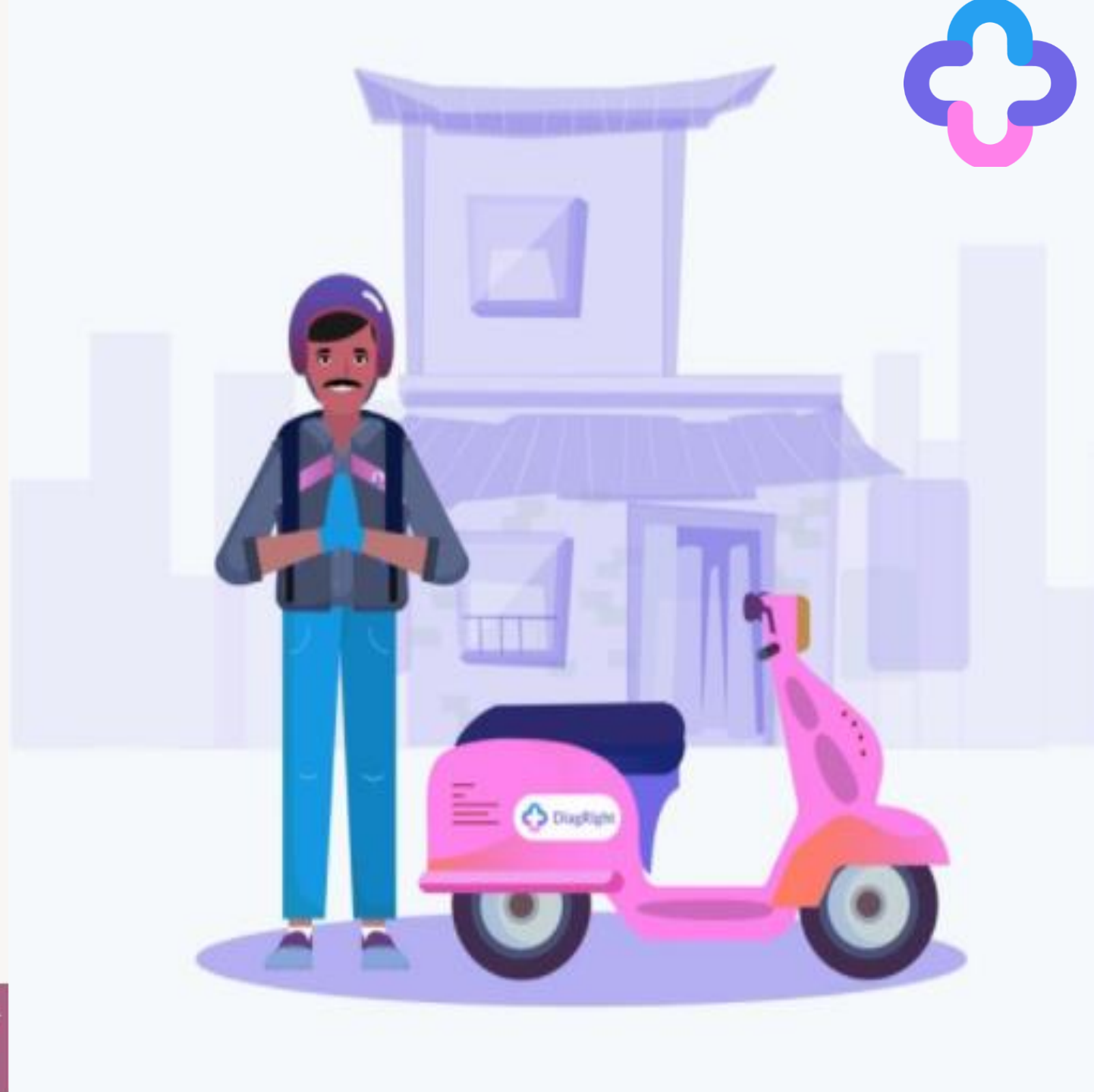




Dissertation Report

**Technology Acceptance Model (TAM) on
acceptance and use of “Home Blood
Collection App – DiagRight” by
Phlebotomists**

Faculty Guide- Dr. Sheenu Jain
Submitted by-Dr. Ashish Panghal

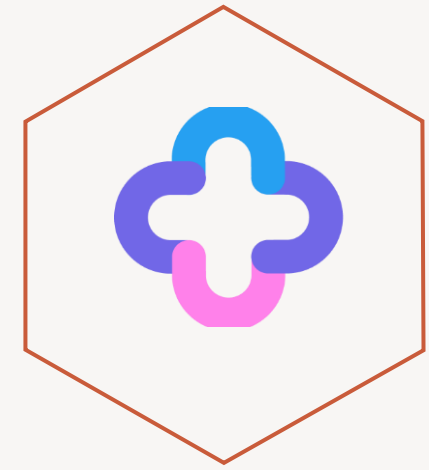




Agenda



Introduction



DiagRight is a health-tech startup working in the diagnostic space in India to bring transparency and visibility in process. DiagRight's founding team has 15+ years of collective work experience in online diagnostics.

DiagRight ensures the most accurate test results by ensuring transparency at each step & strict adherence to NABL (National Accreditation Board of Testing and Calibration Laboratories) India guidelines for quality control right from the sample collection to reporting of results.

The unique value proposition of the company is that it provides Temperature monitoring and LIVE tracking, Partner NABL accredited labs, ensures that samples travel time less than 4 hours, Digital (machine) reports of customers, Customer E-health records and Doctor and nutritionist consultation.

The technology acceptance model (TAM) is a systems theory that models how users come to accept and use a technology when it is launched. The model states that when users are presented with an innovative technology, several factors influence their decision about how and when they will use it.

ROLE IN ORGANIZATION-



PROJECT MANAGER IN PROJECT KICK-OFF

The main deliverable in this project was to ensure the adoption of new tech developments in the company's various department. We managed to activate 600 labs in app and adoption of newly developed admin portal in operations team.



PROJECT COORDINATOR IN PROJECT EAGLE

to facilitate the launch of services in the new cities in project Eagle which was DiagRight's initiative to speed up the expansion in the new cities by identifying new cities with the team, ensure availability of phlebotomists and labs in these cities by inter-team coordination. The availability of kits and other consumables should be ensured beforehand.



PROCESS IMPROVEMENT-

The key responsibility is to streamline and automate the process with minimal human interaction in the repetitive tasks in the operations department. Identified and improved the process of customer query data sheet, RCA, process sheet, and inventory sheet.



PROJECT MANAGER FOR APNA DUKAN INITIATIVE

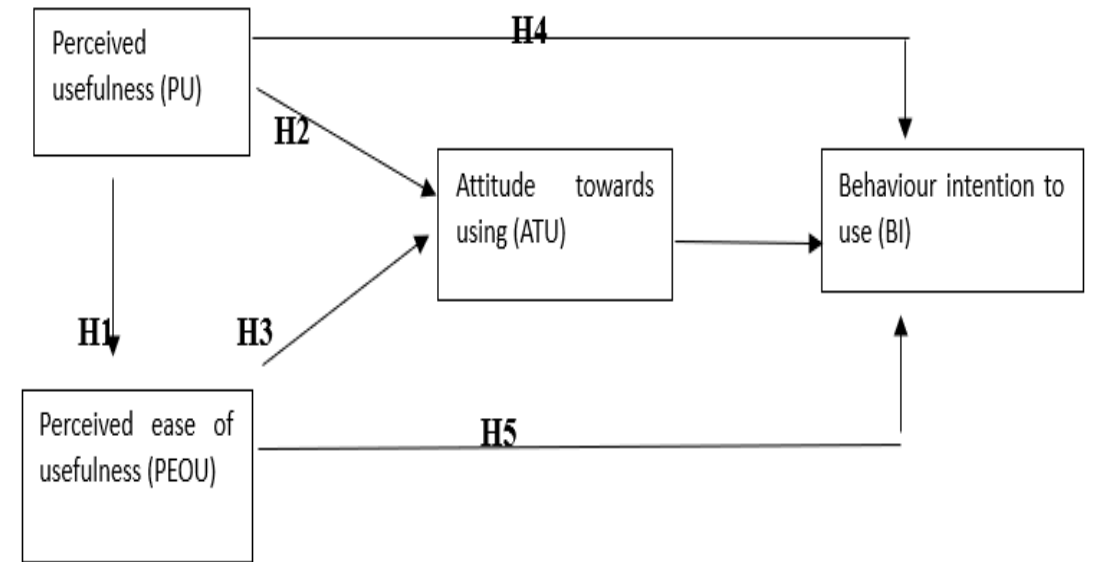
APNA DUKAN was an initiative in the phlebotomist's app where they can process their orders with higher incentives and earnings. The key deliverable in the project was to achieve the first 500 order in the Gurgaon geographical area with the available phlebotomists.

- Perceived usefulness(PU)**- It is the degree to which a potential user believes that using the technology would enhance his or her work performance.

- Perceived ease of usefulness**- It states that how effortless or easy will be the use of newly developed technology.

- ATU**- It is the potential user's positive or negative feeling associated with performing a specific behavior.

- BI**- It is the degree to which a potential user has formulated conscious plans to perform or not perform some specific future behavior.



TAM MODEL



METHODOLOGY

Type of study: Cross-sectional analytical study

Research question:

What is the acceptance of “Home Blood collection App- DiagRight” amongst the phlebotomists using TAM?

Research objective:

- To understand the relations between PEOU and PU.
- To understand the relationship between PEOU and ATU.
- To understand the relationship between PEOU and BI.
- To understand the relationship between PU and ATU
- To understand the relationship between PU and BI.
- To understand the relationship between ATU and BI.

Hypothesis-

H1: There is a significant relationship between perceived ease of use and perceived usefulness among the phlebotomists.

H2: There is a significant relationship between perceived usefulness and phlebotomists' attitude towards using the home blood collection application.

H3: There is a significant between PEOU and phlebotomists' attitude towards using the home blood collection application.

H4: There is a significant relationship between perceived usefulness and phlebotomists' intention to use the home blood collection application.

H5: There is a significant relationship between perceived ease of usefulness (PEOU) and phlebotomists' intention of use the home blood collection application.

H6: There is a relationship between Attitude towards using(ATU) and phlebotomists' intention(BI) to use app.





Type of study: Cross- sectional analytical study.

Sample size- 108

Data collection method: A semi structured questionnaire was circulated amongst the phlebotomists' which had questions to assess the acceptance, ease of using the app, and behavioral intentions to use the app with the help of five pointers Likert's scale.

Inclusion criteria: Phlebotomists' who are using the home blood collection application in the region of Delhi NCR, Chandigarh tri-city, Dehradun and Jaipur.

Exclusion criteria: Phlebotomists' who are not using the "Home Blood collection App- DiagRight" and are not working in these areas.

Analysis Plan

Data cleaning and conversion

The Likert scale responses were converted to the numerical format using MS Excel. The all of these questions were coded in numerical data.



Computation of variables

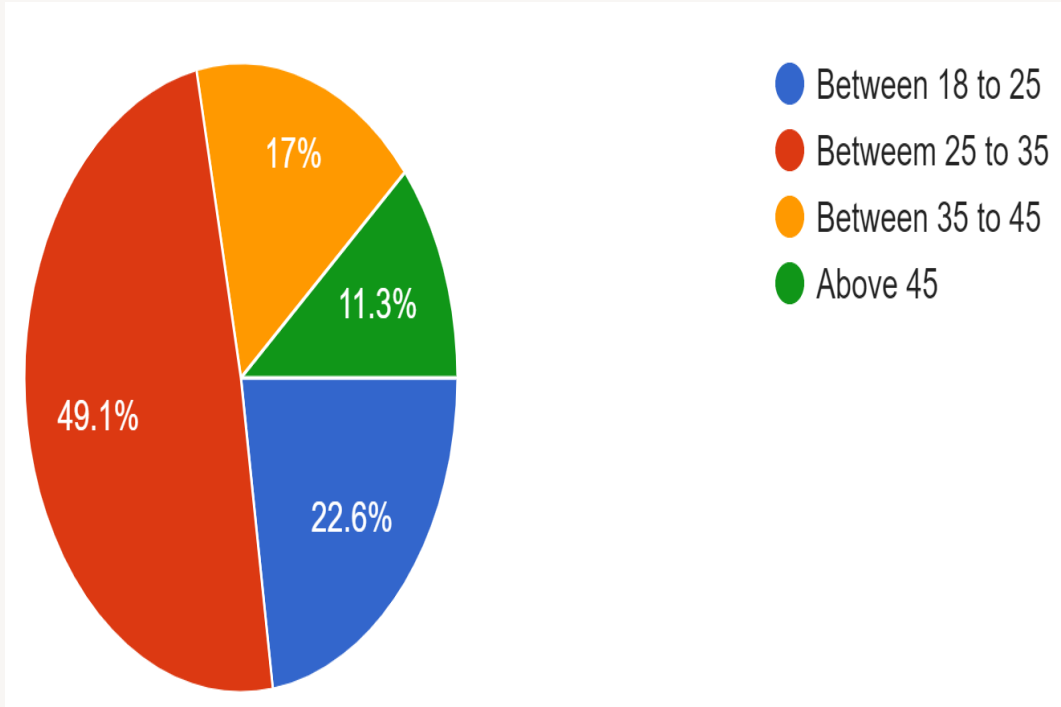
To analyses the data collected in multiple questions(Multiple questions for 1 parameters), new variables were computed using SPSS. Total 4 variables namely PU, PEOU, ATU, BI were calculated for the existing questions.



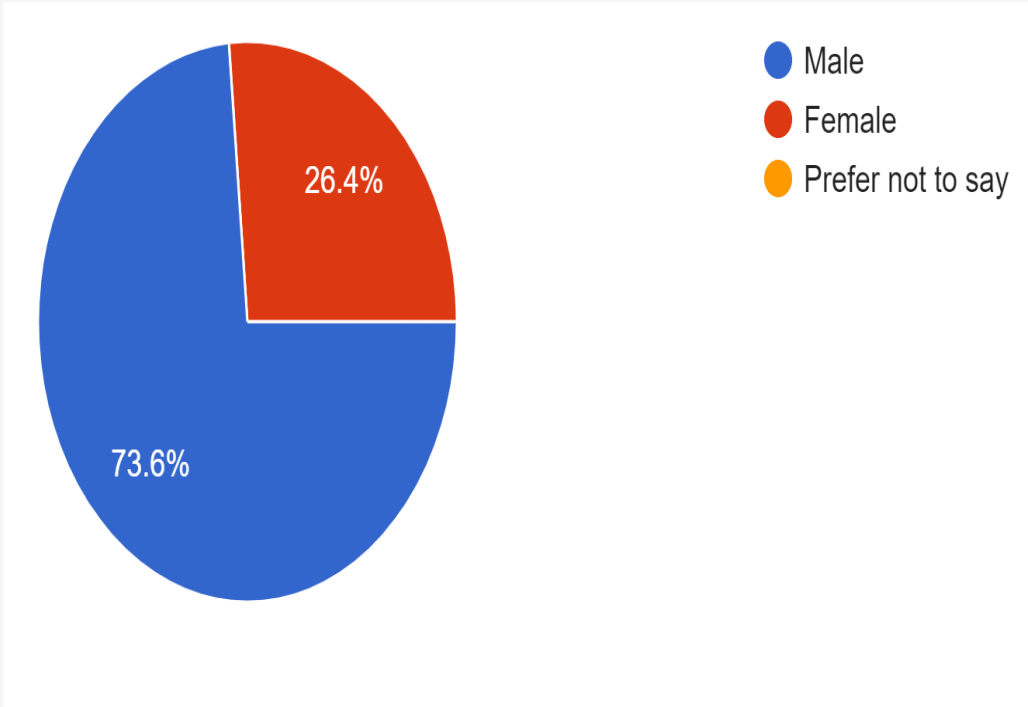
Analysis using MS Excel and IBM SPSS

The collected demographic data analysed using MS Excel and computed variable were analysed IBM SPSS

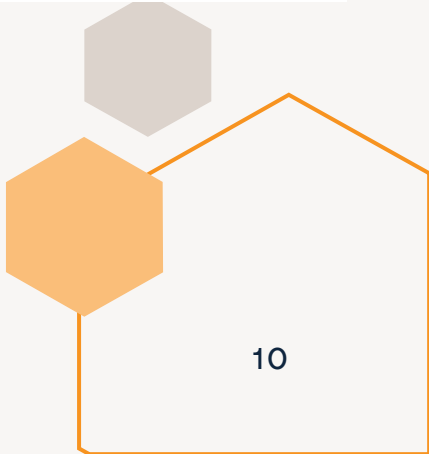
Results-

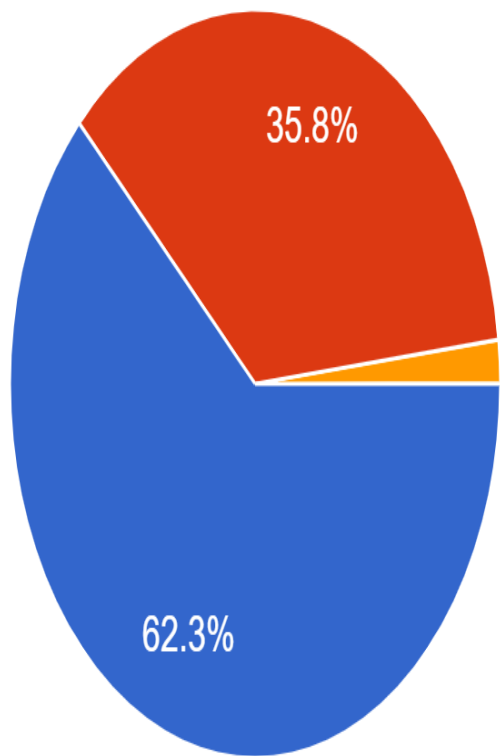


Age Groups



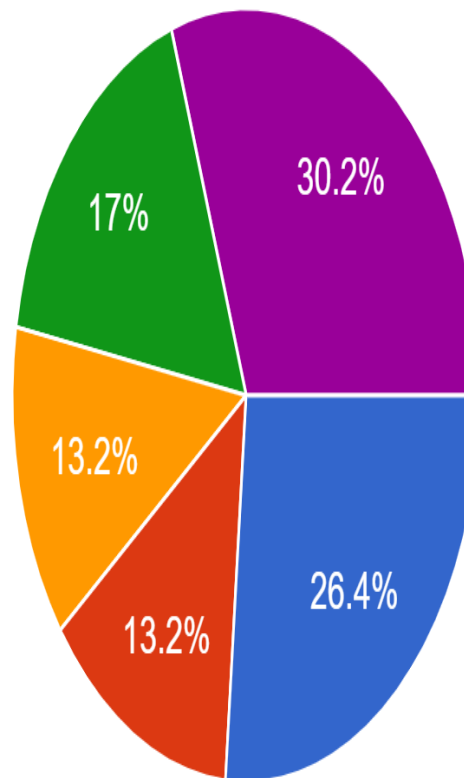
Gender





- Diploma
- Graduate
- Post-graduate

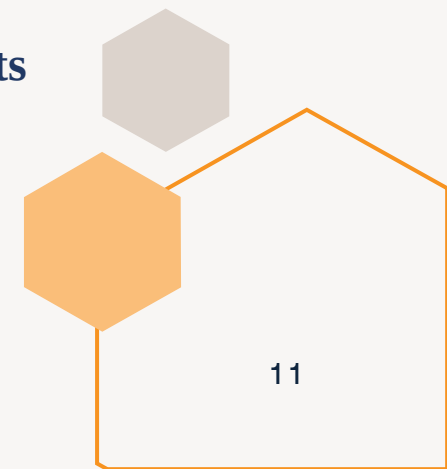
Educational Qualifications

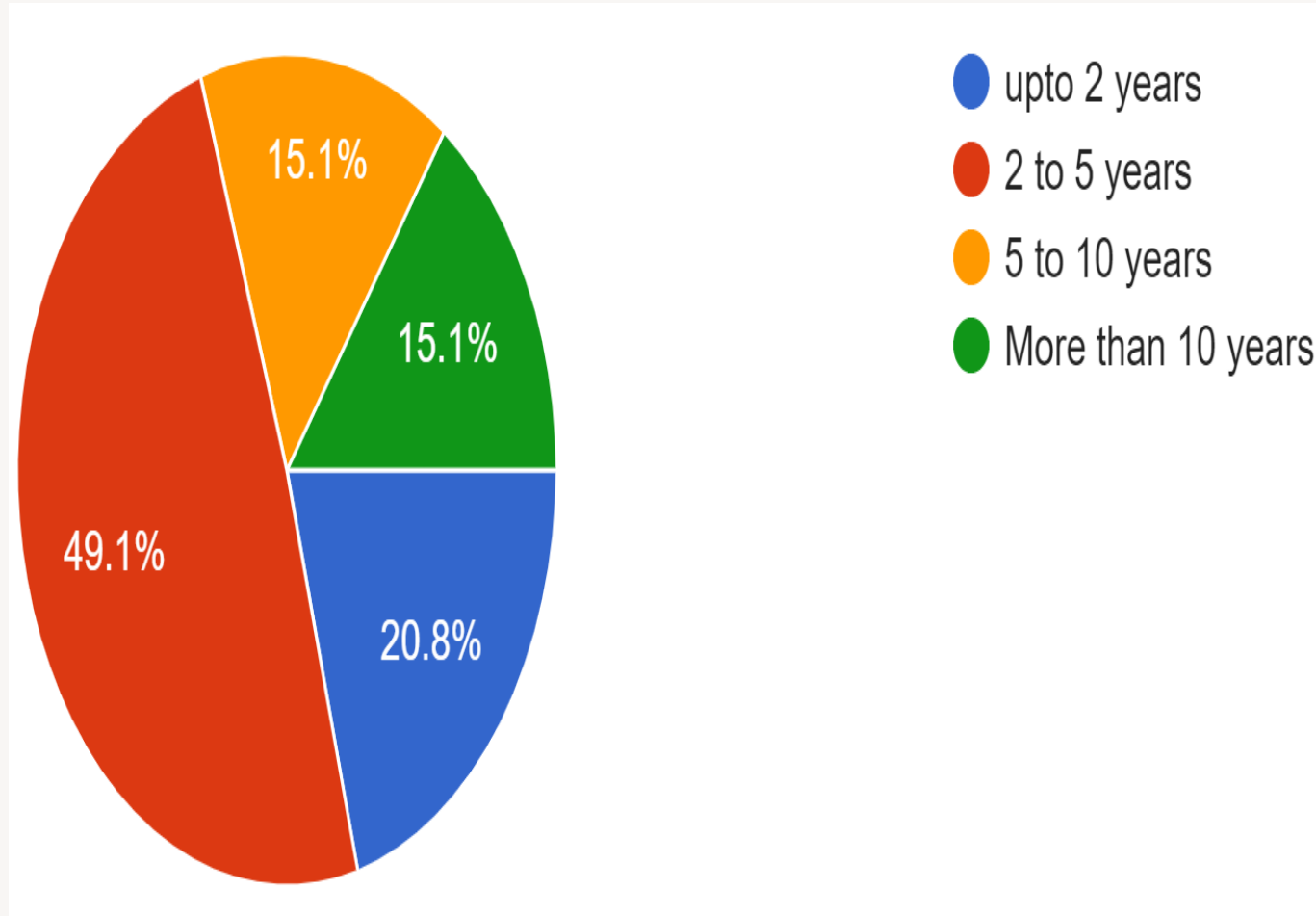


- Delhi NCR
- Chandigarh Tricity
- Dehradun
- Jaipur
- Lucknow

Locations of Respondents

Demographic Characteristics

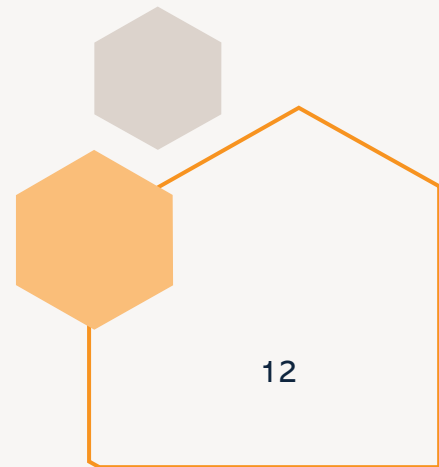




Experience of respondents

Demographic Characteristics

Presentation title



		PU	PEOU	BI	ATU
PU	Pearson Correlation	1	.894	.723	.801
	Sig. (2-tailed)		.000	.000	.000
	N	108	108	108	108
PEOU	Pearson Correlation	.894	1	.818	.864
	Sig. (2-tailed)	.000		.000	.000
	N	108	108	108	108
BI	Pearson Correlation	.723	.818	1	.926
	Sig. (2-tailed)	.000	.000		.000
	N	108	108	108	108
ATU	Pearson Correlation	.801	.864	.926	1
	Sig. (2-tailed)	.000	.000	.000	
	N	108	108	108	108

	Mean	N
PU	2.9105	108
PEOU	2.9580	108
BI	2.8565	108
ATU	2.8719	108

Pearson correlation

Results-

H1	H2	H3
A significant relationship was found between PEOU and PU, and this reinforce the hypothesis H1 (significant level = 0.894). • H1: There is a significant relationship between perceived ease of use and perceived usefulness among the phlebotomists	There is statistically sufficient evidence regarding the impact of PU on the attitude of Phlebotomists to use app and this reinforce for H2 (correlation coefficient = 0.801). • H2: There is a significant relationship between perceived usefulness and phlebotomists' attitude towards using the home blood collection application.	The results also reinforce for a significant relationship between PEOU and Phlebotomist's attitude towards using App. This means the results reinforce hypothesis H3 (correlation coefficient =0.864). • H3: There is a significant relationship between PEOU and phlebotomists' attitude towards using the "Home Blood collection App-DiagRight".

Results-

H4	H5	H6
H4 is also reinforced by the results as they show a statistically significant relationship between PU and Phlebotomist's intention to use "Home Blood collection App-DiagRight". This is at a 0.723 correlation coefficient. • H4: There is a significant relationship between perceived usefulness and phlebotomists' intention to use the "Home Blood collection App-DiagRight".	The data also indicate reinforce for hypothesis H5. The results show a significant positive relationship between PEOU and Phlebotomist's intention to use Home blood collection app. correlation coefficient.(0.818) • H5: There is a significant relationship between perceived ease of usefulness (PEOU) and phlebotomists' intention of use the home blood collection application.	The results show a significant relationship between Phlebotomist's attitude to use Home blood collection app, and their intentions to use Home blood collection app. This reinforce of hypothesis H6 is shown by a 0.926 correlation coefficient. • H6: There is a relationship between Attitude towards using and phlebotomists' intention to use app.



Conclusion-

The phlebotomists also showed attitude and intention to use the app. Pearson correlation showed significant relationship between PEOU and PU, PEOU and ATU, PEOU and BI, PU and ATU, PU and BI, ATU and BI. This study thus proved that TAM to be a useful theoretical model in helping to understand and explain the behavior intention to use the “Home Blood Collection App- DiagRight” Previously, several Literature review showed that TAM is effective in predicting the acceptance of a technology, as well as the results of this study indicated that TAM is effective in anticipating the possibility of acceptance of “Home Blood Collection App- DiagRight”



Recommendations-

- App sometimes crashes or hangs which is issue with the technology team, it needs to be resolved as soon as possible.
- Documentation verification process can be made more faster as some phlebotomists were facing issue with long waiting periods to verify documents.
- Some specific smartphone brands shows difficulty in installing and starting the application.
- The order notification can not be disabled by the phlebotomists even while they are not available(offline), causing discomfort in non-working hours.
- A video tutorial to use the app and it's features can be created and added to app as that will help the phlebotomists to use the app more efficiently.

Questions?





Thank you