

# THE EFFECT OF FINANCIAL DETERMINANTS ON ORGANIZATIONAL PERFORMANCE: A STUDY ON INDIAN IT FIRMS

1. Sukhavasi Santha Kumari, HOD, Dept of Commerce, Koneru Lakshmaiah Education Foundation (KLEF), Vaddeswaram, Green fields, Guntur, Andhra Pradesh, India -522302  
[Santa8023@gmail.com](mailto:Santa8023@gmail.com)
2. D. Sai Basivi Reddy, III B.Com (CA), Koneru Lakshmaiah Education Foundation (KLEF), Vaddeswaram, Green fields, Guntur, Andhra Pradesh, India -522302  
[2100630003@kluniversity.in](mailto:2100630003@kluniversity.in)
3. M. Manikanta Sai, III B.Com (CA), Koneru Lakshmaiah Education Foundation (KLEF), Vaddeswaram, Green fields, Guntur, Andhra Pradesh, India -522302  
[2100630009@kluniversity.in](mailto:2100630009@kluniversity.in)
4. K. Tarun Kumar Reddy, III B.Com (CA), Koneru Lakshmaiah Education Foundation (KLEF), Vaddeswaram, Green fields, Guntur, Andhra Pradesh, India -522302  
[2100630005@kluniversity.in](mailto:2100630005@kluniversity.in)

DOI : 10.48047/IJFANS/V11/Splis5/04

## ABSTRACT

*Since many studies have been conducted in the field of IT industries, there is a dearth of research that examines the determinants or factors that influence the organizational performance of IT firms. This paper investigates the financial determinants that may affect the overall organizational performance of IT firms. For this purpose, this study considered top BSE listed 15 Indian IT companies for the period of five years (2015-2019). For analysis, we have used panel regression with the help of STATA software. Panel regression analysis is suitable for this research as it is well suited to deal with any fixed effect or a random effect error component in the study. As per the findings, Indian IT companies are highly influenced by the Economic Policy Uncertainty. Furthermore, the study outcomes indicate, there is a positive relationship between firm size and firm performance. Also, the return on asset reflects the negative influence of DPS. For measuring the organizational performance, the study taken ROA as a proxy of profitability and overall firm performance.*

**Keywords:** Indian IT Firms, Organizational performance, Return on Assets (ROA)

## INTRODUCTION

The Indian Information Technology (IT) industry has taken a keen interest in putting India on the global map. In the current scenario, India has emerged as a leader in the IT and IT sector at the global world. As per recent industry analysis reports the IT&BPO industry has become one of the most rapidly growing segments of the Indian financial system. Similarly, the Indian IT sector encourages the Indian economy to follow its unique advantage in the process of dynamic development (Raju and Rao, 2020).

IT businesses are well-known organisational entities that have played a significant economic influence on corporate markets across the world. Furthermore, IT firms are observed to be robust in times of crisis because they employ proper survival mechanisms. IT companies, which mostly

appeared towards the end of the eighteenth century, were a user-controlled hardware and software enterprises that shared their avenues in the form of digital transformation. The existence and significance of such cooperatives are also explained in business information technology literature (Ramli, 2010).

If we look at the financial aspects of IT firms than financial success depends on several factors such as size, nature, network, and technological mechanism. These factors help to recognize the IT businesses' institutional advantages, solve the issues of liability, and to enhance the overall organizational performance effectively. The major idea of this article is to look into those financial determinants that influence IT firms' financial performance (Pavelková & Kankava, 2005, Shen & Tzeng, 2015). The current study was conducted in the context of Indian It firms, where IT businesses constitute the most important sector of the overall industries. Being IT business constituted as main business in emerging India, many researchers have made their focus on Indian IT sector (Johansson, 2004), their research offered several outcomes such as to gain the economic advantage, infrastructural support and technological progress (Das & Sagara, 2017).

India's IT companies have battled to become more efficient and have developed rapidly in both the national and rural economies since the early twentieth century. Since then, numerous economists have devoted significant time and effort to analysing and comprehending the challenges that IT companies face, as well as offering various policy options for their resolution. In this line the financial challenges encountered by different IT companies in India are mentioned as their focusing point in the previous studies rather than news of their innovative creations and achievements, (Reports published by Indian IT companies). Although performance evaluation has always been a theme issue in IT organizations, it has always been the interest of both developed and emerging countries (James & Mathew, 2012).

India conducts an annual study of IT businesses every year. According to these survey findings, the number of IT firms in India is increasing, and their total revenue is also increasing.

## CONCEPTUAL CLARIFICATIONS

In context of Accounting Information System, an AIS is a computer-based electronic system that gathers, saves, processes, and transmits financial and accounting data through financial statements to support and assist business decision-making. As these systems provides a framework for all accounting information's to operate, and to manage the accounting data. Mainly It is based on the computer software that system manager follows as an appropriate application for an accounting information system which must be installed (Pffannenstein & Tsai, 2004).

Accounting information system is defined as a system that is made up of a collection of harmonised a company, its components, and its resources processes, maintains, as well as regulates information in order to create along with deliver relevant data to firms those who make decisions (Gaur & Gupta, 2011). Accounting system data as with any other system, it necessitates a collection of components, procedures in order toward function properly. It is a well-connected and homogenous community collection in terms of resources and varied components that interact (people, equipment, data, and so on) in real time within a defined framework in order to achieve the organisational goals.

According to the accounting information system, data acquisition, analysis, and action are all part of the AIS process. An information first related to an accounting data that a computer-assisted system receives, processes and analyses data before creating output or outcomes (Pffannenstein & Tsai, 2004).

## ANALYSIS OF FINANCIAL ACHIEVEMENTS

Financial performance is a metric that assesses a company's financial stability, the ability and desire to satisfy long-term financial aspects, also the commitment to deliver best services (Arora, Arunachalam,

Asundi & Fernandes, 2001) in a timely manner so that the financial success in the can be achieved (Das & Sagara, 2017). As per literature, financial performance refers to the extent to which financial objectives are being reached or have been met. It is the method of determining the financial worth of a company's policies and operations.

The organizational ability of a company to accomplish its financial goals lead to achieve better organizational performance. Other aspects such as investor's return and accounting returns are also two important indices of financial success. In previous literature, the return on equity (ROE) is measured, but the accounting return examines how the firm's earnings react to various management practises.

Effective organizations approach to accomplish its financial objectives is characterised as better organizational performance.

According to Farah, Farrukh, and Faizan, (2018) financial performance is the degree to which a company's financial health is measured throughout time. In other terms, it is a financial activity that involves managing a company's current and non-current assets, finances, equity, revenues, and expenses in order to enhance sales, profitability, and value for its shareholders. Its main purpose is to provide financial information to shareholders and other stakeholders so that they may make educated investment decisions.

## FINANCIAL PERFORMANCE MEASURES

Giving to the Encyclopaedia of Commerce (2011), there are two types of performance measurements: those that focus on the products (outputs or outcomes like competitiveness or financial success) and those who concentrate on the variables that impact the outcomes (quality, flexibility, resource use, and innovation are examples of inputs.). This demonstrates that performance measurement frameworks may stay based on outcomes and determinants According to Zurek, Salameh, Individual and organisational performance are analysed using performance measurement (Venkatraman and Ramanujam, 1986) systems, which are information systems.

To evaluate the company's success, many measures are employed. A company's solvency, repayment capacity, profitability, efficiency, and liquidity are some commonly used measures for analysing firms' performance.

The ratio technique gets long been accustomed to evaluating a company's overall performance because measure statistically success provides a brief assessment in the analysis in terms of financial performance and assists in terms of managerial effectiveness improvement. Lautier and Underdone (2009), on the other hand, believe that investors are interested in two components of a company's financial success. First, its capacity to make profit may be used to evaluate its financial success. This is in accordance with Pandey (2004), who asserts that under competitive market conditions, profit maximisation leads to the most efficient allocation of resources, and the most suitable is profit indicator a measure of a company's success. Consequently, monetary efficiency measurements in this case are concentrate on the link between profit and sales, as well as profit and assets employed. The second is the firm's shareholdings, it is possible that the financial performance will be gauged by the value of its shareholders. Financial performance metrics including earnings per share, dividend yield, and price-to-earnings ratios which are all important metrics to consider are prioritised in this strategy. Financial ratios are metrics that are used to evaluate a company's overall profitability.

## THEORY OF A RESOURCE-BASED PERSPECTIVE

In 1991, Barney introduced a paradigm called resource-based viewpoint. The resource-based approach, according to Barney (1991), approach believes the persistent advantage may be gained by

doing things better; through cultivating exceptional abilities as well as resources. The resource-based perspective is a way of looking at possible elements to consider utilised toward provide firms a competitive edge. The resource-based approach indicates understanding not all resources are created equal, and that not all resources can give a long-term competitive advantage.

The three components of the resource-based theory are: degrees of capacity, competence, and skills that are used to describe a person's ability (Ward, Caldaria, and Cragg). The term "capability" refers to the capacity to do something a company manages its resources; competence refers to skills refer to a wide range of abilities such as technical, managerial, and general management; and managing resources refer to how well those resources are managed; and skills refer to a wide range of abilities such as technical, managerial, and general. Accounting information systems are used to keep track of financial transactions another tool that firms have at their disposal. When the resource-based viewpoint theory is applied to accounting information systems and performance, it shows that firms must manage accounting information systems effectively and adequately in order to maximise their capacity competence and skill sets in order to improve organisational performance.

On other side, concepts of a source-established worldview have already been blasted by a number of times. One of the objections levelled at the idea is that, it is deficient in some way practical validity along with major managerial consequences. It seems to be instructing managers to produce and acquire important, original, inimitable, and non-substitutable resources, as well as to construct a suitable organisational structure organisation (Bublyk, Rybytska, Karpiak & Matseliukh, 2018, September), It is, however, mute on how to do so. It also claims that descriptive and prescriptive theorising are at odds in resource-based perspective theory. The resource-based economy, according to Barney and Clark, viewpoint hypothesis stayed in no way intended on the way to give management recommendations, but rather to explain why some things are the way they are organisations think of a long-term economical edge around others. The resource-based view theory's explanations may not be suggestive, but they may still be useful to managers, thus there is no need to push the resource-based view theory to generate theoretically plausible prescriptions, according to this logic.

## ACCOUNTING INFORMATION SYSTEM'S IMPORTANCE

AIS's main purpose is to provide a numerical value to past, present, and future business occurrences. Accounting to data is often utilised to make choices, such as quarterly reports or analyses. These options include pricing, manufacturing volumes, and product mix, to name a few. Other aspects to consider include outsourcing, inventory policies, customer service (Arora, Arunachalam, Asundi, & Fernandes, 2001), labour agreements, and capital investments (Labhane & Mahakud, 2016).

Accounting information system is crucial to the organization's planning and control management operations (Pfannenstein & Tsai, 2004). In the planning function, AIS offers data for examining and analysing the organization's goals. It also gives information on the relationship between cost, volume, and profit, which is crucial for measuring the degree of interdependence and interaction. AIS also assists in the production of future needs and financial flow lists, as well as budget planning for the formulation of quantitative criteria and their translation into numbers, as part of the planning function.

## DATA AND METHODOLOGY

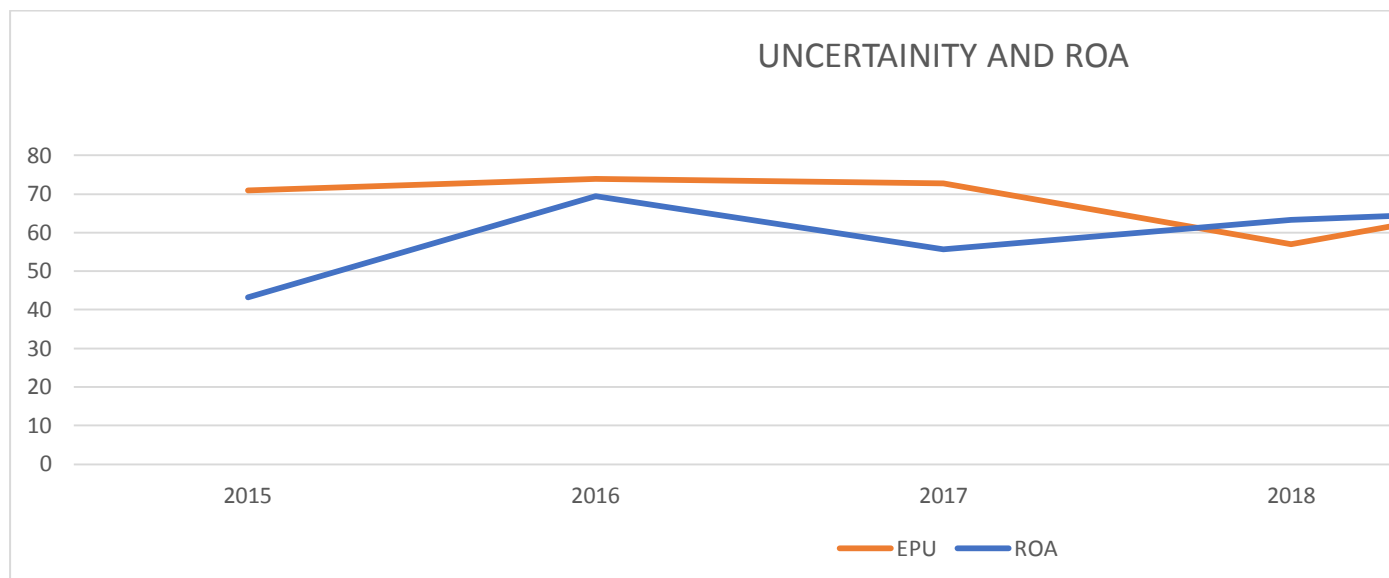
In order to undertake an empirical study to assess the study hypotheses, it used the India organizations database to build a sample of IT businesses from 2015 to 2019. Many publications, studies, and instructional resources on business and rural development are available from the Indian federal executive department. The Indian reports assist researchers in tracking the many IT enterprises throughout the sample. For the last five years, data has been extracted. Following are the process that how the final panel dataset was constructed. The India reports help us keep track of all the IT

businesses in the sample. Data has been retrieved over the last five years (2015-2019). The final panel dataset was constructed in the following manner. The first step was to exclude any firm-years that had missing data for any of the six variables throughout the study period. We next choose just those IT organisations that have all 5 years of continuous time series data observations throughout the study period. Following that, if any value with a very high or low significance, as well as those that  $\pm 3$  standard deviation rule we removed from the data, In this way we were able to obtain 15 firm-year observations for diverse IT businesses using these parameters. Our Present research used the natural log transformation to normalise the dependent variable (ROA) in terms of mean and variance.

**Table 1. Descriptive Statistics**

	Mean	Stdev	Median	Minimum
<b>ROE</b>	20.591	18.409	18.74	-13.64
<b>ROA</b>	13.415	15.742	14.73	-101.7
<b>D/E RATIO</b>	0.0736	0.1137	0.02	0
<b>PMR</b>	22.267	22.923	18.34	-15.7
<b>EPS</b>	39.375	35.826	33.57	-7.1
<b>DPS</b>	24.527	79.804	10	0
<b>EPU</b>	69.547	6.382	72.743	57.028
<b>FIRM_SIZE</b>	8.0374	2.1522	7.7714	-3.507
<b>CI</b>	20.591	2.0508	5.1848	0

**Figure 1. Uncertainty and ROA**



**MEASURES AND VARIABLES**

It is critical to understand how firm performance affects, particularly in rising and developing economies like India, given its impact of financial determinants on corporate performance and the fact that it is one of the most important strategic aspects.

**Table 2. Pearson Correlation Coefficient**

	ROE	ROA	D\E RATIO	P/E	EPS	DPS	EPU	Firm Size	CI
ROE	1								
ROA	-0.42613	1							
D/E RATIO	-0.30109	-0.1924	1						
P/E	-0.03736	0.14766	-0.1427	1					
EPS	0.283844	0.477847	-0.46379	0.1578438	1				
DPS	0.159207	0.116819	-0.16429	0.0749968	0.487405855	1			
EPU	0.038551	-0.00527	0.013075	0.1032123	-0.004597681	0.009423	1		
Firm_Size	-0.38916	0.630318	-0.01654	0.0331247	0.29165573	0.104346	0.02775	1	
CI	-0.06593	0.375487	-0.01932	0.2290996	0.204850216	0.061851	-0.0359	0.857113	1

Selected financial performance indicators presented in this paper were taken as the representative dependent variables. The first variable to be analysed was ROA/ROE as a ratio between total returns and total Assets/equity. This indicator is a commonly used variable to measure the relationship between profit and assets/equity. ROE and ROA – are used to measure the efficiency of using shareholders' equity and the assets of the company. Have presented in their study a positive impact of intangible assets on profitability ratios, focusing on net profit, ROA and ROE as the financial performance variables. Similarly, Firer and Mitchell (2003) have used the VAIC method to analyse the effects of intangible assets on ROA, sales metrics and market share. By focusing on ROA and ROE, Mondal and Ghosh (2012) have analysed the effects of intangible assets on selected financial performance indicators in the Indian banking sector, while in another study by Zhang (2017), the significant and positive impact of intangible assets on ROA in China's telecommunication companies (Zhu & Huang, 2012). Wang and Chang (2005) propose to use the debt and enhance the efficiency of a firm by increasing the production processes, firm size, and profitability. Therefore, the next variable is added value, which is obtained by taking a ratio of Debt to equity. It shows how much debt is added to the firm in compare to the equity portion. P/E is the third ratio which is used as an input to some of the other variables (as well as net earnings). Earning per share is also an extended indicator which includes profit divided by the number of shareholders, presenting how much value is shared by each shareholder. In the same line the study used DPS to analyse the effect of profit distribution on overall firm performance. The next indicator EPU based on uncertainty which caters for negative aspects of a particular time periods. In last two control variables; firm size and capital intensity have been considered to measure their effect on the overall firm performance.

These variables have frequently been used in similar empirical studies which are related to measuring the relationship between financial determinants and the financial performance indicators.

## IMPLICATIONS

This paper has both social and theoretic contribution. It helps managers specially to understand and manage financial determinants that how they affect the financial performance of their organisation. Therefore, the organisations could make a better prioritisation of determinants and find the way to utilise them in a effective way to maximise the overall organizational performance.

The nature of financial determinants is to provide the basis for determining the financial value to a particular firm. Due to the structure of IT firms and their financial resources this paper has given the framework to recognise which determinants having an impact on firm performance.

## RESULTS AND DISCUSSION

The findings reveal that Indian IT firms are particularly not susceptible to economic policy uncertainty, suggesting that uncertainty might be a crucial explanatory variable for IT firms. The positive coefficient of EPU states that, in uncertain situation also the IT firms also able to generate positive returns. If we look at the other industry analysis, we found there is an inverse relationship between firms' profitability and Uncertainty, meaning that IT firms are the exemptions to the uncertain events as they have that kind of work environment which can be manageable very easily. It requires less human resource compare to other production industries. This is the first research of IT organisations that looks at the link between uncertainty and financial success, as far as we know. According to the literature, the link between uncertainty and overall industry performance is unfavourable due to risk aversion and insufficient market information (Shen & Tzeng, 2015).

**Table 3. Panel Regression Analysis**

VARIABLE	COEFFICIENT	STD. ERROR	T-STATISTIC
DERATIO	12.19066		11.96713
P/E	0.083392		0.04998
EPS	0.216847		0.051207
DPS	-0.01014		0.009931
EPU	0.105499		0.096406
FIRM SIZE	9.40077		0.873643
CAPITAL INTENSITY	0.380795		0.960645
R <sup>2</sup>	WITHIN (0.8615)	BETWEEN (0.4125)	OVERALL (0.4837)
F-statistic		47.11	
Prob(F-statistic)		0	
Fixed Effect Model, Hausman test: chi <sup>2</sup> 55.54*(p-value=0.0000)			

Software: Stata 15.0

Even when their uncertainty is similar, the positive coefficient of Size suggests that larger IT firms provide better average returns than small IT organisations. Furthermore, Hart and Moore discovered that when the size of a cooperative grows, the company becomes more efficient since business and preferences among members become more averse after transitioning from an investor-oriented firm to a bigger firm (Gaur & Gupta, 2011). The fact that DPS the sole negative coefficient which does not supports the idea that IT firms should distribute their profits in the form of dividend to the

shareholders. Because of their enhanced efficiency and growth, IT businesses have a greater motivation to retain better yields on their assets. The effects of leverage are statistically negligible. The researcher's positive and statistically significant association backs up prior assertions that a greater incidence of financial determinants creates a positive effect on the firm performance. Finally, the Capital Intensity, which is the asset-to-sales ratio, describes the quantity of revenue capital and is positively associated to company success. we discovered that capital intensity has a positive but insignificant variable in our model, indicating that less capital-intensive IT enterprises had greater profitability than more capital-intensive organisations. The small business effect, on the other hand, might explain why there is a link between capital intensity and IT company financial performance (Shen & Tzeng, 2015).

## CONCLUSIONS

Following the findings provided above, the results in the present study stated that certain micro and macroeconomic drivers have a substantial impact on the success of IT organisations., whereas previous earlier research has mostly focused on micro factors, but in this study, it also looks at the potentiality of macro-economic determinants, such as economic policy uncertainty in the current study. The following findings were drawn as a result of the investigation between financial determinants and firms' financial performance. As per the recommendations of the researcher, when it comes to policy choices, IT businesses should be aware that the ambiguity around these decisions may be just as challenging as making the incorrect choice (Adesola & Okwong, 2009). The findings also imply that India's current economic policy uncertainty has hurt the success of other enterprises. Present study results are in exemption to theoretical models that emphasise the positive impact of uncertainty on company performance. Larger IT businesses found to receive a greater rate of return on assets than smaller IT firms. In terms of size, it's possible to anticipate that larger IT enterprises, with a larger asset base, seek to retain more liquidity and have better market access than small organisations. The concept states that growth is always a required condition of good performance for all organisations which is supported by the fact that growth is shown to be positively related with performance. The study has few limitations as it took financial determinants to know their effect on firms' performance. Although Mergers and acquisitions also could be another factor which future research can consider (Johansson, 2004). The data tends to confirm the hypothesis of a positive link between financial determinants and company performance (Shen & Tzeng, 2015). All five original assumptions were validated by the findings from the whole sample of Indian IT businesses. The results have significant significance for business development policymakers and specialists in dealing with the micro and macro causes that might affect the success of these IT firms.

## DECLARATION

- **Availability of data and materials:** Data will be available on request.
- **Competing interests:** Authors are not having any competing interest
- **Funding:** Not applicable
- **Authors' contributions:** First author completed the entire research work and written the paper, Other authors provided support in order to collect the data and proofread
- **Acknowledgements:** We acknowledge the KLEF for providing the entire research support



## REFERENCES

1. Adesola, W. A., & Okwong, A. E. (2009). An empirical study of dividend policy of quoted companies in Nigeria. *Global Journal of Social Sciences*, 8(1), 85-101.
2. Arora, A., Arunachalam, V. S., Asundi, J., & Fernandes, R. (2001). The Indian software services industry. *Research policy*, 30(8), 1267-1287.
3. Barnett, M. L., & Salomon, R. M. (2012). Does it pay to be really good? Addressing the shape of the relationship between social and financial performance. *Strategic Management Journal*, 33(11), 1304-1320.
4. Bubyk, M., Rybytska, O., Karpiak, A., & Matseliukh, Y. (2018, September). Structuring the fuzzy knowledge base of the IT industry impact factors. In 2018 IEEE 13th International Scientific and Technical Conference on Computer Sciences and Information Technologies (CSIT) (Vol. 1, pp. 21-24). IEEE.
5. Das, K., & Sagara, H. (2017). State and the IT Industry in India. *Economic & Political Weekly*, 52(41), 57.
6. Gaur, J., & Gupta, R. (2011). Comparing firm performance on the basis of age, size, leverage, and group affiliation in Indian IT industry. *Romanian Journal of Marketing*, (3), 8.
7. James, L., & Mathew, L. (2012). Employee retention strategies: IT industry. *SCMS Journal of Indian Management*, 9(3), 79.
8. Johansson, D. (2004). Is small beautiful? The case of the Swedish IT industry. *Entrepreneurship & Regional Development*, 16(4), 271-287.
9. Labhane, N. B., & Mahakud, J. (2016). Determinants of dividend policy of Indian companies: A panel data analysis. *Paradigm*, 20(1), 36-55.
10. N. Venkatraman and V. Ramanujam, Measurement of business performance in strategy research: A comparison of approaches, *Academy of management review*, 11(4), (1986), 801-814.
11. Pavelková, D., Kankava, A. 2005. Business performance from the perspective of the financial manager [In Czech: Výkonnost podniku z pohledu
12. Pfannenstien, L. L., & Tsai, R. J. (2004). Offshore outsourcing: Current and future effects on American IT industry. *Information Systems Management*, 21(4), 72.
13. Raju, M., & Venkateswara Rao, P. (2020). Financial Analysis of selected IT companies in India. *Test Engineering & Management*, 83, 13356-13364.
14. Ramli, N. M. (2010). Ownership structure and dividend policy: Evidence from Malaysian companies. *International Review of Business Research Papers*, 6(1), 170-180.
15. Shen, K. Y., & Tzeng, G. H. (2015). A new approach and insightful financial diagnoses for the IT industry based on a hybrid MADM model. *Knowledge-Based Systems*, 85, 112-130.
16. T. R. Madanmohan, U. Kumar and V. Kumar, Import-led technological capability: A comparative analysis of Indian and Indonesian manufacturing firms, *Technovation*, 24(12), (2004), 979-993
17. Zhu, Z., & Huang, F. (2012). The effect of R&D investment on firms' financial performance: Evidence from the Chinese listed IT firms.