



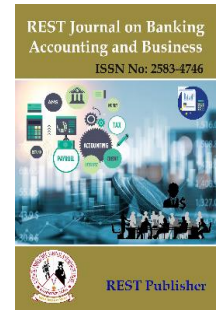
## REST Journal on Banking, Accounting and Business

Vol: 2(1), March 2023

REST Publisher; ISSN: 2583 4746

Website: <http://restpublisher.com/journals/jbab/>

DOI: <https://doi.org/10.46632/jbab/2/1/9>



# Developing Business Services Using IBM SPSS Statistics

\*<sup>1</sup>Krishna Kumar TP, <sup>2</sup>M. Ramachandran, <sup>2</sup>Vidhya Prasanth, <sup>2</sup>Chandrasekar Raja

<sup>1</sup>Nehru School of Management @ NCERC, Pamapady, Thiruvilwamala, Thrissur, Kerala, India.

<sup>2</sup>REST Labs, Kaveripattinam, Krishnagiri, Tamil Nadu, India.

\*Corresponding Author Email: : [tpk683@gmail.com](mailto:tpk683@gmail.com)

**Abstract:** *Developing Business Services. This study examines business development services for entrepreneurs, which should be offered in various phases. Non-financial services and products are defined as business services. "Business services" is a common term used to describe supportive but firm objects and non-productive work. Information technology (IT) is an important supporting service in many businesses, such as shipping and finance. A good business service aligns with the company's IT assets, employees, and customers' requirements, supports business goals, and facilitates company profitability. The IT sector provides business documenting the value of infrastructure processes, IT service audit, IT service inventory creation or renewal, and/or delivery to improve communication, including an employee self-service portal. More information about this source text is required for additional translation; please send feedback using the side panels. Business services are a support business but produce a solid product. Information technology (IT) is an important business support service in shipping, procurement, and various businesses like finance. Business development is about promoting development in your company to increase revenue strategies and opportunities through the process of implementation. Pursuing opportunities, identifying new opportunities, and converting more customers, including commercial services, are activities that help businesses but do not provide tangible substance. For example, information technology in shipping, procurement, and various businesses like finance supports these services. To help your business grow, you need to pursue opportunities and develop strategies to increase revenue. This involves conducting extensive market research, raising visibility and awareness, promoting thought leadership, conducting outreach, generating quality leads, providing exemplary customer service, and developing sales content from success stories. SPSS statistics is a data management, advanced analytics, multivariate analytics, business intelligence, and criminal investigation developed by IBM for a statistical software package. A long time, spa Inc. was created by IBM, which purchased it in 2009. The brand name for the most recent versions is IBM SPSS statistics. The Cronbach's alpha reliability result showed that the overall Cronbach's alpha value for the model is .490, indicating 50% reliability. From the literature review, the above cronbach's alpha value of 46% can be considered to analyze the model.*

**Keywords:** *SPSS statistics, promote thought leadership, conduct outreach, quality leads.*

## 1. INTRODUCTION

Despite the established advantages, very few service managers in manufacturing companies are encouraged to invest resources in expanding the business. Qualitative and quantitative research, a combination of approaches, basically explains that managerial motivation to expand the business through services in manufacturing companies is a natural process, typical of manufacturing companies. Managers must pass some of the behavioral processes [1]. Recent empirical findings regarding the performance effects of service business model innovations, serviceization, and product innovations are mixed. Respect of formation and complementarity based on demand using the lenses of vision, two major service businesses performance impact of models explored: product-specific model and customer-specific model, with product innovations jointly implemented [2]. The relationship between service business model innovation and product innovation and the long-term performance benefits and sacrifice of short-term performance in conjunction with the results indicate [3]. Despite growing into solution providers, various manufacturing companies wholesale any research is their service not specifying orientations. On organizational service, climate-creating literature, this study organizational parameters and service business orientations explore which are related to product sales and manufacturing to explain the service level of companies [4]. Most research to date on why and how service companies internationalize or different aspects of internationalization focus on methods. In contrast, we will examine globalization drivers and the universal application of the strategy is varied, how the types of services are applicable, and production compared to businesses, what differences there may be. By doing so, we connect two different structures, one is a global strategy created to analyze, and one is for

service businesses [5]. The product-service market performance of the business question about, preparation, and between service sales based on the interaction, in especially relevant both functions are one complementary and mutually reinforcing relationship and substitution show the relationship [6]. Starting with spare parts, various maintenance services, and total settlement, including service contracts as a service portfolio, gradually expanded. As a result, its product offers various related services, and its innovation in offering motivation is integral to the product-service business modeled to development [7]. Services marketing literature in the early 1980s already defined, described, and extended marketing concepts and replicated them. In times of explosive growth in the latest service sector, services marketing related to the continuous development of knowledge is given more importance, and thousands of articles have been written [8]. Recent studies on the new product development (NPD) process include several recommendations (see, for example, creating new products). The process is multi-stage and should be separated. Most objectives in settings to set up and create there are separate steps. Ideas, screening ideas/comments, development, business analysis, testing, introduction, and post-evaluation [9,10]. In recent years, electronic business (e-business) too, in controversial research areas formed together. Despite the bursting of the bubble, many companies continue to use their company e-commerce in value chains [11]. The politics of the north (1990) national institutions of the economy and economic behavior based on the comments of formal and informal organizational features are cross-border the acquisition agreement will close, how about possibilities affects, as well as it, and the time taken to complete we will investigate [12, 13]. Longer-term than transactions education for marketing relationships and increasing business focus illumination. Therefore, companies are long-term customers improving relationships, as a result of dissatisfaction customer exit if you want to reduce why customers stay understanding the phenomenon of necessary also, many future ones for organizations with switchers this study may be important because why these customers are staying understanding is important too such companies are such customers are positive and in negative ways no exit can be encouraged to the extent [14, 15]. Business services constitute 11 percent of the gross domestic production and enable commercial integration of processes, employing 4 million highly specialized workers, which is one in seven with a built-in supplier in the UK. Between 1998 and 2004, there were high-performance business-service product incentives resulting in an increase of 23.6 percent in professional development [16, 17]. Although employment growth was 20.2 percent, it is argued that productivity growth was higher at 28.8 percent, depending on the composition, and up to 22.8 percent reduction in productivity development, which resulted in more efficient production [18]. Therefore, productivity growth from customized solutions, along with an increase in employment, improved productivity in business services during expansion [19]. All companies provide goods or services, and they serve various markets. In a diversified firm, corporate domain miscellaneous is defined by business units, and each business unit has one or more liabilities for supplying products in their respective marketplaces. The charter of a business unit is the product-market domain in which the business unit participates, and responsibility for that domain is assigned within the organization [20, 21]]. Specifically, technology changes in business services and the economy are among the key drivers of progress. Since 1982, labor codes have shown an increase of more than 70 percent in business services up to 1996. In West Germany, about 8 percent of the total employment is in business services. Particularly, companies utilizing information and communication technologies and knowledgeable business services play an increasingly important role in exchanging information for the technology and economics of those companies [22, 23]. IBM, Accenture, McKinsey, and EDS are common examples of knowledge-intensive business service companies. They use their knowledge of their customers to create customized service solutions or co-produce with them and play an essential role in value creation and innovation in knowledge-intensive business-to-business services. The importance of knowledge-intensive business services has been demonstrated in the international standard of the ISIC 8 financial industry classification, insurance, real estate, and business services value-added statistics, indicating their growing economic importance [24, 25].

## 2. MATERIALS & METHODS

**Evaluation parameters:** Conduct extensive market research: Market research is a thorough process of directly engaging with customers to determine the reliability of a new service or product. It involves finding out about a company's target market [26]. gathering feedback from consumers and other stakeholders, and getting opinions from professionals in the field. This kind of research can be conducted by internal teams or by third-party market research companies, and may include studies and product testing, as well as focus groups [27].

**Raise visibility and awareness:** The concept of brand is like soda - it's a term that gets thrown around a lot. Whether it's consumer goods or professional services, a brand represents the personality of a business and its impact on consumers. To measure this impact, companies carefully plan their branding strategies, connecting emotions, images, and contacts to their business [28]. Positive communication with customers is essential for building a strong brand, and it can be expensive to achieve. For example, Coca-Cola's Christmas polar bears are a famous branding campaign that aims to create positive memories for consumers and foster loyalty to the brand [29].

**Promote thought leadership:** Thought leadership is a marketing strategy that involves creating content on important industry topics in order to establish oneself as an expert in the field. By sharing their knowledge and expertise, companies can build a reputation as a thought leader and attract more attention to their products or services. The goal is to engage with the target audience and respond to their questions, rather than focusing solely on promoting sales [30].

**Conduct outreach:** The University of Kentucky's advice center is dedicated to providing support and resources to students, including mental health services and counseling. The center aims to increase usage of its services and reduce the stigma associated with seeking help for mental illness [31]. This involves increasing accessibility to services and providing education about identifying and responding to harmful behaviors in oneself or others. In times of crisis, the center plays an important role in responding to the emotional and psychological needs of the university community [32].

**Quality leads:** Experienced marketers know that not all leads are created equal - some potential customers may be "window shopping" and not serious about making a purchase, while others may not be a good fit for the product or service being offered [33]. It's important to identify and focus on high-quality leads in order to maximize the effectiveness of marketing efforts. Marketing automation tools can help to extract and track data to distinguish between high-quality and low-quality leads [34].

**Provide exemplary customer service:** The level of customer service provided by a business can have a significant impact on customer satisfaction and loyalty [35, 36, 37]. By delivering exceptional customer service, a business can attract new customers, increase sales, and generate positive word-of-mouth referrals. Planning, upgrading, and sustaining excellent customer service is essential for creating a culture of customer-focused business. Whether interacting with customers face-to-face, over the phone, or online, it's important to prioritize providing a positive experience [38, 39,40].

**Develop sales content from success stories:** Sales success stories are designed for internal communication purposes, typically used by sales representatives to share their experiences and strategies for achieving success with clients [41]. By providing insights and sharing successful techniques with peers, sales representatives can help to generate new ideas and drive sales [42].

**Methods:** IBM developed the statistical software package SPSS Statistics, which offers features for data management, advanced analytics, multivariate analytics, business intelligence, and criminal investigation [43, 44 ,45, 46]. In 2009, it acquired the company that had previously developed the software, SPA Inc., and the most recent versions are now marketed under the name IBM SPSS Statistics [47, 48, 49]. SPSS is commonly used for modifying, analyzing, and displaying data, particularly in social science research. It supports multiple data formats, and users can purchase add-on modules to expand its capabilities for data entry, statistical analysis, and reporting [50, 51]. The main application is called SPSS Base, and the most important add-on modules for statistical analysis are SPSS Advanced Models and the SPSS Regression Model. Additionally, independent programs that integrate with SPSS are available from SPA Inc [52]. SPSS is available for Windows (98, 2000, ME, NT, and XP), with Windows 2000 supporting SPSS version 11.0.1. While there may be newer versions of SPSS available by the time this book is released, we are confident that the SPSS instructions provided in each chapter will remain relevant for the studies described [53].

### 3. RESULT AND DISCUSSION

TABLE 1. Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.490	.463	7

Table 1 shows the Cronbach's Alpha Reliability result. The overall Cronbach's Alpha value for the model is .490 which indicates 50% reliability. From the literature review, the above 46% Cronbach's Alpha value model can be considered for analysis.

TABLE 2. Reliability Statistic individual

Item-Total Statistics	Cronbach's Alpha if Item Deleted
Conduct extensive market research	0.476
Raise visibility and awareness	0.509
Promote thought leadership	0.494
Conduct outreach	0.26
Quality Leads	0.309
Provide exemplary Customer Service	0.573
Develop sales content from success stories	0.428

Table 2 Shows the Reliability Statistic individual parameter Cronbach's Alpha Reliability results Conduct extensive market research 0.476, Raise visibility and awareness 0.509, Promote thought leadership 0.494, Conduct outreach 0.26, Quality Leads 0.309, Provide exemplary Customer Service 0.573, Develop sales content from success stories 0.428

**TABLE 3. Descriptive Statistics**

Descriptive Statistics													
	N	Range	Minimum	Maximum	Sum	Mean		Std. Deviation	Variance	Skewness		Kurtosis	
Conduct extensive market research	28	4	1	5	93	3.32	.263	1.389	1.930	-.003	.441	-1.444	.858
Raise visibility and awareness	28	4	1	5	94	3.36	.268	1.420	2.016	-.273	.441	-1.089	.858
Promote thought leadership	28	4	1	5	96	3.43	.215	1.136	1.291	-.300	.441	-.157	.858
Conduct outreach	28	4	1	5	88	3.14	.307	1.627	2.646	-.025	.441	-1.667	.858
Quality Leads	28	4	1	5	98	3.50	.265	1.401	1.963	-.131	.441	-1.675	.858
Provide exemplary Customer Service	28	4	1	5	91	3.25	.228	1.206	1.454	-.247	.441	-.452	.858
Develop sales content from success stories	28	4	1	5	86	3.07	.192	1.016	1.032	-.380	.441	.547	.858
Valid N (listwise)	28												

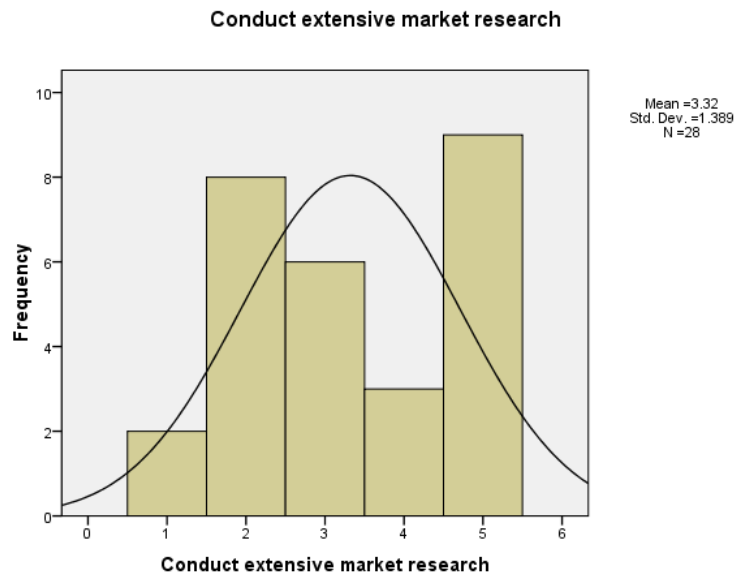
Table 3 shows the descriptive statistics values for analysis N, range, minimum, maximum, mean, standard deviation, Variance, Skewness, Kurtosis. Conduct extensive market research, Raise visibility and awareness, Promote thought leadership, Conduct outreach, Quality Leads, Provide exemplary Customer Service, Develop sales content from success stories this also using

**TABLE 4. Frequency Statistics**

Statistics								
		Conduct extensive market research	Raise visibility and awareness	Promote thought leadership	Conduct outreach	Quality Leads	Provide exemplary Customer Service	Develop sales content from success stories
N	Valid	28	28	28	28	28	28	28
	Missing	4	4	4	4	4	4	4
Median		3.00	3.00	3.00	3.00	3.50	3.00	3.00
Mode		5	3 <sup>a</sup>	3	5	5	3	3
Percentiles	25	2.00	2.25	3.00	2.00	2.00	3.00	3.00
	50	3.00	3.00	3.00	3.00	3.50	3.00	3.00
	75	5.00	5.00	4.00	5.00	5.00	4.00	4.00
a. Multiple modes exist. The smallest value is shown								

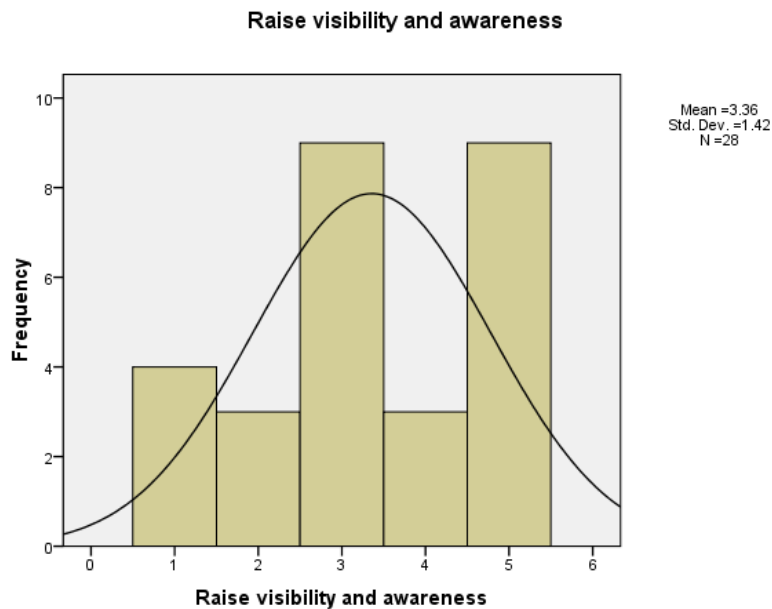
Table 4 Shows the Frequency Statistics in Conduct extensive market research, Raise visibility and awareness, Promote thought leadership, Conduct outreach, Quality Leads, Provide exemplary Customer Service, Develop sales content from success stories curve values are given. Valid 28, Missing value 4, Median value 3.00, Mode value 5.

## Histogram



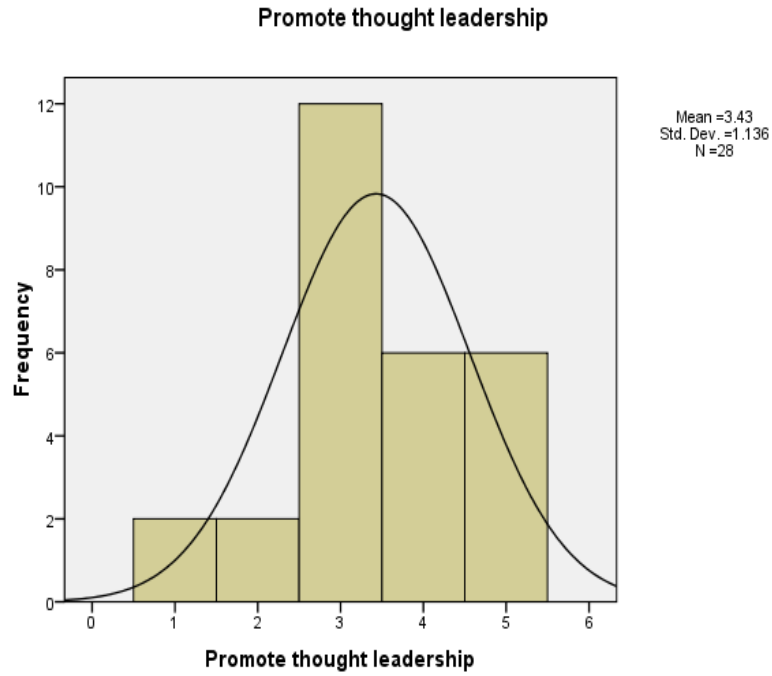
**FIGURE 1.** Conduct extensive market research

Figure 1 shows the histogram plot for the Conduct extensive market research from the figure it is clearly seen that the data are slightly Right skewed due to more respondents choosing 5 for the Conduct extensive market research except for the 2 value all other values are under the normal curve shows the model is significantly following a normal distribution.



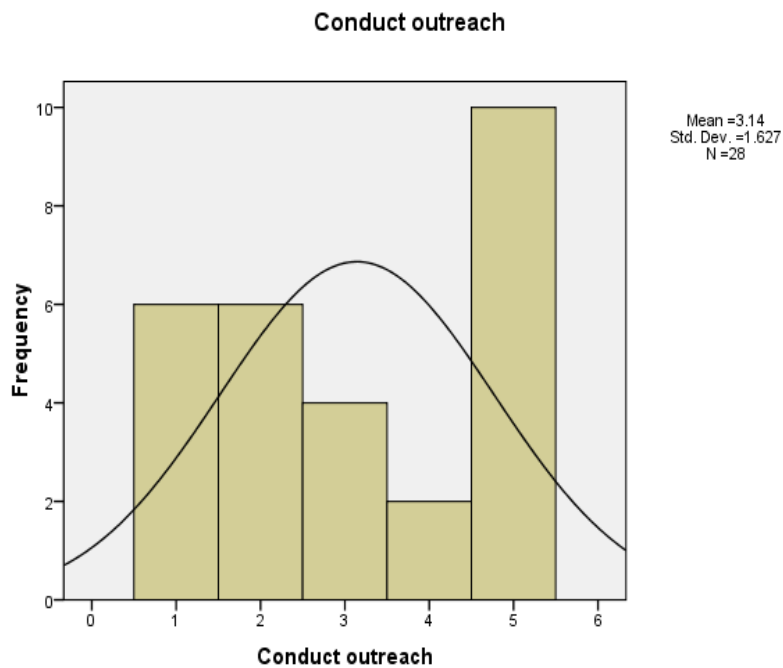
**FIGURE 2.** Silicon

Figure 2 shows the histogram plot for the Raise visibility and awareness from the figure it is clearly seen that the data are slightly Left skewed due to more respondents choosing 3 for the Raise visibility and awareness except for the 2,5 value all other values are under the normal curve shows the model is significantly following a normal distribution.



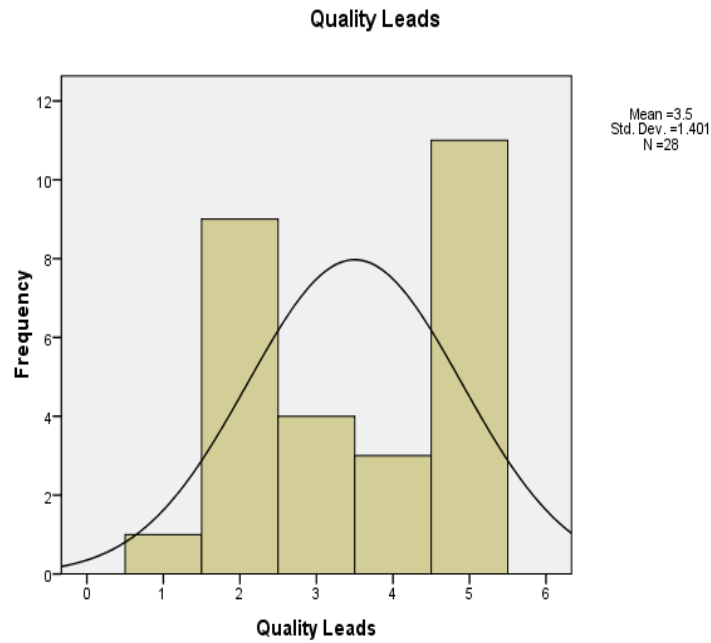
**FIGURE 3.** Promote thought leadership

Figure 3 shows the histogram plot for the Promote thought leadership from the figure it is clearly seen that the data are slightly Left skewed due to more respondents choosing 3 for the Promote thought leadership except for the 3 value all other values are under the normal curve shows the model is significantly following a normal distribution.



**FIGURE 4.** Conduct outreach

Figure 4 shows the histogram plot for the Conduct outreach from the figure it is clearly seen that the data are slightly Right skewed due to more respondents choosing 5 for the Conduct outreach except for the 3 value all other values are under the normal curve shows the model is significantly following a normal distribution.



**FIGURE 5.** Quality Leads

Figure 5 shows the histogram plot for the Quality Leads from the figure it is clearly seen that the data are slightly Left skewed due to more respondents choosing 5 for the Quality Leads except for the 3 value all other values are under the normal curve shows the model is significantly following a normal distribution.



**FIGURE 6.** Provide exemplary Customer Service

Figure 6 shows the histogram plot for the Provide Exemplary Customer Service from the figure it is clearly seen that the data are slightly Left skewed due to more respondents choosing 3 for the Provide Exemplary Customer Service except for the 2 value all other values are under the normal curve shows the model is significantly following a normal distribution.

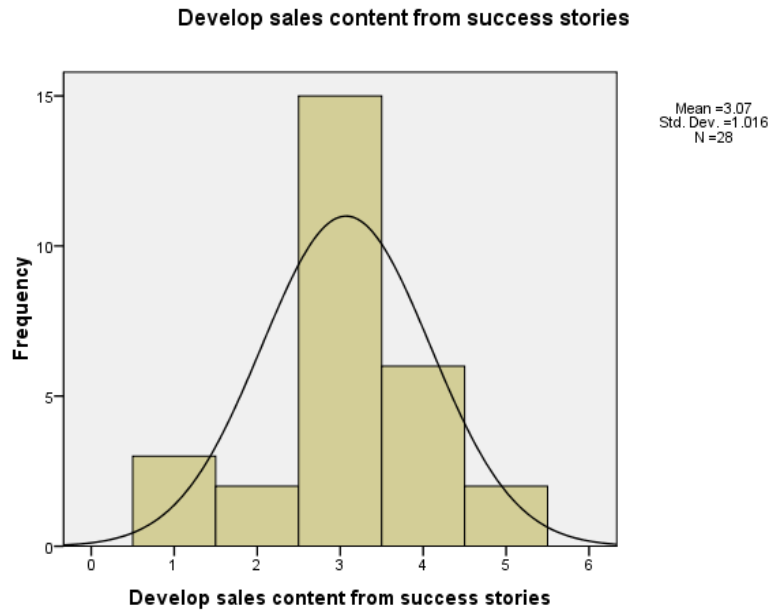


FIGURE 7. Develop sales content from success stories

Figure 7 shows the histogram plot for the Develop sales content from success stories from the figure it is clearly seen that the data are slightly Bell Karo skewed due to more respondents choosing 3 for the Develop sales content from success stories except for the 2 value all other values are under the normal curve shows the model is significantly following a normal distribution.

TABLE 5. Correlations

Correlations							
	Conduct extensive market research	Raise visibility and awareness	Promote thought leadership	Conduct outreach	Quality Leads	Provide exemplary Customer Service	Develop sales content from success stories
Conduct extensive market research	1	0.127	0.168	0.208	-0.029	-0.16	0.272
Raise visibility and awareness	0.127	1	0.246	0.202	0.056	-.444*	0.136
Promote thought leadership	0.168	0.246	1	0.146	0.163	-0.162	-0.316
Conduct outreach	0.208	0.202	0.146	1	.585**	0.038	0.307
Quality Leads	-0.029	0.056	0.163	.585**	1	0.318	0.338
Provide exemplary Customer Service	-0.16	-.444*	-0.162	0.038	0.318	1	0.106
Develop sales content from success stories	0.272	0.136	-0.316	0.307	0.338	0.106	1
*. Correlation is significant at the 0.05 level (2-tailed).							
**. Correlation is significant at the 0.01 level (2-tailed).							

Table 5 provides information about the correlation between different motivation parameters related to various business activities. The highest and lowest correlations are listed for each activity. For example, the motivation parameter for conducting extensive market research has the highest correlation with developing sales content from success stories and the lowest correlation with providing exemplary customer service. Similarly, the motivation parameter for promoting thought leadership has the highest correlation with raising visibility and awareness and the lowest correlation with providing exemplary customer service. This information can be useful for businesses to understand which motivation parameters are most closely related to each other and to help prioritize their efforts accordingly.



## 4. CONCLUSION

Business growth refers to the set of initiatives and activities that aim to improve a business, such as increasing revenue, expanding the business, developing fundamental aspects, creating strategic partnerships, and making profitable business decisions. Business development is often associated with job titles such as business development executive, business development manager, and VP of business development, and it involves various fields such as sales, marketing, project management, product management, and vendor management. Business development activities may include networking, negotiations, partnerships, cost-savings efforts, and other commercially driven goals that are aligned with the overall development objectives of the business. For instance, a successful business in one region may seek to expand its product or service to a new region like Brazil, and the business development team would conduct due diligence, research, and studies to determine the potential for expansion. A business expansion plan can impact various units of a business, such as new business development lines, new sales channel development, new product development, existing or new partnerships in new markets, and mergers and acquisitions decisions. The business development team must assess potential concerns, such as the loss of employees in a new location, and develop strategies to mitigate such risks. In terms of sales, the business development team would pay attention to revenue targets, and in the case of expanding to the Brazilian market, they would target customers in that market with sales strategies to achieve the revenue target of \$1.5 billion over three years. The Cronbach's alpha value of the model mentioned in the text was .490, indicating a 50% reliability. However, from the literature review, this value can be considered acceptable for analyzing the model.

## REFERENCES

- [1]. Gebauer, Heiko, and Elgar Fleisch. "An investigation of the relationship between behavioral processes, motivation, investments in the service business and service revenue." *Industrial Marketing Management* 36, no. 3 (2007): 337-348.
- [2]. Krishna Kumar TP, M. Ramachandran, Sathiyaraj Chinmasamy, Malarvizhi Mani, "Matrix Organization Analysis Using Grey Relational Analysis", *REST Journal on Banking, Accounting and Business*, 1(1), (2022):64-71.
- [3]. Singh, Shubhendra P. "Exploration on a Low Power Accuracy Configurable Radix-4adder." In *2022 Fourth International Conference on Emerging Research in Electronics, Computer Science and Technology (ICERECT)*, pp. 1-5. IEEE, 2022.
- [4]. Tasisa, Yirgalem Bekele, and Kogila Palanimuthu. "Psychosocial Impacts of Imprisonment among Youth Offenders in Correctional Administration Center, Kellem Wollega Zone, Ethiopia." *Medico-legal Update* 21, no. 2 (2021).
- [5]. Gutu, Birhanu, Gene Legese, Nigussie Fikadu, Birhanu Kumela, Firafan Shuma, Wakgari Mosisa, Zelalem Regassa et al. "Assessment of preventive behavior and associated factors towards COVID-19 in Qellam Wallaga Zone, Oromia, Ethiopia: A community-based cross-sectional study." *PloS one* 16, no. 4 (2021): e0251062.
- [6]. Visnjic, Ivanka, Frank Wiengarten, and Andy Neely. "Only the brave: Product innovation, service business model innovation, and their impact on performance." *Journal of product innovation management* 33, no. 1 (2016): 36-52.
- [7]. Antioico, Michael, Rudy K. Moenaert, Adam Lindgreen, and Martin GM Wetzels. "Organizational antecedents to and consequences of service business orientations in manufacturing companies." *Journal of the Academy of Marketing Science* 36, no. 3 (2008): 337-358.
- [8]. Lovelock, Christopher H., and George S. Yip. "Developing global strategies for service businesses." *California management review* 38, no. 2 (1996): 64-86.
- [9]. Joshi, Kapil, Rajiv Kumar, Anil Kumar, Jagdeep Reshi, Aditi Sharma, and Ankur Dumka. "A Framework Optimization in Social Media using Xampp: A Systematic Approach." In *2022 International Conference on Fourth Industrial Revolution Based Technology and Practices (ICFIRTP)*, pp. 1-4. IEEE, 2022.
- [10]. Vanitha, K. "Summary of Either A Report on Methodologies Can Amend Routing'Protection a Servqual." In *2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART)*, pp. 557-561. IEEE, 2022.
- [11]. Kastalli, Ivanka Visnjic, Bart Van Looy, and Andy Neely. "Steering manufacturing firms towards service business model innovation." *California management review* 56, no. 1 (2013): 100-123.
- [12]. Kastalli, Ivanka Visnjic, and Bart Van Looy. "Servitization: Disentangling the impact of service business model innovation on manufacturing firm performance." *Journal of operations management* 31, no. 4 (2013): 169-180.
- [13]. Boksberger, Philipp E., and Lisa Melsen. "Perceived value: a critical examination of definitions, concepts and measures for the service industry." *Journal of services marketing* 25, no. 3 (2011): 229-240.
- [14]. Easingwood, Christopher J. "New product development for service companies." *Journal of Product Innovation Management* 3, no. 4 (1986): 264-275.
- [15]. Krishna Kumar TP, Vimala Saravanan, M. Ramachandran, Manjula Selvam, "A Market Segmentation Assessment Weighted Scoring for Using WSM Method An Study for Different Market", *REST Journal on Banking, Accounting and Business*, 1(3), (2022):1-8.
- [16]. Tajammul, Mohd. "An Method Relies on Penalties can Solve the Macro-and Micro Fire House Placement Issue." In *2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART)*, pp. 205-211. IEEE, 2022.
- [17]. Zhu, Kevin, Kenneth L. Kraemer, and Jason Dedrick. "Information technology payoff in e-business environments: An international perspective on value creation of e-business in the financial services industry." *Journal of management information systems* 21, no. 1 (2004): 17-54.
- [18]. Palanimuthu, Kogila, Eshetu Fikadu Hamba Yigazu, Gemechu Gelalcha, Yirgalem Bekele, Getachew Birhanu, and Birhanu Gutu. "Assessment of Stress, Fear, Anxiety and Depression on COVID-19 Outbreak among Adults in South-Western Ethiopia." *Prof.(Dr) RK Sharma* 21, no. 1 (2021): 440.

- [19]. Rathor, Ketan, Keyur Patil, Mandiga Sahasra Sai Tarun, Shashwat Nikam, Devanshi Patel, and Sasanapuri Ranjit. "A Novel and Efficient Method to Detect the Face Coverings to Ensure the Safety using Comparison Analysis." In 2022 International Conference on Edge Computing and Applications (ICECAA), pp. 1664-1667. IEEE, 2022.
- [20]. Palanimuthu, Kogila, Birhanu Gutu, Leta Tesfaye, Buli Yohannis Tasisa, Yoseph Shiferaw Belayneh, Melkamu Tamiru, and Desalegn Shiferaw. "Assessment of Awareness on COVID-19 among Adults by Using an Online Platform: 26 Countries View." *Medico-legal Update* 21, no. 1 (2021).
- [21]. Abualsaud, Khalid, Massudi Mahmuddin, Mohammad Saleh, and Amr Mohamed. "Performance Comparison of classification algorithms for EEG-based remote epileptic seizure detection in Wireless Sensor Networks." In 2014 IEEE/ACS 11th International Conference on Computer Systems and Applications (AICCSA), pp. 633-639. IEEE, 2014.
- [22]. Palanimuthu, Kogila, Eshetu Fikadu Hamba Yigazu, Gemechu Gelalcha, Yirgalem Bekele, Getachew Birhanu, and Birhanu Gutu. "Assessment of Stress, Fear, Anxiety and Depression on COVID-19 Outbreak among Adults in South-Western Ethiopia." *Prof.(Dr) RK Sharma* 21, no. 1 (2021): 440.
- [23]. Shahid, Maaz Bin, Alka Chaudhary, Deepa Gupta, and Anil Kumar. "Review Based Rating Prediction using Machine Learning Techniques." In 2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART), pp. 118-122. IEEE, 2022.
- [24]. Wahlang, Imayanmosha, Arnab Kumar Maji, Goutam Saha, Prasun Chakrabarti, Michal Jasinski, Zbigniew Leonowicz, and Elzbieta Jasinska. "Deep Learning methods for classification of certain abnormalities in Echocardiography." *Electronics* 10, no. 4 (2021): 495.
- [25]. Dikova, Desislava, Padma Rao Sahib, and Arjen Van Witteloostuijn. "Cross-border acquisition abandonment and completion: The effect of institutional differences and organizational learning in the international business service industry, 1981–2001." *Journal of International Business Studies* 41, no. 2 (2010): 223-245.
- [26]. Kumar Pandey, Rakesh, Asghar Gandomkar, Behzad Vaferi, Anil Kumar, and Farshid Torabi. "Supervised deep learning-based paradigm to screen the enhanced oil recovery scenarios." *Scientific Reports* 13, no. 1 (2023): 4892
- [27]. Yanamandram, Venkata, and Lesley White. "Switching barriers in business-to-business services: a qualitative study." *International journal of service industry management* 17, no. 2 (2006): 158-192.
- [28]. Sako, Mari. "Outsourcing and offshoring: Implications for productivity of business services." *Oxford Review of Economic Policy* 22, no. 4 (2006): 499-512.
- [29]. Mahankali, Aditya. "Health Care Internet of Things (IOT) During Pandemic—A Review." *Journal of Pharmaceutical Negative Results* (2022): 572-574.
- [30]. Rathor, Ketan, Anshul Mandawat, Kartik A. Pandya, Bhanu Teja, Falak Khan, and Zoheib Tufail Khan. "Management of Shipment Content using Novel Practices of Supply Chain Management and Big Data Analytics." In 2022 International Conference on Augmented Intelligence and Sustainable Systems (ICAISS), pp. 884-887. IEEE, 2022.
- [31]. Chowdhury, Sayan, Tulika Mukherjee, Souvik Sengupta, Somenath Roy Chowdhury, Sibabrata Mukhopadhyay, and Hemanta K. Majumder. "Novel betulin derivatives as antileishmanial agents with mode of action targeting type IB DNA topoisomerase." *Molecular pharmacology* 80, no. 4 (2011): 694-703.
- [32]. Varalakshmi, S. "An Effective Review of The Problems and Opportunities of The Supply Chain for Pharmaceuticals." In 2022 11th International Conference on System Modeling & Advancement in Research Trends (SMART), pp. 799-804. IEEE, 2022.
- [33]. Neu, Wayne A., and Stephen W. Brown. "Forming successful business-to-business services in goods-dominant firms." *Journal of service research* 8, no. 1 (2005): 3-17.
- [34]. Khan, Hera, Ayush Srivastav, Amit Kumar Mishra, and Tien Anh Tran. "Machine learning methods for estimating permeability of a reservoir." *International Journal of System Assurance Engineering and Management* 13, no. 5 (2022): 2118-2131.
- [35]. Mishra, Amit Kumar, and Shweta Paliwal. "Mitigating cyber threats through integration of feature selection and stacking ensemble learning: the LGBM and random forest intrusion detection perspective." *Cluster Computing* (2022): 1-12.
- [36]. Das, Tania, Kumar Singha Roy, Tulika Chakrabarti, Sibabrata Mukhopadhyay, and Susanta Roychoudhury. "Withaferin A modulates the Spindle Assembly Checkpoint by degradation of Mad2–Cdc20 complex in colorectal cancer cell lines." *Biochemical pharmacology* 91, no. 1 (2014): 31-39.
- [37]. Rathor, Ketan, Sushant Lenka, Kartik A. Pandya, B. S. Gokulakrishna, Susheel Sriram Ananthan, and Zoheib Tufail Khan. "A Detailed View on industrial Safety and Health Analytics using Machine Learning Hybrid Ensemble Techniques." In 2022 International Conference on Edge Computing and Applications (ICECAA), pp. 1166-1169. IEEE, 2022.
- [38]. Farooqui, Nafees Akhter, Amit Kumar Mishra, and Ritika Mehra. "Concatenated deep features with modified LSTM for enhanced crop disease classification." *International Journal of Intelligent Robotics and Applications* (2022): 1-25.
- [39]. Vallathan, G., Senthilkumar Meyyappan, and T. Rajani. "Healthcare: Energy Optimization Techniques Using IoT and Machine Learning." *Hybrid Intelligent Approaches for Smart Energy: Practical Applications* (2022): 279-290.
- [40]. Kumar, R. Dinesh, C. Sridhathan, and M. Senthil Kumar. "Performance Evaluation of Different Neural Network Classifiers for Sanskrit Character Recognition." *Business Intelligence for Enterprise Internet of Things* (2020): 185-194.
- [41]. Karupusamy, Sathishkumar, Mohammed Ahmed Mustafa, Bos Mathew Jos, Priyanka Dahiya, Ramakant Bhardwaj, Pratik Kanani, and Anil Kumar. "Torque control-based induction motor speed control using Anticipating Power Impulse Technique." *The International Journal of Advanced Manufacturing Technology* (2023): 1-9.
- [42]. Czarnitzki, Dirk, and Alfred Spielkamp. "Business services in Germany: bridges for innovation." *The Service Industries Journal* 23, no. 2 (2003): 1-30.
- [43]. Rakshit, Srabanti, Labanya Mandal, Bikas Chandra Pal, Jayashree Bagchi, Nabendu Biswas, Jaydeep Chaudhuri, Avik Acharya Chowdhury et al. "Involvement of ROS in chlorogenic acid-induced apoptosis of Bcr-Abl+ CML cells." *Biochemical pharmacology* 80, no. 11 (2010): 1662-1675.

- [44]. Arya, Vishakha, Amit Kumar Mishra Mishra, and Alfonso González-Briones. "Analysis of sentiments on the onset of COVID-19 using machine learning techniques." *ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal* 11, no. 1 (2022): 45-63.
- [45]. Chhipa, Abrar Ahmed, Vinod Kumar, Raghuvveer Raj Joshi, Prasun Chakrabarti, Michal Jasinski, Alessandro Burgio, Zbigniew Leonowicz, Elzbieta Jasinska, Rajkumar Soni, and Tulika Chakrabarti. "Adaptive neuro-fuzzy inference system-based maximum power tracking controller for variable speed WECS." *Energies* 14, no. 19 (2021): 6275.
- [46]. Nielsen, Steen. "Management accounting and the concepts of exploratory data analysis and unsupervised machine learning: a literature study and future directions." *Journal of Accounting & Organizational Change* (2022).
- [47]. Kumar, Ashish, Ketan Rathor, Snehit Vaddi, Devanshi Patel, Preethi Vanjarapu, and Manichandra Maddi. "ECG Based Early Heart Attack Prediction Using Neural Networks." In *2022 3rd International Conference on Electronics and Sustainable Communication Systems (ICESC)*, pp. 1080-1083. IEEE, 2022.
- [48]. Sharma, Akhilesh Kumar, Gaurav Aggarwal, Sachit Bhardwaj, Prasun Chakrabarti, Tulika Chakrabarti, Jemal H. Abawajy, Siddhartha Bhattacharyya, Richa Mishra, Anirban Das, and Hairulnizam Mahdin. "Classification of Indian classical music with time-series matching deep learning approach." *IEEE Access* 9 (2021): 102041-102052.
- [49]. Chittora, Pankaj, Sandeep Chaurasia, Prasun Chakrabarti, Gaurav Kumawat, Tulika Chakrabarti, Zbigniew Leonowicz, Michał Jasiński et al. "Prediction of chronic kidney disease-a machine learning perspective." *IEEE Access* 9 (2021): 17312-17334.
- [50]. Gali, Manvitha, and Aditya Mahamkali. "A Distributed Deep Meta Learning based Task Offloading Framework for Smart City Internet of Things with Edge-Cloud Computing." *Journal of Internet Services and Information Security* 12, no. 4 (2022): 224-237.
- [51]. Krishna Kumar TP, M. Ramachandran, Chandrasekar Raja, Ashwini Murugan, "Understanding of E-Learning Programs using WPM MCDM Method", *REST Journal on Banking, Accounting and Business*, 1(2), (2022): 13-19.
- [52]. Chakrabarti, P., B. Bhuyan, A. Chowdhuri, and C. Bhunia. "A novel approach towards realizing optimum data transfer and Automatic Variable Key (AVK) in cryptography." *IJCSNS* 8, no. 5 (2008): 241.
- [53]. Bettencourt, Lance A., Amy L. Ostrom, Stephen W. Brown, and Robert I. Roundtree. "Client co-production in knowledge-intensive business services." *California management review* 44, no. 4 (2002): 100-128.