words, democratization of content due to web 2.0 both from the perspective of content producers and content consumers is leading towards digital convergence (Vukanovic, 2018). Another body of literature revealed that the high tide of novel and futuristic digital

technologies and the simultaneous adoption of new business models like OTT (over-the-top) platforms has morphed the media and broadcasting industry and owing to this, convergence between telecom and broadcasting industries has become a standard business practice. This research is concerned with analyzing the pattern of convergence between the media and broadcasting in the context of public interest, by studying a case of an acquisition deal cracked in South Korea initiated by a telecom operator SK Telecom to a cable TV operator CJ HelloVision (Choi, 2018). A very significant and highly cited study was performed in 1998 that attempted to discover the new patterns of mergers, acquisitions and convergence in the broadcasting, cable TV, and telephone industries after the new telecommunications regulations signed into law in 1996 in U.S. and also to identify the M&A strategies adopted by these industries on to the convergence. The study selected domestic and international M&A case studies under the SIC code 48 from the period of 1991 to 1996 to perform this study. The results indicated that horizontal and vertical mergers and acquisitions and cross-segment integration were the strategies opted for the strategic alliance within and amongst these industries (Chan-Olmsted, 1998).

Research Gap

Despite the growing adoption of bundled services among consumers, very few studies have been undertaken to explore the phenomenon of convergence in industries that too from consumers' perspective. While existing studies have focused on understanding users' perspectives for individual services in Telecom, M&E, and E-commerce industries respectively, there exists a strong need to understand how the convergence of these three sectors combined, creates consumer perception regarding this growing phenomenon. Moreover, the Indian market's unique socio-economic and demographic diversity presents a unique opportunity for analyzing the digital convergence among these industries. Unlike Western markets like (USA, Europe, Middle Eastern countries, etc.) where digital adoption is uniform, India's digital landscape is characterized by regional disparities in internet access, income levels, education levels, and technology adoption rates. Therefore, this study is very instrumental in providing valuable insights into how bundled services are perceived across different segments of Indian consumers and will assist telecom, media, and e-commerce companies in designing bundled offerings that align with customer expectations.

Objectives of the Study

The main objectives of the present study are to gauge the demographic and psychographic profile of Indian telecom, M&E, and e-commerce services users visà-vis convergence and to examine their perception w.r.t convergence happening in telecom, M&E, and e-commerce industries in India. To achieve the same, the following research hypotheses have been formulated for empirical testing:

- Null Hypothesis (H₀): There is no significant difference among consumers' viewpoints (acrossdemographics) regarding the convergence of the telecom, media & entertainment, and e-commerce industry.
- Alternate Hypothesis (H₁): There is a significant difference among consumers' viewpoints (acrossdemographics) regarding the convergence of the telecom, media & entertainment, and e-commerce industry.

METHODOLOGY

The current study is exploratory cum descriptive in nature. A well-structured questionnaire was constructed on a five-point Likert Scale ranging from 1 as "Strongly disagree" to 5 as "Strongly agree". Before gathering respondents' opinions, a pilot study was performed on 40 respondents, after which a few corrections were incorporated into the instrument in line with academic and industry experts' discussions. The final questionnaire was circulated (both online and offline) among consumers who actively use bundled telecom, M&E, and e-commerce services on smart devices. The primary data were collected from 267 respondents in the Delhi-NCR region of India (Delhi, Noida, Gurugram, Rohtak, Faridabad) using judgmentsampling. But after cleaning up the data, and removing outliers and duplicates, we were left with 234 accurate responses to be used for analysis. To check the reliability and internal consistency of the instrument, Cronbach's-coefficient (α) was applied, the value of which was found to be exceeding 0.70 which is reliable and indicates that the survey-questionnaire is reliable

for the present study (see Table 2). The data collected via survey was imported into IBM-SPSS-Statistics (v26) for statistical analysis, and Microsoft Excel was also used (v2411). The study used Standard-Deviation, Mean and Univariate-ANOVA (GLM) as statistical tools to test the null hypotheses w.r.t effect of factorvariables on dependent-variables.

RESULTS

Demographic Attributes of Respondents at a Glance

Table 1 displays the percentage frequency distribution of the demographic variables of the research participants. It is observed that out of 234 participants, 58.1% were male and 41.9% were female. Most of the participants' representations came from the age bracket 20-30 (39.7%), while the participants aged above 50 years showed the least participation in the study was 9.4%. 51.7% of the participants were married and 48.3% were single. Most participants were post-graduates (42.3%) followed by graduates (33.7%), and 23.3% held doctorate degrees. Regarding occupation, half of the respondents (47.9%) were salaried professionals, 29.9% were self-employed, and 22.2% comprised students/housewives. Over half of the respondents (54.2%) reported monthly family income between ₹50,000 to ₹1,00,000, whereas 23.9% earned more than ₹1,00,000. This number indicates the rising percapita income levels of consumers in India. Lastly, 52.5% of participants reside in metro areas and 47.4% in non-metro regions.

Consumer Preferences and Spending Patterns on Telecom, M&E and E-commerce Services

The Graph 1 illustrates respondents' preferred telecom network provider. The participants were asked to specify the telecom network they used and preferred. This survey data aligns with recent TRAI reports and shows that Reliance Jio is the dominant and most popular telecom network among the respondents, with 133 users (56.8%) opting for it, followed by its closest competitor Bharti Airtel, which is preferred by 76 users (32.5%). Conversely, the small numbers for Vodafone-

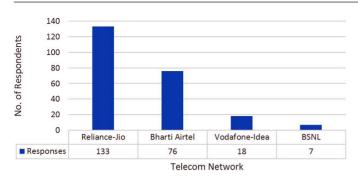
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Demographic Variables Categories Resnondents

Demographic Variables	Categories	Respondents	Percentage
Candan	Male	136	58.1
Gender	Female	98	41.9
	<20	33	14.1
	≥ 20 < 30	93	39.7
Age	≥ 30 < 40	61	26.2
	≥ 40 < 50	25	10.6
	≥ 50	22	9.4
M:4-1 C4-4	Single	113	48.3
Marital Status	Married	121	51.7
	Graduate	79	33.7
Education	Post-Graduate	99	42.3
	Doctorate	56	23.9
	Salaried	112	47.9
Occupation	Self-employed	70	29.9
	Student/Housewife	52	22.2
	< 50,000	51	21.7
Monthly Family Income (₹)	≥ 50,000 < 1,00,000	127	54.2
	≥ 1,00,000	56	23.9
D '1	Metro	123	52.5
Residence	Non-Metro	111	47.4

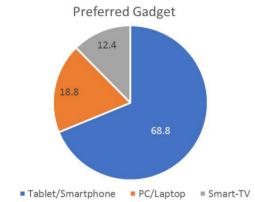
Table 1 Demographic Profile of the Respondents

Source: Authors' work



Graph 1 Telecom Network Preferred by the Consumers *Source:* Primary data gathered via a survey

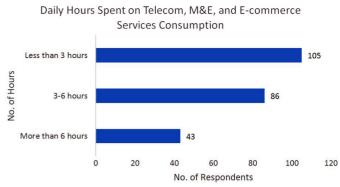
Idea 18 users (7.7%), and BSNL 7 users (3%) indicate a limited consumer preference towards them, potentially due to weaker network coverage, or fewer value-added services provided by them, as reported in TRAI reports.



Graph 2 Gadgets Preferred by the Consumers for Telecom, M&E, and E-commerce Service Consumption *Source:* Primary data gathered via Survey

The pie chart shows that most respondents (68.8%) prefer tablets or smartphones as their primary device for consuming telecom, M&E, and e-commerce services. This substantial number reflects the increasing smartphone-first strategies adopted by these service providers by leveraging the *on-the-go access* offered by this device. Around 18.8% of total respondents use PCs or Laptops, to avail these services, indicating its moderate usage and only 12.4% of total respondents prefer Smart TVs, indicating that while these devices are gaining popularity among the Indian-masses, they are mostly used for entertainment purposes rather than for broader Telecom, M&E, and E-commerce integrated service consumption.

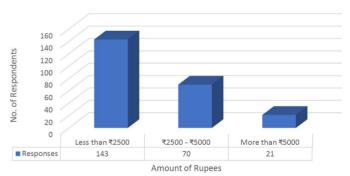
The Graph 3 shows that the maximum number of respondents (44.87%) spend less than 3 hours every day consuming these services while (36.75%) of total



Graph 3 Number of Hours Spent Daily by Consumers on Telecom, M&E, and E-commerce Services Consumption *Source:* Primary data gathered via Survey

respondents spend between 3 to 6 hours daily. Another proportion of respondents (18.38%) spend more than 6 hours every day on these services' consumption. The present data highlights that a significant portion (over half of the total sample size) 55.13% spend a considerable amount of time (1/4th of 24 hours) being highly engaged with these services (binge-watching on OTTs, frequent online shopping).

Monthly Spending on Telecom, M&E, and E-commerce Services



Graph 4 Consumers' Monthly Spending Patterns on Telecom, M&E, and E-commerce Services *Source:* Primary data gathered via Survey

The Graph 4 presents the amount of rupees that an Indian consumer spends monthly on consuming telecom, M&E, and e-commerce services combined. As per the data gathered, the largest group of respondents (n = 143, 61.11%) spends less than ₹2,500 every month on these services' consumption, showing that affordability is a key factor for the majority. Around (n = 70, 29.91%) of respondents spend between ₹2,500 to ₹5,000. Only a small segment (n=21, 8.97%) spends more than ₹5,000 monthly, indicating a niche group of high spenders who engage frequently with these services.

Table 2 Reliability of the Research Statements

Item No.	Research Statements	Mean	S.D		
Historical	and Technological Context				
Item (H1)	Historically, Telecom, M&E, and E-commerce industries were serviced separately by different service providers	3.90	1.125		
Item (H2)	Before high-speed $3G/4G/5G$ telecom & affordable Smartphones, data-pack consumption was neither cheap/ practical	4.02	.922		
Item (H3)	E-commerce in India till now has been dominated by (domestic/MNC) e-commerce giants naving no presence in Telecom				
Consumer	Benefits				
Item (C1)	With mass-adoption of 3G/4G/5G telecom, M&E, e-commerce is more accessible through the consumption of Social-Media platforms	4.32	.625		
Item (C2)	Telecom providers venturing into M&E/E-commerce (through leveraging their strengths, i.e., domination/monopoly in Telecom) is a boon for consumers, as they can access all these 'indispensable' services under a single umbrella	3.91	.730		
Item (C3)	Telecom providers venturing into M&E/E-commerce (through leveraging their strengths, i.e., domination/monopoly in Telecom) is a boon for consumers, as they can access all these 'indispensable' services at very reasonable price	3.89	.754		
Item (C4)	Telecom providers venturing into M&E/E-commerce (through leveraging their strengths, i.e., domination/monopoly in Telecom) is a boon for consumers, as they can access all these 'indispensable' services smoothly and seamlessly	3.65	1.185		
Rising Cor	nsumer Aspirations				
Item (R1)	Modern/fast-paced lifestyle necessitates consumers to avail Telecom, M&E and E-commerce on a single platform (enabling easy-accessibility on Smartphones/Smart Devices like Tablet/Laptops/Smart-TVs) to save time/hassle	4.12	.873		
Item (R2)	With increasing per capita and/or disposable incomes, affluent consumers in India aspire for a better-lifestyle (or quality of life) through access to bundled (i.e., one-stop-availability of) Telecom, M&E and E-commerce	4.03	.843		
Item (R3)	With winds of globalization sweeping the length and breadth of the country, aspirations of good standard/quality of life are percolating down to smaller (Tier-II/III) towns in India, esp. among affluent/highly educated segments of society	4.14	.716		

Source: Authors' work

Results of Hypotheses Testing

The results of GLM Univariate ANOVA analysis for hypotheses testing are presented below, considering all the research statements as dependent variables and demographic factors, such as gender, marital status, age, residence, education, occupation, and monthly family-income, as independent variables.

Historically, Telecom, M&E, and E-commerce Industries were Serviced Separately by Different Service Providers

Table 3 illustrates the testing of the null hypothesis (H_0) , which posits that no significant difference exists

in consumers' viewpoints related to the convergence of telecom, M&E, and e-commerce industry across various demographic variables related to the given statement. As depicted in Table 3, the *p-value* in case of gender, marital status, residence, age, occupation, and monthly family-income is greater than the *level of significance* (0.05), thereby validating the null hypothesis. In the case of education *p-value* < *level of significance* (0.05) thus rejecting H_0 , which indicates that consumers with varying education levels differ in their awareness of changing industry structures. The Adjusted R-Squared value (.924) indicates that 92.4% of the total variance in the dependent variable is explained by the model.

Table 3 Univariate ANOVA

Tests of Between-Subjects Effects; Dependent Variable: H1							
Source	Type III Sum of Squares	df	Mean Square	F	Sig.		
Model	3581.627a	14	255.831	204.387	.000		
Gender	4.399	1	4.399	3.514	.062		
Marital Status	.997	1	.997	.797	.373		
Residence	2.965	1	2.965	2.369	.125		
Age	2.184	4	.546	.436	.782		
Education	7.833	2	3.917	3.129	.046		
Occupation	.923	2	.461	.369	.692		
Monthly Family Income	3.444	2	1.722	1376	.255		
Error	275.373	220	1.252				
Total	3857.000	234					

a. $R^2 = .929$ (Adjusted $R^2 = .924$)

Source: Survey Data (SPSS V.26)

Table 4 Univariate ANOVA

Tests of Between-Subjects Effects; Dependent Variable: H2							
Source	Type III Sum of Squares	df	Mean Square	F	Sig.		
Model	3790.392ª	14	270.742	324.405	.000		
Gender	2.487	1	2.487	2.980	.086		
Marital Status	.810	1	.810	.971	.326		
Residence	3.263	1	3.263	3.910	.049		
Age	2.781	4	.695	.833	.505		
Education	3.246	2	1.623	1.945	.145		
Occupation	.670	2	.335	.401	.670		
Monthly Family Income	3.672	2	1.836	2.200	.113		
Error	183.608	220	.835				
Total	3974.000	234					

 a R² = .954 (Adjusted R² = .951)

Source: Survey Data (SPSS V.26)

Before high-speed 3G/4G/5G telecom & affordable Smartphones, data-pack consumption was neither cheap/practical

As depicted in Table 4, the *p-value* in case of gender, marital status, age, education, occupation, and monthly family-income is greater than the *level of significance*, thus validating the null hypothesis. In the case of residence *p-value* < *level of significance*, therefore rejecting H₀ and indicates that regional disparities have shaped different consumer experiences concerning data-pack affordability and practicality over time. The Adjusted R-Squared value (.951) indicates that 95.1% of the total variance in the dependent variable is explained by the model.

E-commerce in India till now has been dominated by (domestic/MNC) e-commerce giants having no presence in Telecom

As depicted in Table 5, the *p-value* in the case of residence, education, occupation, and monthly family income > *level of significance* thus supporting H_0 . In the case of gender, marital status, and age *p-value* < *level of significance* (0.05) thus rejecting H_0 and indicating that consumers' perception about the dominance of domestic/MNC e-commerce giants in India differs significantly across these dimensions. The Adjusted R-Squared explains 96.1% of the total variance in the dependent variable, demonstrating a strong fit of the model.

Tabla	5	Univariate	ANOVA

Tests of Between-Subjects Effects; Dependent Variable: H3						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Model	3444.534a	14	246.038	418.089	.000	
Gender	2.333	1	2.333	3.964	0.48	
Marital Status	2.405	1	2.405	4.088	0.44	
Residence	2.237	1	2.237	3.802	0.52	
Age	6.180	4	1.545	2.626	0.36	
Education	.405	2	.202	.344	.709	
Occupation	1.035	2	.518	.879	.416	
Monthly Family Income	1.632	2	.816	1.387	.252	
Error	129.466	220	.588			
Total	3574.000	234				

^a $R^2 = .964$ (Adjusted $R^2 = .961$)

Source: Survey Data (SPSS V.26)

Table 6 Univariate ANOVA

Tests of Between-Subjects Effects; Dependent Variable: C1							
Source	Type III Sum of Squares	df	Mean Square	F	Sig.		
Model	4369.956ª	14	312.140	771.198	.000		
Gender	.004	1	.004	.010	.919		
Marital Status	.001	1	.001	.001	.971		
Residence	.020	1	0.20	.051	.822		
Age	.706	4	.176	.436	.783		
Education	.226	2	.113	.279	.756		
Occupation	.694	2	.347	.857	.426		
Monthly Family Income	.215	2	.107	.265	.767		
Error	89.044	220	.405				
Total	4459.000	234					

^a $R^2 = .980$ (Adjusted $R^2 = .979$)

Source: Survey Data (SPSS V.26)

With mass-adoption of 3G/4G/5G telecom, M&E, e-commerce is more accessible through the consumption of Social-Media platforms

As depicted in Table 6, the *p-value* in the case of all the demographic variables (gender, marital status, age, residence, education, occupation, and monthly family-income) is greater than the *level of significance* (0.05), thus supporting the null hypothesis. The Adjusted R-Squared value explains 97.9% of the variance, indicating that all the independent variables collectively have a significant influence on the dependent variable. This reflects the universal appeal and widespread adoption of social media as a medium for accessing digital content and services.

Telecom providers venturing into M&E/E-commerce (through leveraging their strengths, i.e. domination/monopoly in Telecom) is a boon for consumers, as they can access all these 'indispensable' services under a single umbrella

As depicted in Table 7, the *p-value* in the case of gender, marital status, residence, age, and monthly family income > *level of significance* thus validating H_0 . In the case of education and occupation *p-value* < *level of significance* thus rejecting H_0 which indicates that education and occupation are significant factors influencing consumers' opinions related to the benefits of bundled services as a one-stop shop. The Adjusted R-Squared explains 90.6% of the total variance in the

Table 7 Univariate ANOVA

Tests of Between-Subjects Effects; Dependent Variable: C2						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	
Model	3040.472 ^a	14	217.177	162.222	.000	
Gender	.876	1	.876	.654	.420	
Marital Status	.222	1	.222	.166	.684	
Residence	1.214	1	1.214	.907	.342	
Age	3.374	4	.844	.630	.641	
Education	9.548	2	4.774	3.566	.030	
Occupation	14.558	2	7.279	5.437	.005	
Monthly Family Income	5.993	2	2.996	2.238	1.09	
Error	294.528	220	1.339			
Total	3335.000	234				

a. R Squared = .912 (Adjusted R Squared = .906)

Source: Survey Data (SPSS V.26)

Table 8 Univariate ANOVA

Tests of Between-Subjects Effects; Dependent Variable: C3							
Source	Type III Sum of Squares	df	Mean Square	F	Sig.		
Model	3559.920a	14	254.280	469.780	.000		
Gender	.543	1	.543	1.004	.317		
Marital Status	.074	1	.074	.137	.712		
Residence	.236	1	.236	.437	.509		
Age	4.693	4	1.173	2.168	.074		
Education	3.771	2	1.885	3.483	0.32		
Occupation	1.955	2	.977	1.805	.167		
Monthly Family Income	4.648	2	2.324	4.294	.015		
Error	119.080	220	.541				
Total	3679.000	234					

 a R² = .968 (Adjusted R² = .966)

Source: Survey Data (SPSS V.26)

dependent variable, indicating a strong explanatory power of the model.

Telecom providers venturing into M&E/E-commerce (through leveraging their strengths, i.e. domination/monopoly in Telecom) is a boon for consumers, as they can access all these 'indispensable' services at very reasonable price

As depicted in Table 8, the *p-value* in the case of gender, marital status, residence, age, and occupation > *level of significance* thus validating H_0 . In the case of education and monthly family-income *p-value* < *level of significance*, thus rejecting H_0 , and indicating that consumers' perspectives about telecom providers' bundled services (Telecom + M&E + E-commerce)

being affordable differ significantly across these dimensions. The model with a high Adjusted R-Squared value explains 96.6% of the variance in the dependent variable, highlighting an extremely elevated level of explanatory power.

Telecom providers venturing into M&E/E-commerce (through leveraging their strengths, i.e. domination/monopoly in Telecom) is a boon for consumers, as they can access all these 'indispensable' services smoothly and seamlessly

As depicted in Table 9, the *p-value* in the case of gender, marital status, residence, age, education, and occupation > *level of significance* thus validating H_0 . In the monthly family-income *p-value* < *level of*

Table 9 Univariate ANOVA

Tests of Between-Subjects Effects; Dependent Variable: C4							
Source	Type III Sum of Squares	df	Mean Square	F	Sig.		
Model	3103.786a	14	221.699	165.215	.000		
Gender	1.224	1	1.224	.912	.341		
Marital Status	.628	1	.628	.468	.495		
Residence	.050	1	.050	.037	.848		
Age	7.180	4	1.795	1.338	.257		
Education	.936	2	.468	.349	.706		
Occupation	.757	2	.378	.282	.755		
Monthly Family Income	9.823	2	4.912	3.660	.027		
Error	295.214	220	1.342				
Total	3399.000	234					

 $^{^{}a}$ R² = .913 (Adjusted R² = .908)

Source: Survey Data (SPSS V.26)

Table 10 Univariate ANOVA

	Tests of Between-Subje	ects Effects; De	ependent Variable: F	R1	
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	3993.763ª	14	285.269	384.466	.000
Gender	.212	1	.212	.285	.594
Marital Status	.556	1	.556	.750	.388
Residence	.627	1	.627	.845	.359
Age	7.545	4	1.886	2.542	.041
Education	4.527	2	2.264	3.051	.049
Occupation	.512	2	.256	.345	.709
Monthly Family Income	5.514	2	2.757	3.716	.026
Error	163.237	220	.742		
Total	4157.000	234			

a. $R^2 = .961$ (Adjusted $R^2 = .958$)

Source: Survey Data (SPSS V.26)

significance, thus rejecting H_0 and indicating that consumers' perspectives about telecom providers' bundled services being accessed without latency differ significantly on the income dimension. The Adjusted R-Squared value of 90.8% indicates the model's effectiveness in explaining the variance in the dependent variable.

Modern/fast-paced lifestyle necessitates consumers to avail Telecom, M&E, and E-commerce on a single platform (enabling easy-accessibility on Smartphones/Smart Devices like Tablet/Laptops/Smart-TVs) to save time/hassle

As depicted in Table 10, the *p-value* in the case of gender, marital status, residence, and occupation > level of significance thus validating H_0 . In the case of

age, education, and monthly family-income p-value < level of significance thus rejecting H_0 and indicating that age, education, and monthly family-income of consumers significantly influence their viewpoints of the necessity of bundled services on a single platform to suit the modern lifestyles. The Adjusted R-Squared explains 95.8% of the total variance in the dependent variable, demonstrating a strong fit for the model.

With increasing per capita and/or disposable incomes, affluent consumers in India aspire for a better-lifestyle (or quality of life) through access to bundled (i.e., one-stop-availability of) Telecom, M&E, and E-commerce

As depicted in Table 11. the *p-value* in the case of marital status, residence, education, and monthly

Table 11 Univariate ANOVA

Tests of Between-Subjects Effects; Dependent Variable: R2							
Source	Type III Sum of Squares	df	Mean Square	F	Sig.		
Model	3600.476a	14	257.177	414.425	.000		
Gender	2.910	1	2.910	4.689	.031		
Marital Status	.005	1	.005	.008	.929		
Residence	.467	1	.467	.752	.387		
Age	6.329	4	1.582	2.550	.040		
Education	1.189	2	.594	.958	.385		
Occupation	6.374	2	3.187	5.136	.007		
Monthly Family Income	.374	2	.187	.301	.740		
Error	136.524	220	.621				
Total	3737.000	234					

 $^{^{}a}$ R² = .963 (Adjusted R² = .961)

Source: Survey Data (SPSS V.26)

Table 12 Univariate ANOVA

Tests of Between-Subjects Effects; Dependent Variable: R3					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Model	3665.597a	14	261.828	557.063	.000
Gender	.043	1	.043	.092	.762
Marital Status	.005	1	.005	0.11	.918
Residence	.861	1	.861	1.832	.177
Age	.379	4	.095	.202	.937
Education	3.068	2	1.534	3.264	.040
Occupation	.233	2	.117	.248	.780
Monthly Family Income	3.039	2	1.519	3.233	.041
Error	103.403	220	470		
Total	3769.000	234			

 $^{^{}a}$ R² = .973 (Adjusted R² = .971)

Source: Survey Data (SPSS V.26)

family-income > level of significance thus validating H_0 . In the case of gender, age, and occupation *p-value* < level of significance thus rejecting H_0 and indicating that gender, age, and occupation are significant factors influencing consumers' opinion of the relationship between affluence and the aspiration for bundled services. The high Adjusted R Squared value of 96.1% highlights that the model effectively explains the variance in the dependent variable.

With winds of globalization sweeping the length and breadth of the country, aspirations of good/standard quality of life are percolating down to smaller (Tier-II/II) towns in India, esp. among affluent/highly educated segments of society

As depicted in Table 12, the *p-value* in the case of age, gender, marital status, residence, and occupation > level of significance thus validating H₀. In the case of education and monthly family-income *p-value* < level of significance thus rejecting H₀ and indicating that education and monthly family-income are significant predictors of consumers' perception of aspirations for a good/standard quality of life. These findings align with the burgeoning trend of globalization and the increasing influence of socioeconomic factors in shaping consumer aspirations, specifically in smaller towns (Tier-II/III). The Adjusted R-Squared value of 97.1% indicates the model's effectiveness in explaining the variance in the dependent variable.

DISCUSSION

Before the advancement of digital technologies, the telecom, M&E, and e-commerce industries in India operated independently (by different companies) without intervening in each other's sectors, focused on their respective territories. Telecom companies (BSNL, Airtel, Vodafone) used to provide only voicecalling, SMS, and basic internet connectivity (2G) with no role in media/e-commerce. And it can be solemnly attributed to the expensive data packs (₹269 per GB in 2014) and inadequate network infrastructure (popular 2G spectrum case in 2008). But the launch of 3G/4G/5G technology in India marked a turning point in India's digital consumption rates. As of Q4 2024, the cost of 1 GB of mobile data is \$0.16, and the per-user monthly data consumption has increased to 27.5 GB. The results of our study show that consumers affirm this fact that prior to industry convergence, they had to visit different service providers to avail themselves of these services separately. But this excessively cheap data with laser-light speed networks allowed consumers to use data not only for voice calling and SMS but also for many exciting activities such as streaming video content, online gaming, online shopping, through several social media platforms (e.g., Facebook, now Meta, Instagram, WhatsApp, etc.). As a result, telecom companies hijacked this goldmine and entered the burgeoning media and entertainment industry by bundling these services with their existing telecom subscription plans. For example, telecom operators such as Reliance Jio, Bharti Airtel, and Vodafone-Idea have begun offering bundled packages that include not only voice and data services but also access to Over-The-Top (OTT) platforms and other media services. Reliance Jio launched its own streaming platform, JioHotstar, Jio TV, which provides users with access to a wide range of movies, TV shows, and original content. Furthermore, by eyeing the growth of e-commerce leaders like (Flipkart, Amazon, Myntra, Meesho etc.) who effectively capitalized on the growing internet user base in India but not ventured into traditional telecom services, the one telecom giant (Reliance Jio) identified this lucrative business opportunity and launched platforms such as JioMart, Reliance Digital, Ajio, Tira which allows users to shop for groceries, electronics, apparels and other products online. So, as of now, in India it is only Reliance Jio that has capitalized on its

millions-subscriber base and successfully converged M&E and e-commerce industries with the telecom industry. In 2024, Airtel also shook hands with Apple to provide its iOS users exclusive access to watch content on Apple TV+ and listen to their favorite melodies on Apple Music as part of its Airtel Xstream platform (Airtel Press Release, 2024). The integration of these services means customers can enjoy a variety of entertainment options without needing separate subscriptions or platforms.

The findings of this study highlight the benefits that consumers drive by accessing these converged services on a single device. First, consumers are now able to satisfy their gratifications for instant communication, entertainment, and shopping—(all in one) without juggling between multiple providers/subscriptions. Second, consumers are now able to access these integrated services at a fraction of the price. To be precise, consumers get the benefit of lower subscription fees for streaming services when bundled with telecom plans, thereby accessing global premium content more affordably. Third, consumers are now able to watch their favorite shows and live events (Cricket, Football matches) on the go in 4K HD resolution, without buffering, and play online games without lag/ latency, and shop seamlessly, especially during hightraffic events like Flash sales around festivals. All these benefits to consumers have become possible with the rollout of 4G and 5G internet services by telecom companies. Furthermore, constantly rising consumer aspirations have played an instrumental role in creating demand for bundled services. In today's consumerism era, where everyone is stretching his working hours to make more money (rising per-capita income) to uplift his lifestyle, our study reveals that having the option to access telecom, M&E, and e-commerce services through a single device brings a lot of convenience to consumers whereby they are not required to switch between multiple devices to access different services (saving plenty of time). Most importantly, globalization has significantly impacted people from Tier II and III cities in India by elevating their aspirations from having access to premium global content from HBO and Warner Bros. to having all the global luxury brands in their wardrobes. It clamors a strong urge among the Indian masses for a better standard of living, especially among affluent and highly educated segments of society.

Finally, from the consumer's perspective, telecom providers' expansion into media and entertainment, as well as e-commerce, is a welcome development and is accepted, as evidenced by our study.

CONCLUSION

The present study focused on studying the digital convergence of telecom, media & entertainment (M&E), and e-commerce services in India, which has 360-degree transformed the digital consumption habits of Indian consumers. Our study affirmed that the entry of 3G/4G/5G technology led by the telecom industry has been a game-changer for M&E and e-commerce industries in India, respectively, because it led to drastically reduced data usage costs and also enhanced the network infrastructure, thereby spoonfeeding Indian consumers with their services on their palm. Additionally, this study confirms that consumers acknowledge the convenience and affordability brought by industry convergence, enabling seamless access to communication, entertainment, and shopping services under one umbrella.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

This study can be improved by future researchers as it suffers from a few limitations. First, the study was merely quantitative in nature, and the sample size was also limited. So, the studies in the future can follow a mixed-method research design. Second, this study focused on gauging consumer-perception only, future studies can measure other variables like customer satisfaction, service performance on the SERVQUAL model related to bundled services and identify challenges that consumers face while accessing them. Moreover, future researchers can explore convergence happening in other industries as well, such as Telecom, finance, education, healthcare, agriculture, and others.

Abbreviations

M&A – Mergers & Acquisitions

M&E – Media & Entertainment

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