

# An Assessment of the Distance Learners Acceptance and Readiness for e- Learning in the State of Uttar Pradesh (India)

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## Abstract

E-learning is broadly used to describe “instructional content or learning experience delivered or enabled by electronic technologies”. It is seen that in the past few years e-learning becomes very popular among students worldwide, an assessment of e-learning acceptance and readiness is very much needed for the implementation of Electronic Learning as a platform for distance learners. In the draft new education policy government of India focused upon the creation of the environment to facilitate e learning by universities especially “Open and Distance Learning (ODL)” institutions in India. In the above context this study explored the distance learners presently enrolled in the various programme of IGNOU in the state of Uttar Pradesh, India about their readiness and acceptance for the e – learning. This study is based upon “Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, et al. 2003)”. The major factors taken into consideration regarding e- learning readiness and acceptance in this study are performance criterion, efforts criterion, social criterion and facilitating environment.

**Keywords:** Acceptance of e-Learning, India, IGNOU, Information and Communication Technology (ICT), Online Education, Readiness for e-Learning, Technology Supported Learning, UTAUT, Uttar Pradesh

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## 1. Introduction

In the last few years it has been seen that higher education sector has immensely used “Information and Technology (ICT)” for the delivery of educational content. Further it has been also observed by “Cappelli, (2003)<sup>2</sup> that distance learning via the Internet will drive tremendous growth in future”. It has been also seen that the more and more usages of ICT tools and e-learning in higher education mainly in educational programs, could play major role in enhancing the development of the region.

In the literature the “E-learning, or electronic learning”, has been defined in a number of different ways and forms. In general terms, e-learning is used to describe “instructional content or learning experience delivered or enabled by electronic technologies (Ong, Lai and Wang, 2004)<sup>6</sup>”. Some definitions of e-learning are “narrow one limiting e-learning to content delivery via the Internet only (Jones, 2003)<sup>4</sup>”. However in broader sense it can include the use of the Internet, intranets/extranets, audio- and videotape, satellite broadcast, interactive TV, and CDROM, not only for content delivery, but also for interaction among participants (Industry Canada, 2001). Recently the definition of e- learning further expanded to include “mobile and

wireless learning applications (Kinshuk, Suhonen, Sutinen, and Goh, 2003; Lehner, Nösekabel and Lehmann, 2003)<sup>5</sup>”. It is also defined as “instructional content or learning experiences delivered or enabled by electronic technology (The Commission on Technology and Adult Learning, 2001)<sup>3</sup>, particularly computer networks and standalone computer”.

The various components of E-learning as categorized by “Khan (2001)” are as follows:

- “Instructional Design (ID)”
- Multimedia Component”
- Internet Tools
- Computers and Storage Devices
- Connections and Service Providers”

## 2. Main Focus of the Paper

In the last few years IGNOU has also devised massive strategy to offer its programme in the e – learning mode. Under these circumstances there is urgent need to assess the readiness of the IGNOU learners about the acceptability of the e- learning platform so that more and more courses could be offered through this mode in future.

This study explored the distance learners presently enrolled in the various programme of IGNOU in the state of Uttar Pradesh, India about their readiness and acceptance for the e – learning.

### 3. Research Design

This study is based upon “Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, et. al. 2003)”. The key factors taken into consideration regarding e- learning readiness and acceptance in this study are performance criterion, efforts criterion, social criterion and facilitating environment.

The detailed questionnaire on the above aspects has been explored on IGNOU students. In the study 91 students currently enrolled in the various programmes of IGNOU as per following details has been participated:

Name of the Programme	Number of Students
BA	1
BCA	18
DHHM	1
MA	1
MAEDU	2
MAH	1
MAPC	3
MBA	4
MCA	25
MCOM	15
MEC	3
MEG	5
MPA	7
MSW	3
PGDIBO	1
PGDIPR	1
<b>Grand Total</b>	<b>91</b>

#### 3.1 The gender wise distribution of the respondents is as follows:

Gender	Number of Respondents
Female	24
Male	67
<b>Grand Total</b>	<b>91</b>

#### 3.2 The educational qualification wise distribution of the respondents is as follows:

Educational Qualification	Number of Respondents
10+2	14
B Tech and doing MBA	1
Diploma	1
Graduation	55
Post Graduation	20
<b>Grand Total</b>	<b>91</b>

#### 3.3 Age group wise distribution of the respondents is as follows:

Age group of Respondents	Number of Respondents
20 - 25 Year	70
26-30 Years	12
31-35 years	1
36 - 40 years	1
41- 50 years	5
More than 50 years	2
<b>Grand Total</b>	<b>91</b>

#### 3.4 We have also requested in our questionnaire to list out the device which they used to access Internet. Their distribution is as follows:

Device Used to access	Number of Respondents
Desktop	9
Laptop	22
Smart Phone	59
Both Smart phone and Desktop	1
<b>Grand Total</b>	<b>91</b>

#### 3.5 Employment Status wise distribution of the respondents is as follows:

Employment Status	Number of Respondents
Employed	26
Not Employed	65
<b>Grand Total</b>	<b>91</b>

#### 3.6 Place of residents distribution of the respondents is as follows:

Place of residents	Number of Respondents
Agra	4
Aligarh	9
Allahabad	2
Auraiya	2
Barabanki	1
Bareilly	1
Etah	1
Farrukhabad	1
Gorakhpur	1
Gursahaiganj	1
Kanpur	17
Lucknow	39
Mainpuri	1
Mathura	1
Moradabad	5
Pratapgarh	1
Raebareli	2
Raebareli	1
Sitapur	1
<b>Grand Total</b>	<b>91</b>

## 4. Results and Interpretations

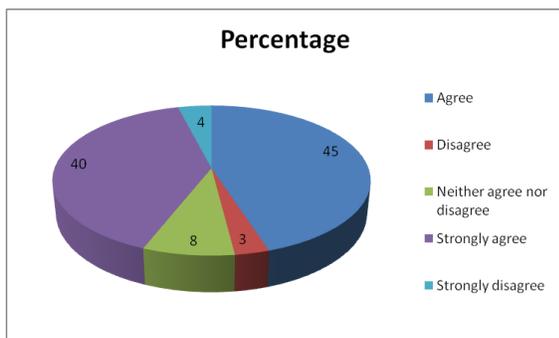
The survey has been conducted using Google Forms over a period of 15 days during which response of the participants has been taken on five point questionnaire on a set of 41 questions about Performance criterion (Perceived usefulness, Interactivity, Flexibility), Effort criterion (Ease of learning, Ease of use, Self-efficacy), Social criterion (Subjective norm, Image), Facilitating environment (ICT infrastructure, Institutional policies, Training and technical support, Leadership), Learning Style / Teaching Style, Behavioral Intention, Actual Usage. The outcome of the survey under different sub themes is as follows:

### 4.1 Performance Expectancy

#### 4.1.1 Perceived usefulness

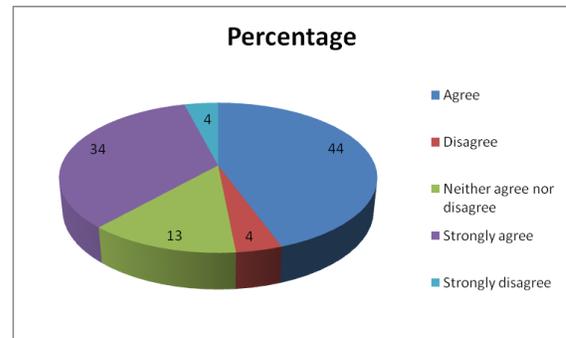
##### 4.1.1.1 Ease of Using e-learning in understanding the topic

Category	Number of Respondents	Percentage
Agree	41	45
Disagree	3	3
Neither agree nor disagree	7	8
Strongly agree	36	40
Strongly disagree	4	4



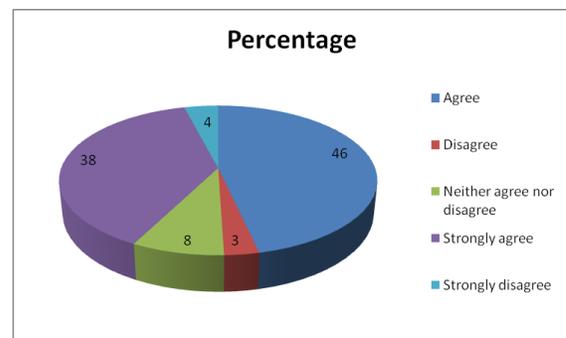
##### 4.1.1.2 Correlation of using e-learning increases with scoring higher marks

Category	Number of Respondents	Percentage
Agree	40	44
Disagree	4	4
Neither agree nor disagree	12	13
Strongly agree	31	34
Strongly disagree	4	4



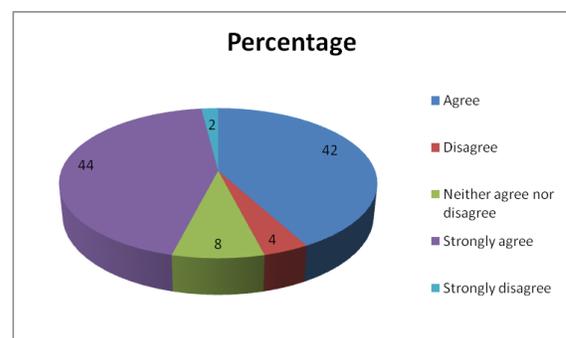
##### 4.1.1.3 Correlation of e-learning in studies to complete assignment, learn topic rapidly.

Category	Number of Respondents	Percentage
Agree	42	46
Disagree	3	3
Neither agree nor disagree	7	8
Strongly agree	35	38
Strongly disagree	4	4



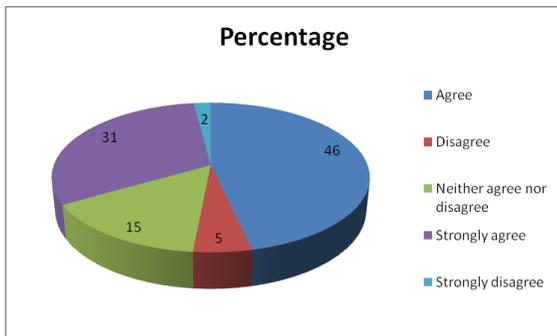
##### 4.1.1.4 Whether e-learning useful in the study

Category	Number of Respondents	Percentage
Agree	38	42
Disagree	4	4
Neither agree nor disagree	7	8
Strongly agree	40	44
Strongly disagree	2	2



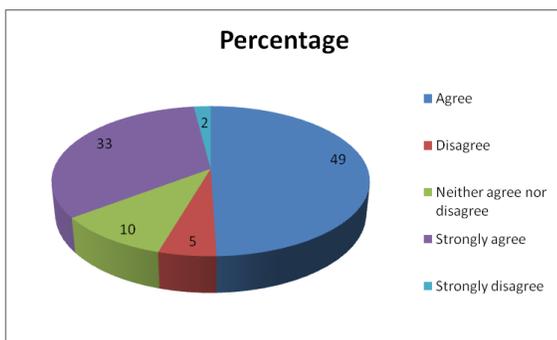
4.1.1.5 Correlation between e-learning and number of topics study per day.

Category	Number of Respondents	Percentage
Agree	42	46
Disagree	5	5
Neither agree nor disagree	14	15
Strongly agree	28	31
Strongly disagree	2	2



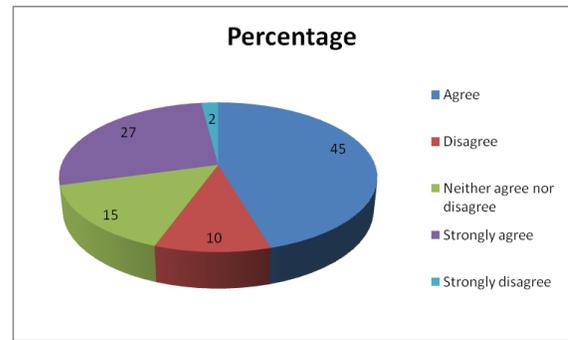
4.1.1.6 Correlation e-learning enhances and efficiency of a student.

Category	Number of Respondents	Percentage
Agree	45	49
Disagree	5	5
Neither agree nor disagree	9	10
Strongly agree	30	33
Strongly disagree	2	2



4.1.1.7 Correlation between e-learning and study load.

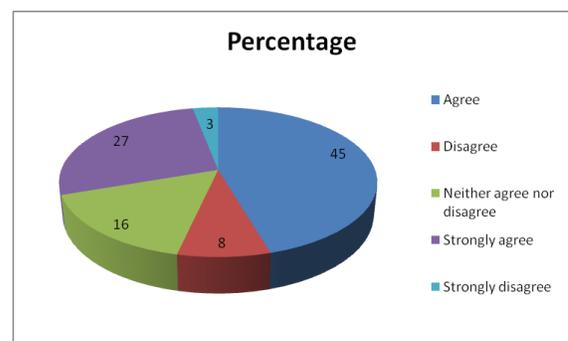
Category	Number of Respondents	Percentage
Agree	41	45
Disagree	9	10
Neither agree nor disagree	14	15
Strongly agree	25	27
Strongly disagree	2	2



4.1.2 Interactivity

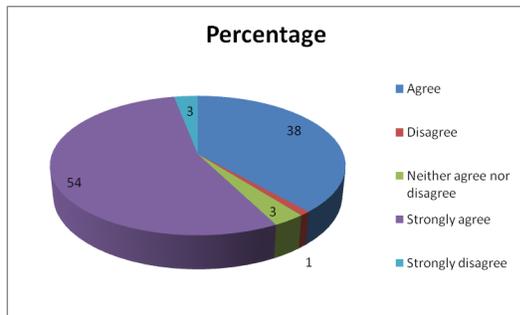
4.1.2.1 Correlation between e-learning and query resolution

Category	Number of Respondents	Percentage
Agree	41	45
Disagree	7	8
Neither agree nor disagree	15	16
Strongly agree	25	27
Strongly disagree	3	3



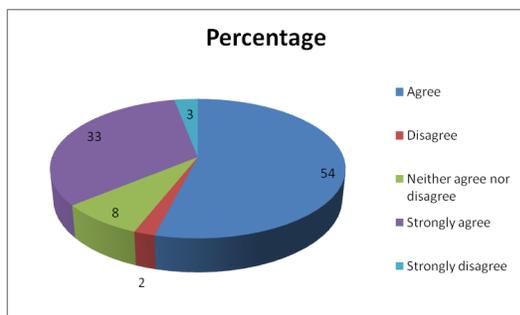
4.1.2.2 Correlation between e-learning and extraction of information from online resources e.g. "Wikipedia" etc

Category	Number of Respondents	Percentage
Agree	35	38
Disagree	1	1
Neither agree nor disagree	3	3
Strongly agree	49	54
Strongly disagree	3	3



4.1.2.3 Correlation between e-learning allows and collaborative learning with friends towards solving common assignments

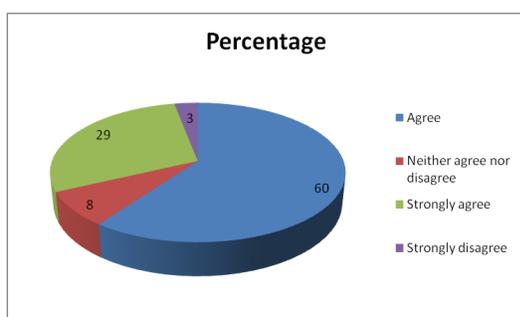
Category	Number of Respondents	Percentage
Agree	49	54
Disagree	2	2
Neither agree nor disagree	7	8
Strongly agree	30	33
Strongly disagree	3	3



4.1.3 Flexibility

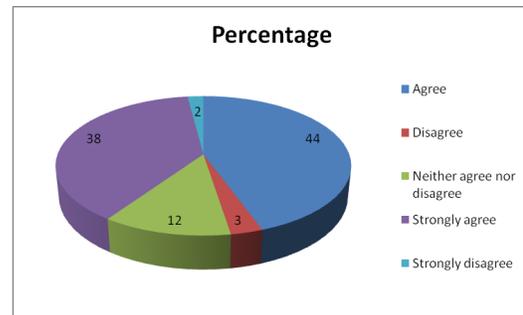
4.1.3.1 Correlation between e-learning and identification of topics towards effective learning

Category	Number of Respondents	Percentage
Agree	55	60
Neither agree nor disagree	7	8
Strongly agree	26	29
Strongly disagree	3	3



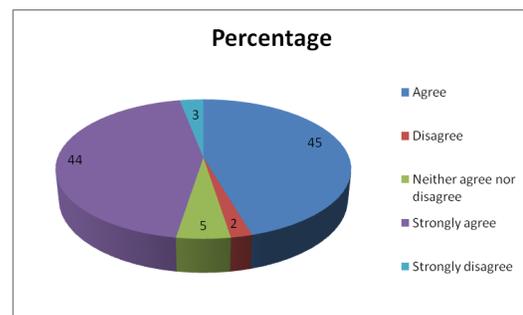
4.1.3.2 Correlation between e-learning and completing assignments as per time available

Category	Number of Respondents	Percentage
Agree	40	44
Disagree	3	3
Neither agree nor disagree	11	12
Strongly agree	35	38
Strongly disagree	2	2



4.1.3.1 Correlation e-learning and anytime anywhere learning

Category	Number of Respondents	Percentage
Agree	41	45
Disagree	2	2
Neither agree nor disagree	5	5
Strongly agree	40	44
Strongly disagree	3	3

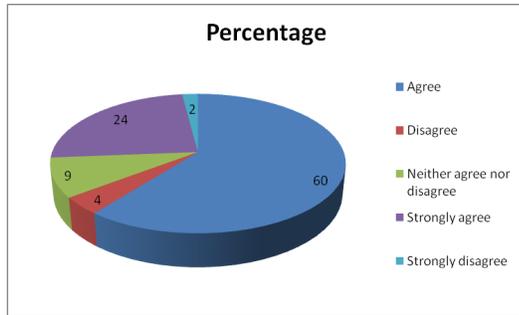


4.2 Effort expectancy

4.2.1 Ease of learning

4.2.1.1 Correlation between e-learning and learning style as per convenience of the learner

Category	Number of Respondents	Percentage
Agree	55	60
Disagree	4	4
Neither agree nor disagree	8	9
Strongly agree	22	24
Strongly disagree	2	2



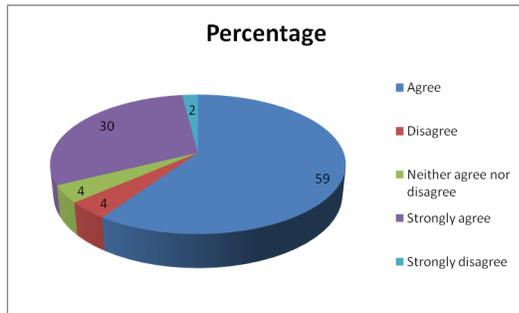
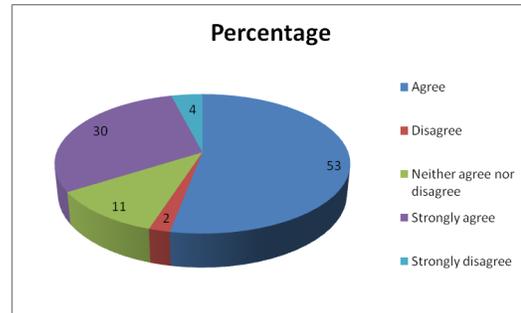
4.2.2.3 It is very easy to access different resources using e learning

Category	Number of Respondents	Percentage
Agree	48	53
Disagree	2	2
Neither agree nor disagree	10	11
Strongly agree	27	30
Strongly disagree	4	4

4.2.2 Ease of use

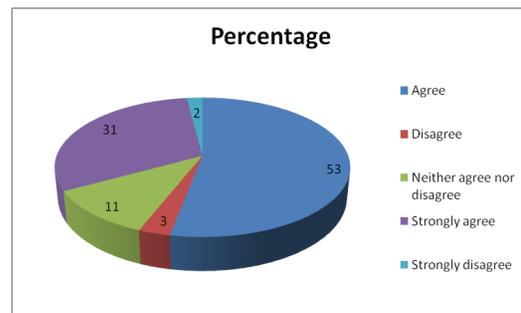
4.2.2.1 Correlation between e-learning and its simplicity to use

Category	Number of Respondents	Percentage
Agree	54	59
Disagree	4	4
Neither agree nor disagree	4	4
Strongly agree	27	30
Strongly disagree	2	2



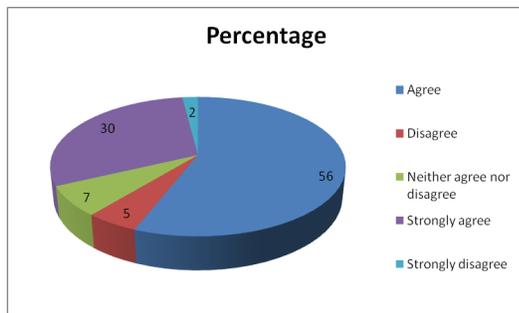
4.2.2.4 e Learning is very easy to use

Category	Number of Respondents	Percentage
Agree	48	53
Disagree	3	3
Neither agree nor disagree	10	11
Strongly agree	28	31
Strongly disagree	2	2



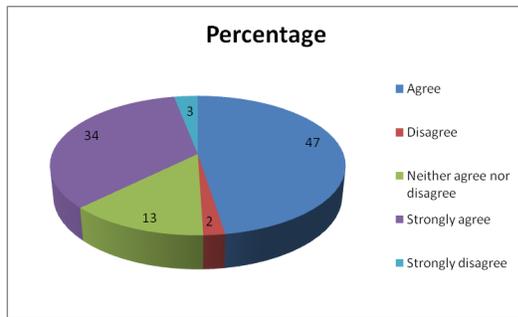
4.2.2.2 e-learning allows user to get content as per convenience

Category	Number of Respondents	Percentage
Agree	51	56
Disagree	5	5
Neither agree nor disagree	6	7
Strongly agree	27	30
Strongly disagree	2	2



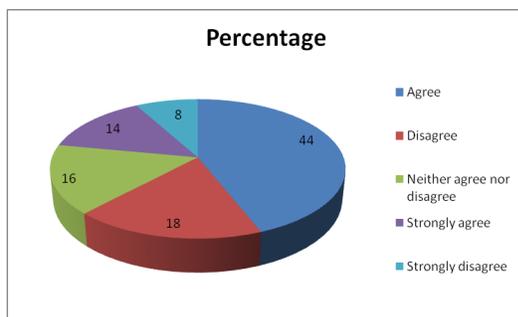
4.2.2.5 I don't face any problem is using e-learning

Category	Number of Respondents	Percentage
Agree	43	47
Disagree	2	2
Neither agree nor disagree	12	13
Strongly agree	31	34
Strongly disagree	3	3



4.2.2.6 Do you think that excessive mental effort is needed for using e Learning

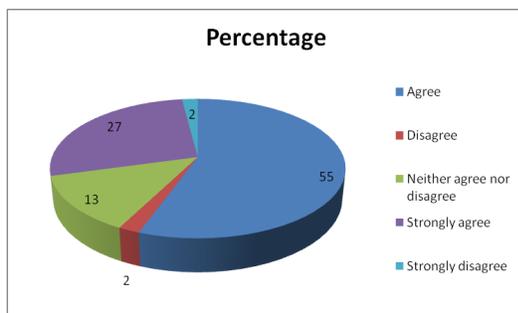
Category	Number of Respondents	Percentage
Agree	40	44
Disagree	16	18
Neither agree nor disagree	15	16
Strongly agree	13	14
Strongly disagree	7	8



4.2.3 Self-efficacy

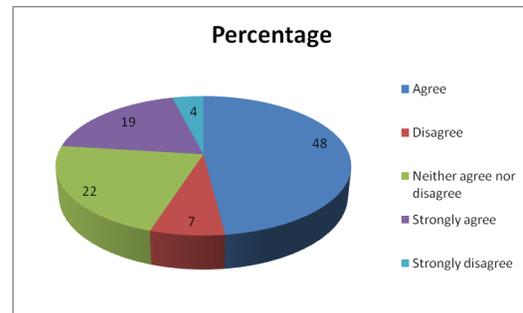
4.2.3.1 I have necessary Skill needed for using use e-learning tools.

Category	Number of Respondents	Percentage
Agree	50	55
Disagree	2	2
Neither agree nor disagree	12	13
Strongly agree	25	27
Strongly disagree	2	2



4.2.3.2 My teachers also have necessary skills for using e learning

Category	Number of Respondents	Percentage
Agree	44	48
Disagree	6	7
Neither agree nor disagree	20	22
Strongly agree	17	19
Strongly disagree	4	4

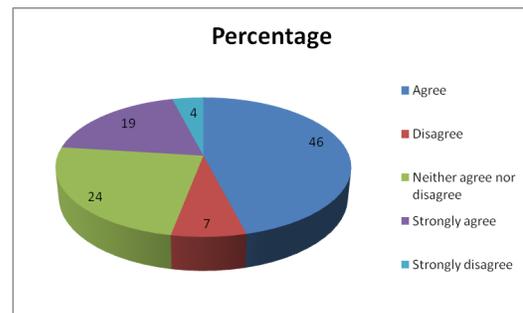


4.3 Social influence

4.3.1 Subjective norm

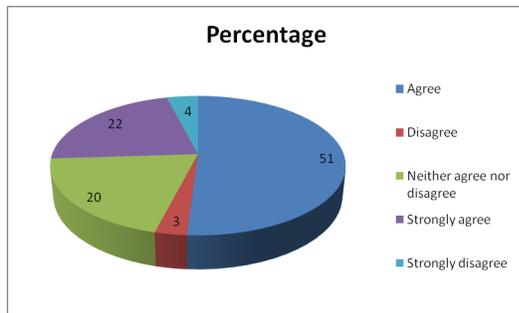
4.3.1.1 My colleagues, teachers etc want me to use e-learning.

Category	Number of Respondents	Percentage
Agree	42	46
Disagree	6	7
Neither agree nor disagree	22	24
Strongly agree	17	19
Strongly disagree	4	4



4.3.1.2 Number of people who are influencing my day to day life always motivating me to use e-learning as much as possible.

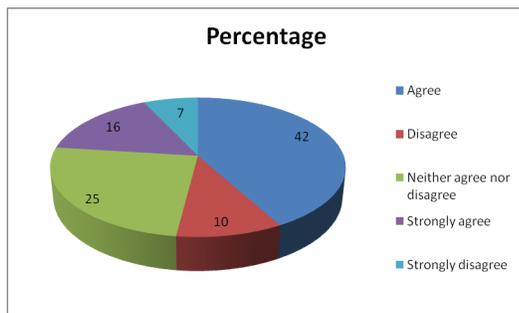
Category	Number of Respondents	Percentage
Agree	46	51
Disagree	3	3
Neither agree nor disagree	18	20
Strongly agree	20	22
Strongly disagree	4	4



4.3.2 Image

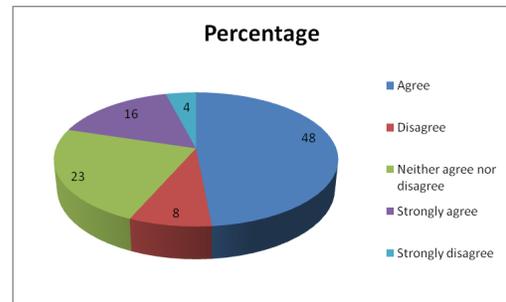
4.3.2.1 It has been observed that those students who uses e- learning get more weightage in my university as compared to those who don't use it

Category	Number of Respondents	Percentage
Agree	38	42
Disagree	9	10
Neither agree nor disagree	23	25
Strongly agree	15	16
Strongly disagree	6	7



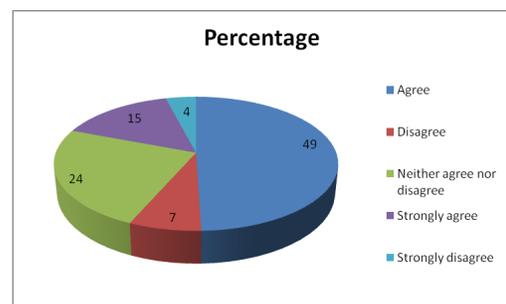
4.3.2. e Learning students are suppose to be more smart as compared to those who don't

Category	Number of Respondents	Percentage
Agree	44	48
Disagree	7	8
Neither agree nor disagree	21	23
Strongly agree	15	16
Strongly disagree	4	4



4.3.2.3 Being active e- learning user I am able to command respect among colleagues

Category	Number of Respondents	Percentage
Agree	45	49
Disagree	6	7
Neither agree nor disagree	22	24
Strongly agree	14	15
Strongly disagree	4	4

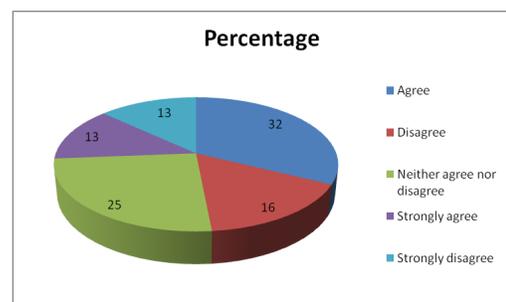


4.4 Facilitating conditions

4.4.1 ICT infrastructure

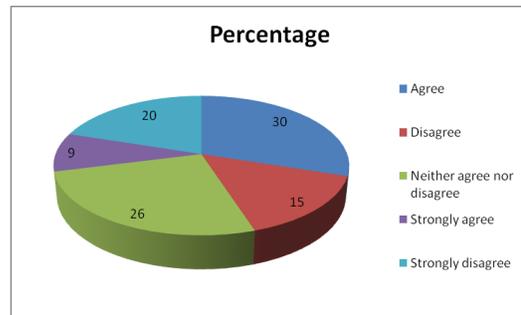
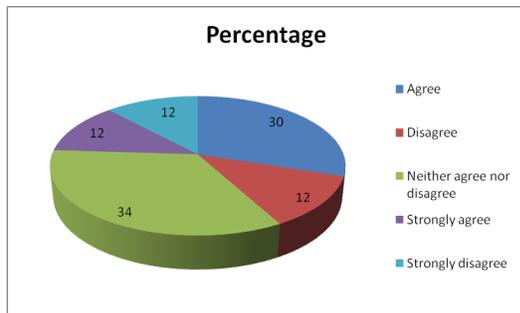
4.4.1.1 Our university has all the facilities to support e- Learning

Category	Number of Respondents	Percentage
Agree	29	32
Disagree	15	16
Neither agree nor disagree	23	25
Strongly agree	12	13
Strongly disagree	12	13



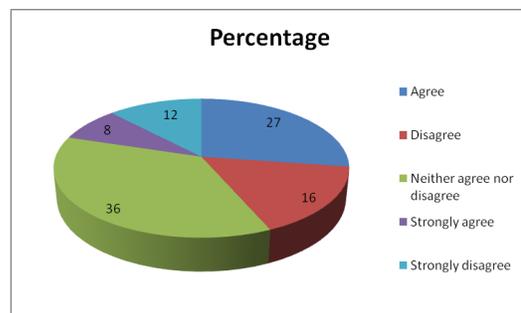
4.4.1.1 I have easy access to the ICT infrastructure of the university as per my convenience

Category	Number of Respondents	Percentage
Agree	27	30
Disagree	11	12
Neither agree nor disagree	31	34
Strongly agree	11	12
Strongly disagree	11	12



4.4.2.3 My university provides benefits in the form of learning incentives to the teachers who promote e-learning

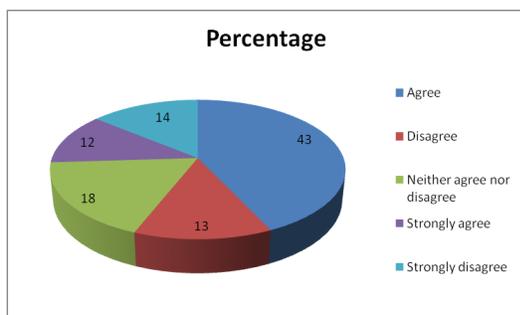
Category	Number of Respondents	Percentage
Agree	25	27
Disagree	15	16
Neither agree nor disagree	33	36
Strongly agree	7	8
Strongly disagree	11	12



4.4.2 Institutional policies

4.4.2.1 I have lots of support from my university in e-learning.

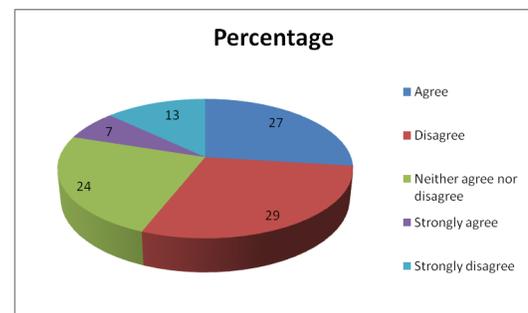
Category	Number of Respondents	Percentage
Agree	39	43
Disagree	12	13
Neither agree nor disagree	16	18
Strongly agree	11	12
Strongly disagree	13	14



4.4.3 Training and technical support

4.4.3.1 There is sufficient training facility available in my university towards how to use e-learning tools

Category	Number of Respondents	Percentage
Agree	25	27
Disagree	26	29
Neither agree nor disagree	22	24
Strongly agree	6	7
Strongly disagree	12	13

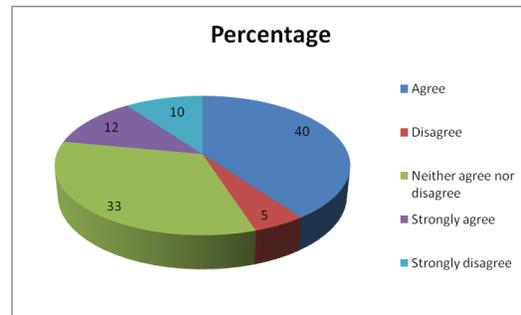
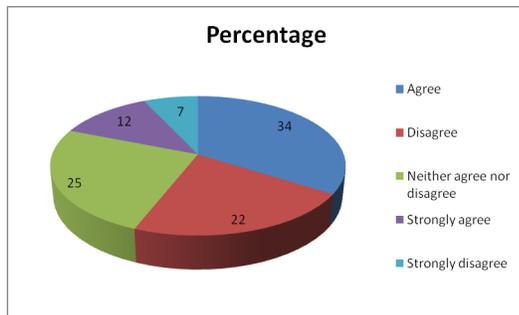


4.4.2.2 My university provides benefits in the form of learning incentives to the students for using e-learning.

Category	Number of Respondents	Percentage
Agree	27	30
Disagree	14	15
Neither agree nor disagree	24	26
Strongly agree	8	9
Strongly disagree	18	20

4.4.3.2 *There is dedicated technical support available to us in using e-learning*

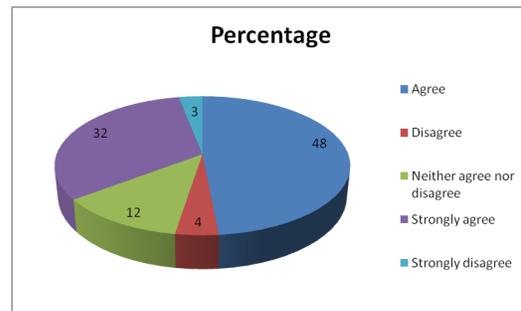
Category	Number of Respondents	Percentage
Agree	31	34
Disagree	20	22
Neither agree nor disagree	23	25
Strongly agree	11	12
Strongly disagree	6	7



4.5 Behavioural Intention

4.5.1 *I am very keen to use e-learning in the future studies*

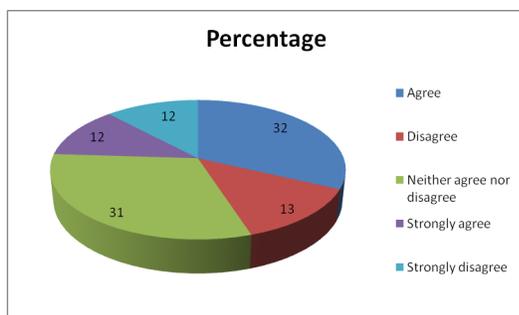
Category	Number of Respondents	Percentage
Agree	44	48
Disagree	4	4
Neither agree nor disagree	11	12
Strongly agree	29	32
Strongly disagree	3	3



4.4.4 Leadership

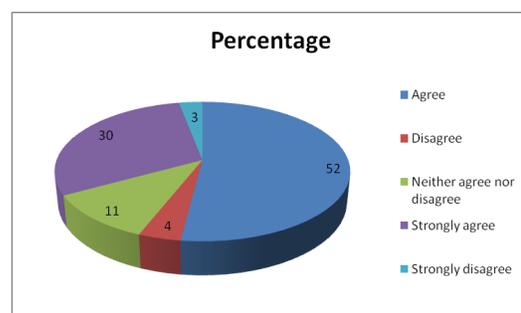
4.4.4.1 *Our university higher authorities himself using e learning*

Category	Number of Respondents	Percentage
Agree	29	32
Disagree	12	13
Neither agree nor disagree	28	31
Strongly agree	11	12
Strongly disagree	11	12



4.5.2 *I feel that I would use ld use e-learning in the next semester*

Category	Number of Respondents	Percentage
Agree	47	52
Disagree	4	4
Neither agree nor disagree	10	11
Strongly agree	27	30
Strongly disagree	3	3



4.4.4.2 *Our university head support supports students in the use of e-learning*

Category	Number of Respondents	Percentage
Agree	36	40
Disagree	5	5
Neither agree nor disagree	30	33
Strongly agree	11	12
Strongly disagree	9	10

### 4.5.3 I plan to use e-learning in the next semester

Category	Number of Respondents	Percentage
Agree	48	53
Disagree	2	2
Neither agree nor disagree	11	12
Strongly agree	27	30
Strongly disagree	3	3

## 5. Discussion and Conclusions

From the above graphs it is very much clear that most of the IGNOU learners who are enrolled in various programmes have shown their strong e- readiness, assessed across various dimensions like Performance criterion measured on the parameters of Perceived usefulness, Interactivity & Flexibility, Effort criterion measured on Ease of learning, Ease of use, Self-efficacy, Social criterion measured on subjective norms and Image and Facilitating environment measured on ICT infrastructure, Institutional policies, Training and technical support, Leadership, Learning Style / Teaching Style, Behavioral Intention, Actual Usage. We may conclude from the above survey that students are willing to be part of e- learning programmes whenever it is launched by IGNOU in future.

## 6. References

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## Annexure-I

An Assessment of the Distance Learners Acceptance and readiness for e- learning in the State of Uttar Pradesh (India)

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