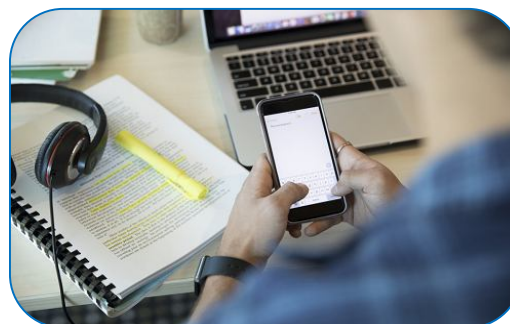_____

USE OF INFORMATION AND COMMUNICATION TECHNOLOGY GADGETS IN ACADEMIC AND RESEARCH ACTIVITIES

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ABSTRACT

  ICT in every aspect of economic, social and educational activities integrating in almost all developmental sectors and this is evidenced by the development of the ICT policy to guiding the use and implementation of ICTs in all developmental sectors and education This study reports the perception of information technology gadgets to support their academics based on the feedback of 838 respondents covering students and teachers of universities in Hyderabad Karnataka region. The extent of use of Personal computer, interactive whiteboards, learning management systems, Use of Video conferencing systems, mobile phones and projection system is being discussed in this study.

KEYWORDS: *Smart Technologies, Learning Tools, Use Study.*

INTRODUCTION :

  The advancement of technology has changed the way we think, learn and take decisions. With the advent of Internet technology and various IT applications, we are moving from age of fixed computing to Internet of Things and now to Internet of everything. Technological advancement in education sector has direct impact on the style and efficacy of delivery and utilization of educational content. Various novel communication and information technology-based tools and resources have enabled efficient, timely delivery of diverse academic concepts. Wearable Technology is one such technology, which has many potential applications. Wearable Technology-based gadgets are now influencing every dimension of human life. In the case of higher education, the use of Wearable Technology remains largely experimental. Jena (2016) examined students' attitudes towards the use of the Wearable Technology and to determine if attitudes towards the use of Wearable Technology differ, based on learning style. The results of the study found significant effect of learning style on the use/adaptation of Wearable Technology in teaching and learning among Indian post graduate students

  The constraints to effective use of University web portal include internet connection failure, inability to access the web portal properly. The University web portal plays an important role in students study and academic programme. Therefore, management should on admissions to the programme recommend the use of multimedia devices such as iPhone, iPad, Computer system and other supportive gadgets for educational purpose however; this can be incorporated in their tuition fees (Ikegune, D. O., & Cln, A. O. A. 2018). This study attempts to seek the use of various IT gadgets among academic community to support their learning, research and research activities.

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OBJECTIVES

The main objective of the study is to

- Use of IT gadgets i.e. personal computers and interactive boards
- Use of learning management systems AND Video conferencing system
- Extent of use of mobile phones and projection systems supporting communication/ networking, learning and in organizing work and keeping records

METHODOLOGY

In this study, 838 respondents covering teachers and researchers serving in universities of Hyderabad Karnataka region are covered. The self-administrative questionnaire has been adopted to collect the information which includes use of technological gadgets and its support in learning and research activities. A majority proportion of the respondents, more than three-fifth, (522, 62.3%) is research scholar and a significant proportion of the respondents, less than two-fifth, (316, 37.7%) is teaching faculty.

DATA ANALYSIS AND RESULTS

Use of personal computer in academic and research activities by the respondents is shown in Table 1. Results find that majority proportion of the respondents, more than four-fifth (760, 90.7%), is opined that they have used personal computer for academic and research activities. A very small proportions of the respondents, less than one-tenth, (36, 4.30%), (24, 2.90%) and (18, 2.10%) is opined that they have used it often, occasionally and never used respectively.

Table 1: Use of personal computer

Use	Frequency	Percentage
Never	18	2.10
Occasionally	24	2.90
Often	36	4.30
Always	760	90.7
Total	838	100.0

An interactive whiteboard, also known as a smart-board, is an interactive display in the format of a whiteboard that reacts to user input either directly or through other devices and these plays important role to support teachers and scholars in the university setup. Table 2 shows the use of Interactive whiteboards among the respondents.

Table 2: Use of interactive whiteboards

Use	Frequency	Percentage
Never	287	34.2
Rarely	101	12.1
Occasionally	82	9.8
Often	202	24.1
Always	166	19.8
Total	838	100.0

A majority proportion of the respondents, more than one-fourth (287, 34.2%), is opined that they have never used interactive whiteboards for academic and research activities. A significant proportion of the respondents, less than one-fourth (202, 24.1%) opined that they often used it, followed by proportion less than one-fifth (166, 19.8%) have said they always use it.. A small proportion of the respondents, more than one-tenth, (101, 12.1%) and less than one-tenth (82, 9.80%) have opined that they used it rarely and occasionally respectively.

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Table 3: Use of learning management systems

Use	Frequency	Percentage
Never	223	26.6
Rarely	166	19.8
Occasionally	222	26.5
Often	160	19.1
Always	67	8.00
Total	838	100.0

More than one-fourth (223, 26.6%), have opined that they have never used learning management systems for academic and research activities. Relatively same proportion of them (222, 26.5%) have opined that they have often used it. A small proportions of the respondents, less than one-fifth (166, 19.8%) and (160, 19.1%) have opined that they have used is occasionally and always respectively. A very small proportion or them less than one-tenth (67, 8%) said they always use it (Table 3).

Table 4: Use of Video conferencing systems

Use	Frequency	Percentage
Never	352	42.0
Rarely	232	27.7
Occasionally	134	16.0
Often	92	11.0
Always	28	3.3
Total	838	100.0

Table 4 shows the use of video conferencing systems in academic and research activities by the respondents; it may be seen from the above table that out of 838 respondents, a majority proportion of the respondents, more than two-fifth (352, 42.0%), have opined that they have never used video conferencing systems for academic and research activities. A significant proportion of the respondents, more than one-fourth (232, 27.7%) have opined that they used it occasionally. A small proportions of the respondents, more than one-tenth (134, 16.0%) and (92, 11.0%) have opined that they used it often and always respectively.

Table 5: Use of mobile phones

Use	Frequency	Percentage
Never	66	7.9
Rarely	116	13.8
Occasionally	102	12.2
Often	167	19.9
Always	387	46.2
Total	838	100.0

The above table depicts the use of mobile phones in academic and research activities by the respondents; it may be seen from the above table that out of 838 respondents, a majority proportion of the respondents, more than two-fifth (387, 46.2%), have opined that they have always use mobile phones for academic and research activities. A significant proportion of the respondents, very close to one-fifth (167, 19.9%) have opined that they used it often. A small proportions of the respondents, more than one-tenth (116, 13.8%) and (102, 12.2%) have opined that they used it rarely and occasionally respectively. A very small proportion of them less than one-tenth (66, 7.9%) opined that they never used it.

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Table 6: Use of projection system

Use	Frequency	Percentage
Never	42	5.00
Rarely	97	11.6
Occasionally	145	17.3
Often	338	40.3
Always	216	25.8
Total	838	100.0

A majority proportion of the respondents, slightly more than two-fifth (338, 40.3%), have opined that they have often use projection system for academic and research activities. A significant proportion of the respondents, more than one-fourth (216, 25.8%) have opined that they used it always. A small proportions of the respondents, less than one-fifth (145, 17.3%) and (97, 11.6%) have opined that they used it occasionally and rarely respectively. A very small proportion of them less than one-tenth (42, 5%) opined that they never used it.

CONCLUSION

Due to NAAC and concern for quality, emergence of Smart Campus will result in several benefits that provide complete control over resource utilization; integration among various academic and administrative operations and bring discipline in delivery of services, create a positive culture of collaborative research and innovation. It is desirable to make use of smart technologies by both researchers and teachers in the University for improving their quality and creating impact on the end users. Results are an attempt to showcase the current status of using IT gadgets and call for still optimum use of smart technologies.

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