ISSN: 2663-2187

https://doi.org/10.48047/AFJBS.6.Si4.2024.5502-5511

African Journal of Biological Sciences

Journal homepage: http://www.afjbs.com

Research Paper

Open Access

RELATIONSHIP BETWEEN PRODUCT DIFFERENTIATION AND BRAND EQUITY: A Study on Laptop Computer Users in Trichy City, Tamilnadu.

T. D. HEMAMALINI, Dr. M. KAMARAJ

1Ph.D. Research Scholar, Department of Business Administration, Annamalai University, Annamalai Nagar, Chidambaram-608002, Tamilnadu,

2Associate Professor, Department of Business Administration, Annamalai University, Annamalai Nagar,Chidambaram-608002,Tamilnadu.

Volume 6, Issue Si4, Aug 2024

Received: 15 June 2024

Accepted: 25 July 2024

Published: 15 Aug 2024

doi: 10.48047/AFJBS.6.Si4.2024.5502-5511

ABSTRACT

In today's fiercely competitive market, creating a distinctive product that stands out from the crowd has been essential for building a strong brand. Product differentiation refers to the process of highlighting the unique features and benefits of a product or service that distinguishes it from competitors. It has involved in creating a perception of value, superiority, and innovation in the minds of target consumers. Product differentiation lies at the heart of attracting customers, gaining their loyalty and ultimately, maximizing brand equity. Brand equity has been representing the intangible value and strength that a brand possesses. It has encompassed the positive associations, perceived quality, and emotional connection established with consumers over time. Product differentiation has been instrumental in driving brand equity by creating a unique position in the marketplace. The purpose of this study has to understand the relationship between product differentiation dimensions and brand equity. Sample size is 680 laptop users of Trichy City. Primary data is collected and analyzed through correlation to test relationship between the study variable. It has been concluded that increased deployment of product differentiation will lead to brand equity of laptop market.

Key words: Product Differentiation, Product Features, Product Innovation, Brand Awareness, Brand Equity.

INTRODUCTION

Product differentiation is the key to unlocking brand equity. A differentiated product always is unique by itself. Philip Kotler has defined that product differentiation is the act of designing a set of meaningful differences to distinguish the company's products from competitors' products as well as the company's own services. By analyzing the market, identifying consumer needs and highlighting unique selling proposition, organizations have been positioning their brand as a front runner in the marketplace. Pairing superior quality with a compelling brand story and fostering an engaged community further strengthens brand equity. Companies and manufacturers must concentrate on products that are launched well in the market. The company must deal well with both existing customers and potential customers. The more variety of product choices makes customers more selective in choosing products. In other way it will say that, customers will look for products with better value than competing products.

Farquhar (1989) defined that brand equity is the added value endowed by the brand to the product. To maintain a competitive edge, it is crucial to continuously innovate and adapt to changing market dynamics. Monitor trends, anticipate customer needs, and proactively introduce new features or product variations to stay ahead of the curve. By demonstrating a commitment to innovation and staying relevant, organizations strengthen product differentiation and sustain brand equity over the long term. With continuous innovation and adaptation, brand can carve out a lasting presence, capturing the hearts and minds of consumers. In today's world there has been an extraordinary competition between countries, products, and even among the brands themselves. So based on the explanation above, the purpose of this research is to increase brand equity of the company through the implementation of product differentiation strategies.

REVIEW OF LITERATURE

Gina Bukovecz (2023) studied product innovation impact on brand image. The study aimed to explore the relationship between product innovation, product differentiation, and brand trust as they relate to brand image within the European fintech landscape. The study primary data collected through online survey. Hypotheses were tested using descriptive statistics, regression analyses and mediation and moderation analyses. The study results showed that product innovation positively impacts brand image, and brand trust serves as a mediator between product innovation and brand image. The study indicated that product differentiation was not show a moderating effect on the relationship between product innovation and brand trust as initially hypothesized. The study suggested that fintech companies to invest in product innovation and brand trust to attract and retain customers.

Yue and Chanchai (2023) investigated the influence of marketing mix strategy on brand equity enhancement of Chinese dried forest fruit brands based on customer mind model. The objective of the study was to analyze the influence of a marketing mix strategy on brand equity enhancement (brand loyalty) among Chinese dried forest fruit brands, brand utility as a mediator of the relationship between the marketing mix and brand equity enhancement (brand awareness, brand association, perceived quality and perceived value), and the effect of brand equity dimensions on the willingness of customers to pay a price premium. The study collect responses from a sample of 480 consumers and SEM used to analyze the data. The results of the study showed that product, promotion and place had positive impacts on both brand utility and brand equity dimensions. The study revealed that brand utility positively impacts both brand value dimensions and brand loyalty, serving as an intermediary for the association between the marketing mix (product, place) and brand loyalty. The study concluded that both brand equity dimensions and brand equity enhancement positively influence customers' willingness to pay a price premium.

Nwe Ni Aye (2022) examined the effect of marketing practices on brand equity and consumer buying behavior of bossini fashion products. The purpose of this study was to examine the effect of marketing practices on brand equity and to analyze the effect of brand equity on customer buying behavior of Bossini fashion products in Yangon. The structured questionnaire used to collect primary data and data were analyzed through descriptive statistics and regression analysis. The study results showed that product quality, perceived value and customer communication have positive and significant effect on brand equity. The study found that the four elements of brand equity have positive and significant effect on buying behavior. The study suggested that Bossini brand must be keep product quality, perceived value and customer communication to build brand equity and it can lead to encourage buying behavior of customer on Bossini fashion products.

Nedka and Mariana (2015) examined the opportunities for increasing brand equity by applying the concept of product differentiation. The main objective of the study was a theoretical systematization of the possibilities for increasing brand equity by applying the concept of product differentiation. The study concluded that to create a sustainable competitive advantage, a brand and its products must be well differentiated, and marketing must reflect and enhance that differentiation. The study recommended that brands with well differentiated products set the trends for their category and act differently from their competition.

Jalal and Haim (2015) studied product innovation as a key success factor to build sustainable brand equity. The study aimed to examine the effect of product innovation on brand equity in Malaysian automotive market. The primary data was collected from 287 responses through questionnaire at several shopping malls in northern Malaysia. The study findings revealed that product innovation had significant positive effect on overall brand equity and its dimensions namely; brand awareness, brand loyalty, brand image, and brand leadership.

Nebojsa and Davcik (2015) examined impact of product differentiation, marketing and brand investments equity on pricing strategies- a brand level investigation. The study sample size was 10282. The study used regression and cluster analysis to analyse the data. The study results found that the premium price was significantly associated with product differentiation based on innovation and company type. The study concluded that differentiation, based on market and technology innovation, drives the brand performance output (e.g., price premium). The study suggested that brand equity, marketing investment and product differentiation are closely associated with price. The study further recommended that an analytical model to maximize brand performance outputs (such as price, market share, etc.) by maximizing the innovation activities.

Shahram (2011) investigated the impact of selected marketing elements on strategic brand management for improving brand equity. The sample size of study was 424. The analytical methodology used was structural equations modelling. The study concluded that different marketing mix elements impact the creation of brand equity with different levels of intensity, as well as that some elements of marketing mix can negatively affect the creation of brand equity. The study recommended that managers, in their efforts to build the equity of the brands should primarily focus on the creation of brand awareness and a positive brand image.

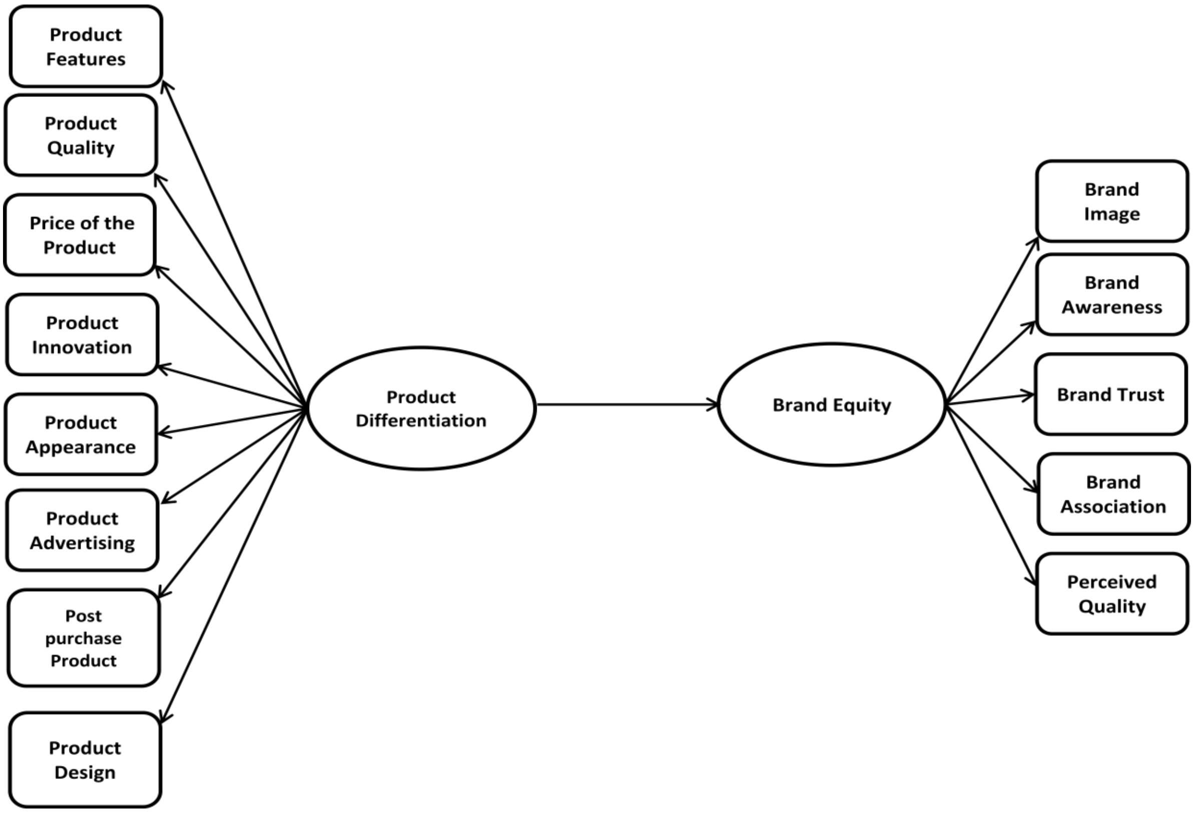
STATEMENT OF THE PROBLEM

Product differentiation is the specific way that one organization's products can be identified from another organization's products or services in a business. This helps in adding dedicated customers and generates brand equity. Brand equity shows "Customers willingness to pay a premium price for the brand and/or willingness to continue to purchase" (Ambler, 1997). Though the concept of Product differentiation dimensions, it has been considered as essential antecedents of Brand Equity. Brand equity can be improved and promoted through product differentiation. So, the study has focused in investigating the relationship between product differentiation dimensions and brand equity.

CONCEPTUAL FRAMEWORK OF THE STUDY

The present study has aimed to investigate the relationship between Product differentiation dimensions and Brand Equity. The researcher has designed the following frame work to study the relationship between Product differentiation and Brand Equity.

Figure 1.1



SCOPE OF THE STUDY

The present study is undertaken to investigate the relationship between Product differentiation dimensions and Brand equity. The present study is undertaken in various brand Laptop users (Dell, HP, Acer, Asus, Apple, HCL, Microsoft etc) of Trichy City. The commoditization of laptop industry has created a big challenge for marketers to survive in market. They need to find out the purchasing criteria set by the customers on which they are making decisions. Any laptop company can increase the sales by increasing brand valuation that is brand equity. Hence, the study has intended to know the relationship between Product differentiation and Brand equity.

OBJECTIVE OF THE STUDY

- To analyze the relationship between Product differentiation dimensions and Brand Equity dimensions.

HYPOTHESIS OF THE STUDY

Product differentiation dimensions have significant positive relationship with Brand Equity.

RESEARCH METHODOLOGY

The type of study is descriptive in nature. The researcher has used a questionnaire consist of 90 statements for product differentiation according to Devendra Prasad Luitel (2023), David Kisa Cheruiyot (2021) and Doddahulugappa Goutam (2020), by adopting likert's five point scale (Extremely Important - 5, Very Important - 4, Important - 3, Moderately Important - 2 and Equally Important- 1) to measure the responses. 37 statements for Brand Equity according to Boonghee Yoo and Naveen Donthu (2000) and Particia and Michael (2003) by adopting Likert's five point scale option from (5 - Strongly agree, 4 - Agree, 3 - Neutral, 2 - Disagree, and 1 - Strongly disagree) have been used to measure the responses. The researcher has collected primary data from the laptop computer users in Trichy City through the Google form link https://forms.gle/hseqHADfihcninAy9. Out of 750 responses, 680 (91%) responses are used for analysis. Data is analyzed through correlation to test the relationship between product differentiation dimension and brand equity variables.

Out of 680 respondents, majority of the respondents 49.5% age group belongs to '26 to 45'years, 58.09% of respondents are 'Male', 57.50 % of respondents are 'Married', 40.74% of respondents are 'Graduates', 49.56 % of respondents are 'Private Employees', 27.06% of respondents family monthly income is '15001 to 25000' and 60.59 % of respondents are from 'Nuclear Families', 30% of respondents are having Lenovo brand laptop, 79% of respondents are interested to purchase the same brand of laptop for repurchase.

RESULTS

TABLE –1.1

Laptop brands and Product Differentiation Dimensions Mean Score

Laptop Brands	Product Features	Product Quality	Product Design	Product Price	Product Innovation	Product Appearance	Product Advertising and Promotion	Post purchase Product Service
Acer	3.31	2.8	3.12	3.04	3.25	3.89	3.22	3.69
Apple	2.44	2.76	3.26	4.44	2.82	2.85	3.21	3.03
Asus	3.05	3.11	2.00	2.73	2.81	2.65	2.65	4.50
DELL	3.33	3.38	3.78	3.14	3.01	3.18	3.05	3.39
HCL	3.56	4.78	3.33	3.44	2.67	3.18	3.03	4.22
HP	2.97	2.68	2.73	2.84	2.92	2.69	4.00	2.76
Lenovo	2.62	2.77	2.77	3.02	3.89	2.77	2.65	2.59
Microsoft	4.11	3.56	3.44	3.56	3.56	2.33	1.67	2.00
Realme	3.11	4.00	3.50	3.00	4.50	3.50	3.50	3.49
SAMSUNG	4.00	2.11	2.33	2.56	3.33	2.11	3.11	2.22

Source: Primary Data

FIGURE-1.2

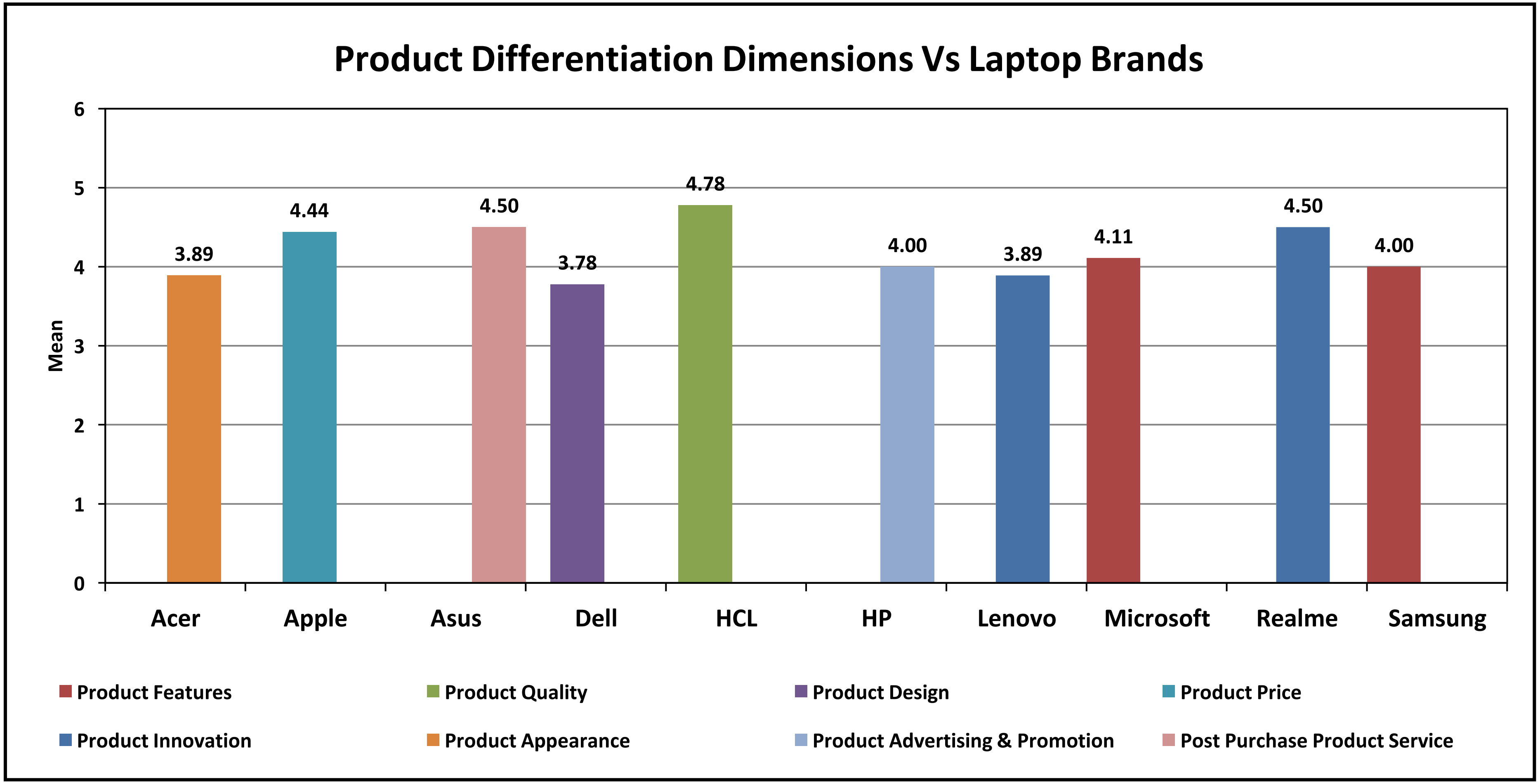

Product Differentiation Dimensions Vs Laptop Brands
Mean
0
1
2
3
4
5
6
3.89
4.44
4.50
3.78
4.78
4.00
3.89
4.11
4.50
4.00
Acer
Apple
Asus
Dell
HCL
HP
Lenovo
Microsoft
Realme
Samsung
Product Features
Product Quality
Product Design
Product Price
Product Innovation
Product Appearance
Product Advertising & Promotion
Post Purchase Product Service

Table 1.1 and Figure 1.2 portrait the mean scores of product differentiation dimensions and laptop brands. It is known from the above table the brands Microsoft and Samsung secure high mean score of (4.11 and 4.00), respectively for Product Features, HCL secures high mean score (4.78) for Product Quality, DELL secures high mean score (3.78) for Product Design, Apple secures high mean score (4.44) for Product Price, Realme and Lenovo brands secure high mean score (4.50 and 3.89), respectively for Product Innovation, Acer secures high mean score (3.89) for Product Appearance , HP secures high mean score (4.00) for Product Advertisement and Promotion , Asus secures high mean score (4.50) for Post Purchase Product Service .

Table 1.2

Descriptive Statistics and Correlations between the study variables

Variables	Mean	S.D	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Product Features	3.96	0.55	1														
Product Quality	3.93	0.54	.706**	1													
Product Design	3.93	0.56	.717**	.799**	1												
Price of the Product	3.95	0.58	.665**	.772**	.783**	1											
Product Innovation	3.91	0.62	.634**	.731**	.741**	.803**	1										
Product Appearance	3.95	0.54	.770**	.732**	.727**	.752**	.746**	1									
Product Advertising and Promotion	3.95	0.57	.797**	.810**	.752**	.731**	.726**	.755**	1								
Post Purchase Product Service	3.88	0.57	.658**	.914**	.759**	.763**	.727**	.698**	.793**	1							
Product Differentiation	3.93	0.50	.839**	.914**	.888**	.889**	.869**	.873**	.900**	.893**	1						
Brand Awareness	3.97	0.62	.621**	.835**	.699**	.687**	.654**	.650**	.795**	.788**	.810**	1					
Brand Image	3.90	0.51	.505**	.714**	.589**	.581**	.572**	.578**	.612**	.738**	.692**	.569**	1				
Brand Association	3.86	0.64	.126**	.121**	.110**	.116**	.144**	.168**	.157**	.148**	.154**	.110**	.425**	1			
Brand Trust	3.92	0.60	.114**	.130**	.106**	.120**	.177**	.161**	.156**	.171**	.161**	.108**	.384**	.750**	1		
Perceived Quality	3.98	0.57	.771**	.701**	.679**	.663**	.649**	.702**	.826**	.698**	.804**	.646**	.564**	.144**	.221**	1	
Brand Equity	3.93	0.42	.588**	.686**	.599**	.595**	.604**	.621**	.702**	.697**	.720**	.674**	.804**	.695**	.700**	.708**	1

**. Correlation is significant at the 0.01 level (2-tailed).

Table-1.2 portraits Mean, Standard Deviation and Pearson Correlation between studied variables. It shows that between product differentiation and brand equity dimensions, Perceived Quality (3.98), Brand Awareness (3.97) and Product Features (3.96) has secured highest mean score value compared to other variables and Brand Association has highest standard deviation value of 0.64 compared to other variables.

Pearson Correlation results show that Product Differentiation have positive significant correlation with Product Quality (0.914, $p<0.001$), Product Advertising and Promotion (0.900, $p<0.001$), Post Purchase Product Service (0.893, $p<0.001$), Price of the Product (0.889, $p<0.001$), Brand Awareness (0.810, $p<0.001$), Perceived Quality (0.804, $p<0.001$), Brand Equity (0.720, $p<0.001$) and Brand Image (0.692, $p< 0.001$).

Findings of the present study is similar with the findings of the research studies undertaken by the researchers (Nwe Ni Aye, 2022; Nurain, 2020; Nedka and Mariana, 2015; Piyush Sharma, 2015; Murtiasih, 2013; Goi and Fayrane, 2011). Product differentiation dimensions have positive and significant relationship with brand equity. If the company producers keeping in mind the above features, the company brand equity will be improved.

MANAGERIAL IMPLICATIONS

The study has been providing valuable implications for marketing people. In a practical context, marketing people can use the findings of the study to see their strengths and weaknesses of their product differentiation dimensions and can improve their performance accordingly at the local market level. Marketing people must concentrate on developing product differentiation strategies according to their customers needs, preferences and purchasing behavior that must successfully make loyal customers and it will lead to brand equity. From this study, it has been understood that how important is product differentiation in getting desired marketing output that is brand equity.

LIMITATIONS AND SCOPE FOR FUTURE RESEARCH

There are several variables which have relationship with product differentiation namely organizational performance, sales performance, consumer preferences, organizational competitiveness and purchase and repurchase intention. But the present study is confined only product differentiation with the relationship of brand equity. The researcher has obtained responses only from the consumers of the Laptop computers from Trichy City on Tamil Nadu only.

The present study provides many potential paths for future researchers. In this study product differentiation dimensions and brand equity are the major variables. However, investigation of how product differentiation dimensions influences other areas in an organization may be fruitful. For example, the question of how product differentiation affects organizational performance, measurement of corporate growth, brand management, marketing communication, consumer behavior and customer loyalty etc. The research has focused only on Trichy City and additional research is necessary to generalize the relationship between variables to other areas.

CONCLUSIONS

Product differentiation is one of the important factors that affect brand equity in numerous aspects. Present study has shown that product differentiation dimensions have positive relationship with brand equity. Brand Equity is ultimate result that an organization wants its customers to attain, which will be influenced by product differentiation. Thus companies must try to achieve brand equity by preciously designing their product differentiation features like, post purchase product service, product innovation, product design and product quality and other factors get affected directly and indirectly. Eventually, it is concluded that there is a strong and positive relationship between product differentiation dimensions and brand equity.

REFERENCES

Boonghee Yoo Naveen Donthu Sungho Lee, (2008)," An examination of selected marketing mix elements and brand equity". *Journal of the Academy of the Marketing Science, Volume 28, Article number: 195 (2000).*

Devendra Prasad Luitel ,(2023),"Brand preference of laptop among BBA students of Sundarharaincha", *Malaysian Business Management Journal (MBMJ), 2(2) (2023) 61-69.*

Eda Atilgan, Safak Aksoy and Serkan Akinci, (2005),"Determinants of the brand Equity: a verification approach in the beverage industry turkey". *Marketing Intelligence and planning*, ISSN-0263-4503.

Farquhar, P.H., (1989) "Managing Brand Equity", *Marketing Research, 1, 24-33.*

Gina Bukovecz, (2023)," Does product innovation impact brand image? Exploring the role of product differentiation and brand trust in the European fintech ecosystem", *Master thesis , Catolica Lisbon Business and Economics.*

Goi Chai Lee and Fayrene Chieng Yew Leh, (2011),"Dimensions of customer-based brand equity: a study on malaysian brands", *Journal of Marketing Research and Case Studies*, Vol.2011 (2011), Article ID 821981, 10 pages .

Jalal Hanaysha and Haim Hilman,(2015),"The Impact of Product Innovation on Relationship Quality in Automotive Industry: Strategic Focus on Brand Satisfaction, Brand Trust, and Brand Commitment*", Asian Social Science; Vol. 11, No. 10; 2015.*

Mosarrat Farhana, (2012)," Brand elements lead to brand equity: differentiate or die", *Information Management and Business Review 4(4):223-233 DOI:10.22610/imbr.v4i4.983.*

Natalie A.Carlson, 2023,"Differentiation in microenterprises", *Strategic Management Journal, Wiley Blackwell, vol. 44(5), pages 1147-1167.*