

An Awareness Study about Future Technology among Youngsters with Special Reference to Professional Graduates – Technical Approach

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Abstract Technology driven life become inseparable living system in present day world. The rate of introduction and adoption of technology happens very rapidly in all utility services. The focus of technology providers aims to enhance sophisticated life pattern by end users through investing less time and cost. The expediting of innovation technology happens day by day according to end user preference. But at the same time, the correlation between expanding of technology and awareness about its updation need to be study among youngsters in present day scenario(techno savvy) through a comprehensive exploratory study. This paper attempts to address the research gap of awareness of youngster's preferably professional graduates about emerging technologies with respect to testing of hypotheses and clustering technique. In order to address this gap, the researcher has employed questionnaire method for collecting the data and deployed SPSS tool for interpretation.

Keywords: Technology driven, Enhance sophisticated, Awareness, Emerging Technologies

I. INTRODUCTION

The future technologies are visualized as powerful instrument for real time happening in day to day life. These technologies are either new or updation of existing one. The character of future technology is novel, relatively fast in growth, speed and accuracy as well as social impact. It is viewed as a radically novel and relatively fast spreading technologies characterized by certain accuracy over a period of time and have the potential to affect the socio-economic aspects in end user life system. It includes process technology, IoT, education technology, sensing city, zero carbon natural gas, babel-fish earbuds, nano technology, biotechnology, psycho technology, robotics, crypto currency, augmented reality and artificial intelligence [1-4].

It is an absolute technological convergence of different system created towards a defined goal. The special character of future technology converge separate technology like voice data and video together so that any end user can share and interact each other either for communication or utility purposes.

The usage volume of future technology among present day youngster's preferably professional graduates is reasonably high due to market spread as well as technological expertise. Over centuries innovative methods and new technology are happening through theoretical research and profound research and development. But at the same time, these

technologies have become indispensable in our day to day life for social to professional system.

But at the same time, it is essential to view the level of awareness among end users about future technologies with respect to selected demographic variables and appropriate techniques. Hence this work is an extension of earlier work [5]. This work contains 6 sections, Section I describes introduction part about future technologies, Section II dealt with review papers, Section III contains objectives of the study, Section IV explain the methodology, Section V describes results and discussion and Section VI concludes the research work with limitations and scope for further work.

II. LITERATURE REVIEW

Nic Newman [6] conducted a survey from 194 top editors, Chief Executive Officers and Digital leaders about the trends, predictions and innovations in technological fields. Jani Suomalainen et.al [7] proposed SDN based monitoring framework in 5G network and it will provide software networking and visualization into small portions which is very much easier to monitor and manage.

Dr.S.Amutha and S.John Kennedy [8] conducted a study from 91 respondents to understand the technological awareness among student teachers. The result reveals that utilization of information resources is low and lack of awareness exists in using information technology.

Yunos Zahri et.al [9] examined online survey to understand the awareness level of cyber security among primary and secondary school students in Malaysia. Result highlights that they are well exposed in using internet at the same time activities in online to be monitored for security aspects.

Aisar Salihu Musa et.al [10] conducted a study from 111 final year diploma students of mass communication from Kano State, Polytechnic to understand the awareness level and usage of social media. The outcome of the study identified that students are aware of social media and they used internet and mobile phones regularly for academic, create and maintain friendship and self-expression.

Nilamadhav Mishra [11] discussed about importance of IoE in data science applications. Marie Fernandes [12] discussed about various classification and clustering techniques in data mining.

III. OBJECTIVES

- To check the significant difference about the awareness level based on selected demographic variables.
- To learn the view of end users about the status of awareness of future technology using K-means clustering.

IV. METHODOLOGY

The research design is to explore the level of awareness about future technologies. Population study is chosen as professional graduates in an engineering college located in Kanchipuram. The research instrumentation employed for the study made with simple questionnaire. Sample size of the study is 25. Random sampling technique is applied for collecting the data. The collected data's were edited and tabulated for further analysis. The respondent's data were analyzed through SPSS tool and corresponding outputs were presented in the following sections.

V. RESULTS AND DISCUSSION

5.1 Validation of Hypotheses:

Hypotheses 1

Ho: There is no significant difference between gender and status of awareness about future technologies at 5% level of significance.

Ha: There is significant difference between gender and status of awareness about future technologies at 5% level of significance.

Table 1: ANOVA : Gender vs. Status of Awareness Level

	Sum of Squares	F	p-value
Between Groups	.274	2.653	.117
Within Groups	2.379		

Source: Primary data

From the table 1, it is understood that obtained p value is not less than 0.05, hence null hypotheses is accepted and concluded that there is no significant difference between gender and status of awareness about future technologies.

Hypotheses 2

Ho: There is no significant difference between educational status and awareness about future technologies at 5% level of significance.

Ha: There is significant difference between educational status and awareness about future technologies at 5% level of significance.

Table 2: ANOVA : Educational Status vs. Awareness Level

	Sum of Squares	F	p-value
Between Groups	1.534	9.589	.001
Within Groups	1.120		

Source: Primary data

From the table 2, it is understood that obtained p value is less than 0.05, hence null hypotheses is rejected and concluded that there is significant difference between educational status and awareness about future technologies.

Hypotheses 3

Ho: There is no significant difference between father's occupation and awareness about future technologies at 5% level of significance.

Ha: There is significant difference between father's occupation and awareness about future technologies at 5% level of significance.

Table 3: ANOVA : Father's Occupation vs. Awareness Level

	Sum of Squares	F	p-value
Between Groups	.466	1.490	.246
Within Groups	2.187		

Source: Primary data

From the table 3, it is understood that obtained p value is not less than 0.05, hence null hypotheses is accepted and concluded that there is no significant difference between father's occupation and awareness about future technologies.

5.2 Clustering

The below table 4 and 5 shows the outcome of K-means clustering technique. Here questions regarding awareness about future technologies are clustered with respect to educational status and presented in table 4 and 5.

Table 4: Level of Cluster Cases

Number of Cases in each Cluster		
Cluster	1	9.000
	2	16.000
Valid		25.000
Missing		.000

Source: Primary data

Table 5: K-means Clustering based on Educational Status

Final Cluster Centers	Cluster	
	1	2
	Do you know about awareness in encrypted currency market like bit coins?	2
Do you about automated legal/law awareness industries?	1	2
What is the level of knowledge do you have in artificial intelligence / AI based controllers?	2	3
What is the level of awareness do you have the role of software in logistics management?	2	3
What is the level of awareness do you have in getting different food supplements from different unconventional methods by getting proteins from insects etc.,?	3	2
What is the level of awareness do you have the functionality of fully automated cars built by Teslaw, Goolge and Apple?	3	3
What is the level of awareness do you have in the technology behind fully automated super markets?	2	3

Source: Primary data

From the table 5 entire results are clustered into two clusters, in cluster 1, the highest awareness about future technologies of 3 goes to getting different food supplements from different unconventional methods by getting proteins from insects etc., and functionality of fully automated cars. If we analyze second cluster, there are 4 awareness questions such as artificial intelligence/AI based controllers, software in logistics management, fully automated cars and automated super markets which share the same plane which has highest mean of 3.

VI. CONCLUSION

It is noted that the scope for using future technologies is increasing due to its multiple applications, easy access, manual replacement as well as cost effective process in nature. The result indicates that null hypotheses is accepted, based upon the mean value, obtained mean value for male is 2.53 and female is 2.31, it is inferred that male respondents have more awareness about future technologies when compared to female respondents. Similarly for educational status, obtained mean value for engineering, B.Sc / BCA, B.Sc (Physics/Chemistry) and MBA respondents are 2.66, 2.33, 2.09 and 2.69. It is understood that MBA respondents

have better awareness about future technologies when compared to other educational streams. As far as in clustering, more clustering groups are formed in cluster 2. From the results, penetration about future technologies among youngster does have to increase. Limitations of this study are small amount of sample have taken for analysis and it is restricted to specific location and engineering college. Sample size can be extended, compare and contrast different colleges and universities. Through this study, the researcher suggests that depth campaign through social media need to promote in order to know the real value of future technologies.

REFERENCES

- [1]. Mohanad Halaweh, "Emerging Technology: What is it?", J. Technol. Manag. Innov. 2013, Volume 8, Issue 3, pp.108-115, 2013.
- [2]. Göran Kindvall, Anna Lindberg, Camilla Trané, Jonatan Westman, "Exploring future technology development", ISSN NO 1650-1942, pp.1-72, 2017.
- [3]. Kasey Panetta, Gartner Top 10 Strategic Technology Trends for 2018, 2017.
- [4]. Kelvin Claveria, "Blockchain, the Internet of Things and other top tech trends for 2018", 2017.
- [5]. Dr.M.Kannan & Dr.N.Ashok Kumar, "Future Technology Growth and its Awareness to the Present Youth", Seventh National Conference of Recent Enhancement in Advanced Computing Technologies (NCREACT'18), RRASE College of Engineering, Padappai, 2018.
- [6]. Nic Newman, Journalism, "Media and Technology Trends and Predictions", ISBN 978-1-907384-42-4, pp.1-52, 2018.
- [7]. Jani Suomalainen, Kimmo Ahola, Mikko Majanen, Olli Mämmelä and Pekka Ruuska, "Security Awareness in Software-Defined Multi-Domain 5G Networks", Future Internet, doi:10.3390/fi10030027, 10,27, 2018.
- [8]. Dr.S.Amutha and S.John Kennedy, "Awareness on Technology Based Education by the Student Teachers", International Journal of Scientific and Research Publications, ISSN 2250-3153, Vol.5, No.9, pp.1-4, 2015.
- [9]. Yunos Zahri, Ab Hamid R. Susanty, Ahmad Mustaffa, Cyber Security Situational Awareness among Students: A Case Study in Malaysia, International Journal of Educational and Pedagogical Sciences, Vol.11, No.7, pp.1699-1705, 2017.
- [10]. Aisar Salihu Musa, Mohd Nazri Latiff Azmi and Nur Salina Ismail, "Awareness and Usage of Social Media: A Study of Mass Communication Students of Kano State Polytechnic", International Conference on Languages, ICL, pp.1-15, 2015.
- [11]. Nilamadhab Mishra, "Internet of Everything Advancement Study in Data Science and Knowledge Analytic Streams", International Journal of Scientific Research in Computer Science and Engineering, E-ISSN: 2320-7639, Vol.6, Issue.1, pp.30-36, 2018.

- [12]. Marie Fernandes , “Data Mining: A Comparative Study of its Various Techniques and its Process”, International Journal of Scientific Research in Computer Science and Engineering, E-ISSN: 2320-7639, Vol.5 , Issue.1, pp.19-23, 2017.

Author Profile

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