

A Conceptual eHealthCare4U Digital Platform Business Model: Ensure healthy lives and promote wellbeing for all ages of Healthcare and including prevention & cure

¹Issa Mahamat Issa Ahmat, ²Gaber Amer Abdullah Saleh Yahya,
³Tengku Ebar Syarif Hamzah, ⁴Abdul Rahman bin Ahmad Dahlan

^{1,2,3,4} Department of Information System, Kulliyyah of Information and Communication Technology, International Islamic University Malaysia

Abstract: The ultimate objective of this paper is to propose an online platform that connects patients, doctors, and pharmacies through a web-based platform. With the progress of life and new technologies, and the hectic life that people live, this platform will provide many advantages to its different categories of intended users. The services of the platform mainly focus on elderly patients, caretakers, doctors, pharmacists, and hospitals. eHealthcare4U is a conceptual business model that provides real solutions to sick and healthy people. Healthy people by preventing them from sickness and ill people by giving them the ability to search for the medicine prescribed by doctors and deliver it to them. Also, we help people who want to get the drug or any medical product that is difficult to understand or not available in hospitals and pharmacies around them to help them live with good Health and Well-being. The Design Thinking methodology is adapted for this paper which is to understand the critical problems, ideation of possible solution options, validation of solution options by customer segments, and to suggest a conceptual business model and solution. This includes conducting a literature review and benchmarking, conducting interviews using the business modelling tools, i.e. the nine blocks of Business Model Canvas (BMC), Value Proposition Canvas (VPC), Environment Map (E.M.), and Strategy Canvas. This paper offers a validated conceptual business model of a digital platform, with a focus on enhancing the experience of patients, busy working and healthy people to get medical products from pharmacies or hospitals, and doctors, pharmacists to speed up the process of prescription of patients to understand what need at the soonest possible time in real-time communication and transactions through the platform.

Keywords: Well-being, SDG3, Medicine, doctors, pharmacists, hospitals, Healthcare, patients, digital platform business model.

I. INTRODUCTION

No doubt, with the boom of information technology and the internet of things, our life becomes faster in terms of achieving our daily life tasks. Internet shopping is a phenomenon that is overgrowing nowadays. A peep into the exponential growth of the leading players in this industry indicates there is still an extensive reservoir of market potential for e-commerce. Everything is directly or indirectly done by technology, and many traditional businesses started leaving the old usual traditional way in conducting its business and shifting to adopt the new changes that the technology has brought [2]. Over the recent few years, many online platforms have started selling many medical products for people. Some of these products, unfortunately, are not the same as the user wanted, or maybe they are not available at all in these online platforms or even do not exist in the physical pharmacies. In May 2017, CNBC reported that Amazon was to hire a general manager to lead the push into the healthcare market [3]. Amazon has since hired 40–50 people (including a

former chief health informatics officer of the United States Food and Drug Administration), who are reportedly looking at how the entire drug supply chain can be disrupted [4]. Amazon's curiosity in the pharmacy market is not new. In 1999, it owned 40% of the online medicine retailer drugstore.com, which was eventually sold to Walgreens in 2011[5]. From this point, this paper shows a solution for patient people, doctors, and highlights the benefits that they gain an alternative and efficient platform that guarantees proper medicine and helps to save people. In today's life, no one can deny how technology changed the way we live our life. New technology brought ease to our life; everything can be done within a blink of an eye because it is done through technology. Besides that, health became part and parcel for technology since many people depend on the internet to get knowledge about different things. Healthcare Information Technology (HIT) continues to hold immense promise for reducing medical errors, collecting instant and vast data from across medical providers, increasing efficiency, improving clinician and patient satisfaction sharing data, guiding clinicians with up-to-date findings, and facilitating teamwork within and across professions [6]. Many people face difficulties when they search for a specific medicine, especially the older adults, parents who cannot afford to leave home, and those who do not have any means of transportation. For poor elderly who have financial problems and cannot offer the cost of the medicine, they can benefit from this platform by getting the dose that they need to take and do shipping other medical items and get available caretakers for them who require assistance support. For the parents who are busy with the work or cannot find time to go and search for the medicine, they can take advantage of this Website and search for the medication that they want. Also, many patients might not know the exact dose that the doctor prescribed for them so that they can send or upload the prescription to the Website and some of the pharmacists will assist them in getting the medicine 24/7 at any given time around the clock through an efficient centralized, secure architecture for an end to end integrated healthcare systems. Many business technologies are introduced recently, which enable people and objects to interact with each other. Therefore, all the parties need to have a platform that allows them to finish all the process as soon as possible and solve all the problems that might be countered when they want to get what they want [7].

II. PROBLEM STATEMENT

Many different people in society face difficulties when they want to find medicine or medical items or might be ignorant about the side effects that this medicine might cause if it is taken without any prescription from a doctor. Right now, many platforms sell medical products, but sometimes these products or medication are not the right ones that the patients are supposed to take. This may cause some severe issues or compromise the medical conditions of people. Considering the breadth of medicines available without a prescription and the spectrum of problems that can arise with medication use, pharmacists, particularly those working in community pharmacies, have the potential to make a significant impact on society [8]. A significant problem that can raise many ethical issues and practice challenges are prescription/nonprescription medicine misuse and abuse [9]. Sick people find difficulties to get the right medicine, and people around them do not have the time to go and get that medicine. Through this platform, doctor and pharmacists take care of these problems and people who want the medication to get the right medication. Through our drivers, we will deliver their orders to their doorsteps in a very convenient way. Sick and healthy people suffer from the distance from their location to the hospital. For example, healthy people want to inquire about something, and they can attach their question through the platform so they can get a reply without consuming time and money.

III. LENSES OF INNOVATION

1) **Challenging Orthodoxies:** Enable people to understand that the safest way to buy medicine and medical items is through an authorized platform that is managed by well-experienced doctors and pharmacists and gets what they want to the doorsteps of their house. Next, make them realize that this platform will help them to save time, effort and money. Finally, make them have a complete belief and trust in the eHealthcare4U digital platform and gain mass customers to fulfil their requirements.

2) **Harnessing Trends:** With the progress of life and new technology, shopping online has become one of the trends that almost everybody prefers, rather than going to the physical shops and doing traditional shopping. It is the fashion in today's life to let things come to our house instead of going out and bringing them. People nowadays by default like to do daily activities as quickly as possible and get done with them. Therefore, we thought it kind of exciting to help people to get medical stuff and deliver them to their homes by consulting them online and communicating with them through digital healthcare apps, websites, social media platforms, etc.

3) **Leveraging Resources:** Looking at the business of eHealthcare4U from a leveraging resources perspective, we mainly focus and target the people face difficulties when they search for a specific medicine especially the older people, parents who cannot afford to leave home, those who do not have any means of transportation and those who are packed with their work. Besides, we put into account people who are classified as a B40 from Malaysian society.

4) **Understanding Needs:** This will provide aids to people who are in desperate need of medical products and medicine as quickly as possible and people who might need help or advice about a specific kind of medicine especially, the older people. Healthcare and wellbeing are some of the most fundamental factors that the entire society needs to be fully aware of them.

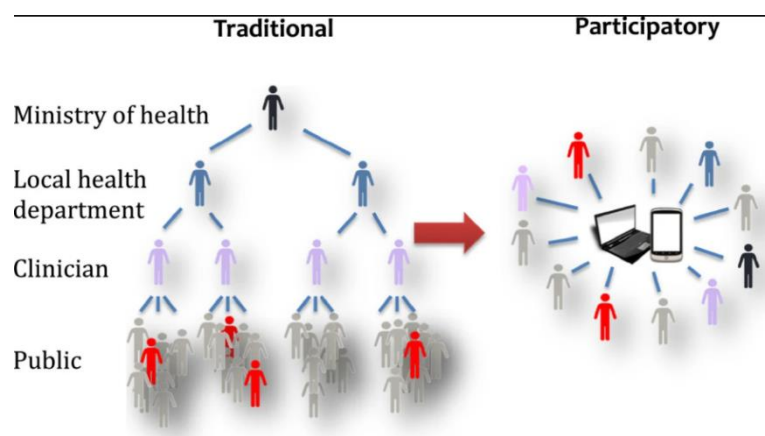
IV. LITERATURE REVIEW

To simplify the analysis and speed up the process of producing this project, we make a detailed literature review on similar existing applications in the market and industry. We could notice the value and benefits of these applications, and we could extract them to provide it to our intended customers. Several online platforms offer similar services, and we have gone through them by systematically reviewing them. These companies conduct their business in some countries like The United States of America, Canada, Germany, France, The United Kingdom, and Australia. We highlighted the advantages and disadvantages of these businesses for the betterment of our business.

A. Healthcare Industry:

Healthcare is one of the essential infrastructures in society; it helps people in curing as well as preventing disease. Furthermore, it also decreases the risk of a pandemic by researching new strains and illness. In the past, people struggled to have a healthy community because healthcare facilities are not accessible to the public; only specific categories of people with secure wealth can afford to have Healthcare. However, today, almost everyone no matter how good the individual's financial situation is, they are eligible to access healthcare facilities. There are some new segments of Healthcare which just rose in recent decades, which are online healthcare businesses. These businesses focus on on-demand services like doctor's visits, ambulance calls, etc. Furthermore, they offer us a medical supply e-marketplace to buy medicine, prescription and sanitary products.

There is a big difference between transitional Healthcare and online Healthcare, which in traditional Healthcare needs more consuming time and staff as well. Some research collected data about participatory surveillance systems, and they found that it is more comfortable and more suitable than traditional health care based on conventional healthcare surveillance systems because participatory surveillance systems can be access through online via a simple device such mobile phone.[18]



B. Sustainable Development Goals 3 and 8 (SDGs)

eHealthCare4U is an online platform that connects patients, doctors, and pharmacies through a web-based platform. eHealthCare4U will satisfy the working adults to bring their medical services through the internet as well as it will increase the economy by making new opportunities for drivers and caretakers. Besides, taking good care of sick people and also educating healthy people by giving them useful awareness.

C. Digital/IR4.0 in Healthcare

Coming digital hospital concept is a practice to the forefront and invested in by developed countries in recent years. Mercy Virtual Care Center offers remote diagnosis and treatment methods that made in the United States, the first founding hospital without beds in Missouri named Mercy Virtual Care Center provides remote diagnosis and treatment methods.[16]. According to the previous statement, there are benefits from the technology which will help in public Awareness of Healthcare. "According to the rapid population ageing and the increase in the number of people with chronic diseases, digital healthcare services are getting more and more attention. The recent improvement in information technology has expanded the consumers of digital healthcare service from the patients to the general population. Therefore, there is a growing need for studies on the status and needs of digital healthcare users in general".[17]

D. Benchmarking:

For the efficiency and quality of the business, benchmarking of the project is one of the fundamental things that any start-up business has to make. Benchmarking helps to measure the development process of the project from different angles, and it provides a systematic approach and standard framework for the business to conduct in a perfect environment and perform best practices from the other competing companies in the market.

1. Online marketplace with delivery service: Amazon, Lazada and Shoppe

<https://www.vox.com/recode/2020/3/19/21185746/covid-19-seniors-apps-amazon-skype-food-delivery>

Food and medical supplies are essential amid the coronavirus pandemic. It is vital to get stocked and plan for the near future. Amazon offers a solution to this problem which is delivery services. They can deliver the item that people need to survive the pandemic. In Malaysia, Lazada and Shoppe dominate the delivery market by having a massive scale of delivery area for people in need.

2. Online prescription business:

Pharmacy Checker <https://www.pharmacychecker.com/#!>

It was founded in 2002 by Tod Cooperman, and the purpose is to provide the increasing number of Americans searching online to save money on medication with the necessary information to protect their health and safety. They offer medical prescriptions worldwide for those who didn't manage to find the recommended medicine from their trusted doctor.

3. Online prescription business: Doctor2U

<https://www.doctor2u.my/medication-delivery/>

Doctor2U is an on-demand mobile app that provides healthcare services to you with just a push of a button. It was founded in October 2015 by Garvy Beh, and the aim is to provide on-demand healthcare services across Asia. At the moment, they have four services that are being offered to our customers which are Doctor House Calls, Medication Delivery, Live Chat, Video Consultation.

E. Interview and survey:

We will conduct some interviews to identify the requirements of the working adults, doctors, pharmacists and drivers and meet their needs. Then we develop an online survey to get statistics and numbers about the project and opinions from the audience for eHealthCare4U.

V. ENVIRONMENT MAP

1. Key Trends: In this age of technology, almost everybody has at least a smartphone, tablet, laptop, personal computer or any computing device, this will make our Website accessible by anyone at any given time and get what they want to get on the site. Since everybody has access to the internet, we will benefit from this trend by developing a useful application. Based on the mega-trend study, People are now buying everything online in Asia, Europe and North America. In the car, trains, subway, at work, at home and on the go, people all around the world now use smartphones or other computing devices to do shopping by using smart cards to pay, with many big U.S. cities. Millions of U.S. customers are now using online platforms to get payment solutions, with tens of millions more planned as the latest e-commerce payment programs underpinned by the financial sector are introduced nationally. Many companies are now switching to

digital-first processes to save time. Many large corporations depend on expense solutions such as TravelBank and Expensify to funnel expenses directly to their finance departments from the current cash register. At the same time, credit card companies such as Brex and Divvy are creating payment systems to streamline those activities. We can see a new wave in all of the big companies that are now trying to go for online methods which will change the industry and lessen peoples' suffering. [10]

2. Market Forces: As we notice that good health and wellbeing is one of the most critical factors that affect people's lives in society. A person should be healthy physically, mentally, psychologically and spiritually. People, especially elderly patients, need someone who takes care of them and looks after them, they need some special attention. This effect was independent of people's current level of socioeconomic status, emerged most strongly when adults were experiencing financial threat and were mediated by differences in willingness to take risks between people from poor versus wealthy childhoods [11]. People, especially nowadays, have become more aware of their health; they want to get medical needs from an authentic source, and this is one of the issues that concern many people. The old traditional way consumes a lot of people's time and money because they might buy the wrong product and medicine. The current development of technology this problem is easy to solve by creating a web-based application that brings benefits to society and is compliant with its culture and values.

3. Macroeconomic Forces: No doubt, one of the most factors that customers think of is their money and emotional thinking when they want to purchase something. Indeed, the economic crisis and standard of living will play a significant role in the decisions that the customers make. Based on this, we targeted those who are in desperate need of getting medicine and medical products within a short period. With the growth of people who are concerned about their health, many people in Malaysia spend a lot of money for the sake of their health. Malaysia's healthcare industry spending is expected to reach about RM80 billion by 2020 and expected to jump to approximately RM100 billion by 2025 said the Health Minister [12]. All these vast numbers and the tremendous demand in this segment make our solution one of the factors that increase the economic power of the country at large.

4. Industry Forces: This product developed after reviewing the similar existing products and in the market and industry. In Malaysia, a platform that contains all these features and facilities for people has not existed yet created by other people. Up to very recently, doctor on call, a Malaysia-based digital health platform by Health Digital Technologies Sdn. Bhd, emerged and has partnered with Merchantrade Asia Sdn Bhd (Merchantrade), which will allow Merchantrade Money application's users to access online consultations with accredited doctors and e-pharmacy, purchase medication safely and have them delivered conveniently [13]. The emergence of this kind of business in Malaysia will bring a lot of customers to our segments. When we compare the situation in Malaysia with other countries like The United States of America, Canada, Germany, France, The United Kingdom, and Australia, they all have this kind of Website or application. The present scenario of the online pharmacy market in Europe and its market dynamics for the period 2019-2025. It covers a detailed overview of several market growth enablers, restraints, and trends. The study offers both the demand and supply aspects of the market. It profiles and examines leading companies and other prominent companies operating in the market. From this point, we will purpose this project to the Ministry of Health in Malaysia, so they will be our real stakeholders. We have a strong belief that this will bring a new bright future for the country and develop the segment of health.[14].

VI. STRATEGY CANVAS

For eHealthcare4U to become a successful competitor with the other businesses, we need to think out of the box and bring new methods, strategies, and mechanisms to ace the competition. The latest fashion and trend of the digital world and the revolution of the various kinds of industries and technologies must be applied to the proposed project. The ultimate goal of the intended audience is to get what they expect to get as quickly as possible, and this is the opportunity that our solution and value proposition solve problems in society daily activities. We are not thinking of staying within our local borders but widen it to become a global business. Undoubtedly, one of the most important things that everybody could dream of is to have to save and manage time efficiently. To address this matter, getting medicine and medical products in hand is a service that enables users to reduce their waiting time and thus use it to do other things. As the idiom says, we may kill two birds with a single stone. Saving time and completing more tasks.

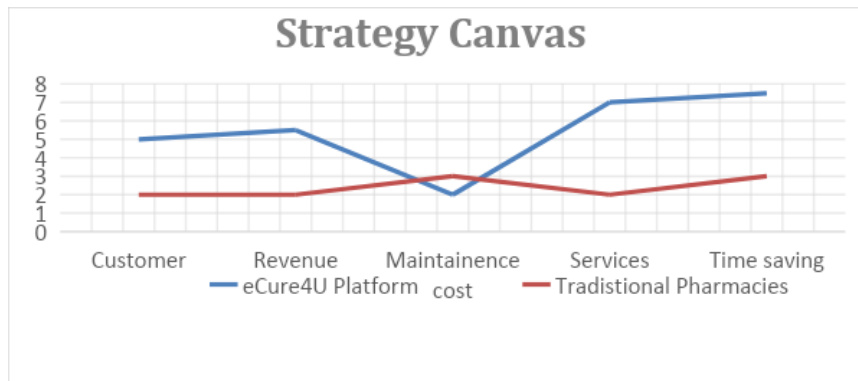


Figure 2: Strategy Canvas

VII. INITIAL BUSINESS MODEL

To start up a new business, we use a business model canvas as strategic Management and lean start-up template for developing new business models. It describes a product's value proposition, infrastructure, customers, and finances by leveraging on the nine blocks of Business Model Canvas (BMC) framework [15] namely Value Proposition, Customer Segment, Customer Relationship, Channel, Key Activities, Key Resources, Key Partners, Course Structure and Revenue.

Business Model Canvas		Designed for:	Designed by:	Date:	Version:
				06-April-2020	2
Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments	
Hospital Medical centre International/Local Pharmacy Ministry of Health Global/Local Delivery Company Payment gateway	Delivering the medicine Selling product from pharmacy Information for news feed Interviewing doctors for tips to prevent disease disaster Managing of KP(Key Partners) and CS(Customer Segment)	Trusted platform for customer as we work with our verified and professional key partners International and Local delivery medicine and sanitary products to your home Passionate and caring caretaker to help sick elderly and needy people. Saving time for those ill customer who do not have enough time to get the medicine. E-market for medicine and sanitary products (excluding fatal and cancerous illness) News feeds for current situation on a pandemic or recent health-related news Forum for health F.A.Q answered by experts in their field Provide opportunities of jobs for drivers and caretakers Platform to sell medicine for our supplier	Points for discount or freebies Discount on products Engagement of Virtual Face to Face health consultation with our healthcare professional	❖ Sick - Elderly/needy, - Normal ❖ Busy working adults ❖ Mother or Father who cant afford to leave home ❖ Supplier of medicine ❖ Doctors ❖ Drivers ❖ Caretakers ❖ Health centers	
	Key Resources		Channels		
	Healthcare Experts Software builders Software maintenance experts Drivers Caretakers		Virtual Channel (Website, Media Social)		
Cost Structure		Revenue Streams			
IT infrastructure Maintenance and development of applications Employee wages Advertisement for our early stage of our business		Product selling Ads inside the news feed			

Figure 3: Initial BMC

A. Customer Segment

The block of customer segments illustrates categories of customers that our product directed to. These customers will be our main focus on delivering our value proposition and maintaining our customer relationship. These are the type of customer that we include but not limited to:

Ill Elderly/needy People

The people who would use our services to help them ease their wellbeing.

Busy & working adults

The people who are interested in buying medicine or ordering prescriptions, but their work's schedule doesn't allow them to get their items directly from pharmacies.

Mother/Father that can't leave home

The people who don't have the opportunity to leave their home because of their children or their parents who need to be taken care off.

Medicine Supplier

Our medicine and prescription will be supplied and crafted by our pharmacy partner.

Doctors/Health centres

These people would provide information and ideas on health topics. Furthermore, they can accept consultation online using our platform.

Caretakers

These people would provide service by taking care of ill people based on their request and appointment. Their responsibility is to ease and help the ill so that they can recover quickly.

B. Key proposition

The critical proposition describes the value of products and services that our business aims to deliver, which will be offered to our customer segment. The amount varies between each customer segment which will be mainly focused on medicine/prescription delivery, Online health consultation, and caretaker services.

E. Channels/

Our channels will help us in promoting and selling our value proposition. The circuit mainly consists of Facebook, Instagram, and Website application.

F. Customer Relationship

Customer relationship describes the type of relationship between our business and our customer by maintaining it using our selected programme. eHealthCare4U will provide discounts and coupons on our reliable and fast delivery of medicine/prescription. Furthermore, it also offers a credible source of health information and honest online consultation.

G. Key Resources

This block describes the most critical and essential assets of our business which are required to run eHealthCare4U. Our primary resources include drivers (runners, riders) caretaker, doctors/health professionals, software developers.

H. Key Activities

Our principal activities will depict what it will need to do to make our business work as intended. The primary activities include delivery of medicine and prescription from a pharmacy, Management of critical partners and customer segments, interviewing doctors, and lastly, creating a platform for (a) health professionals to express their medical ideas and health tips, (b) consumer segments in taking care of their health.

I. Key Partners

Our key partners are collaborators of our business that will ensure that our principal activities are working correctly as planned. The key partners are medical facilities, international/local pharmacies, payment gateway, global/local delivery company.

J. Cost Structure

The cost structure of our eHealthCare4U includes I.T. infrastructure, Employee wages, Advertisement cost, Maintenance and development of our application.

K. Revenue Stream

Our revenue stream will mainly come from the sales of medicine/prescription, caretaker services and other party advertisements inside our freemium application.

VIII. INITIAL BUSINESS MODEL – VPC

Value Proposition Design Canvas to find out the problems that surround our customers and try to get their satisfaction and overcome all the difficulties that they face. Kaplan and Norton say "Strategy is based on a differentiated customer value proposition. Satisfying customers is the source of sustainable value creation".

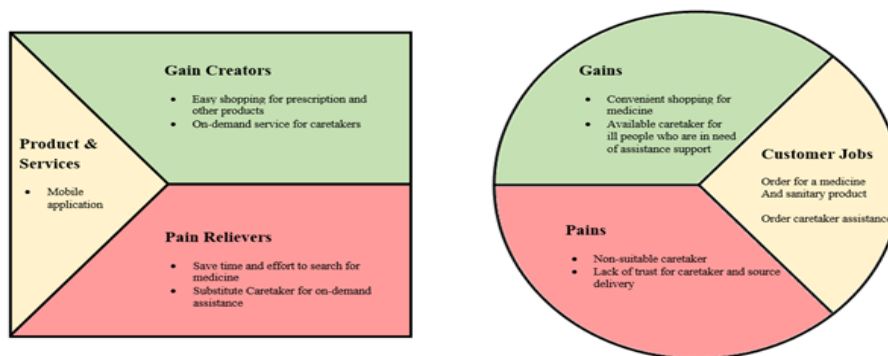


Figure 4: Initial Value Proposition Canvas for ill or sick people

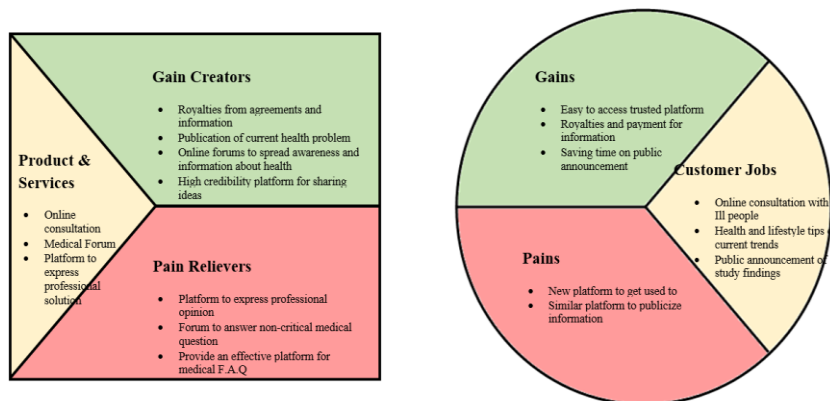


Figure 5: Initial VPC Value Proposition Canvas for doctor and health centre

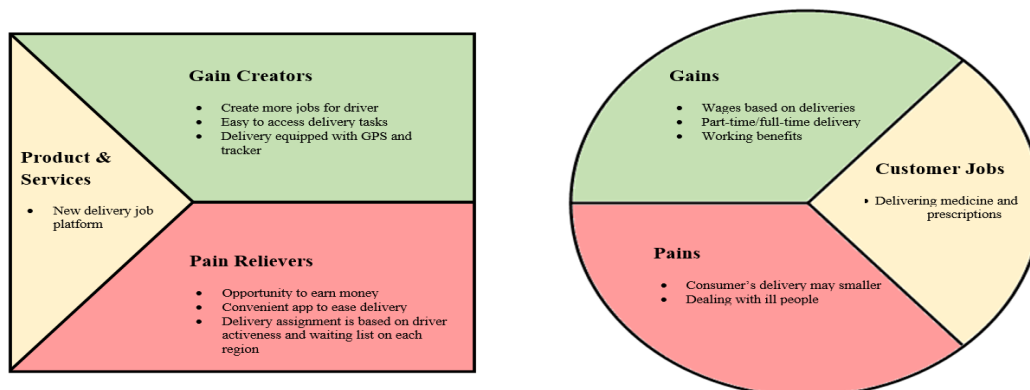


Figure 6: Initial VPC Value Proposition Canvas for driver

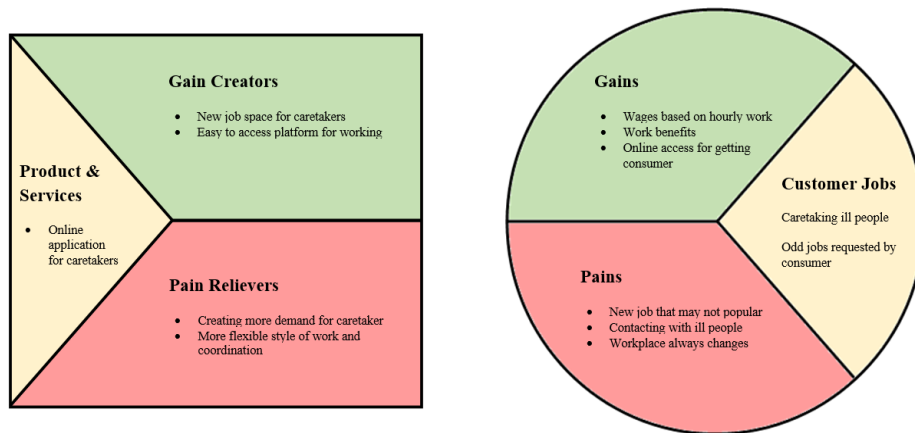


Figure 7: Initial VPC Value Proposition Canvas for a caretaker

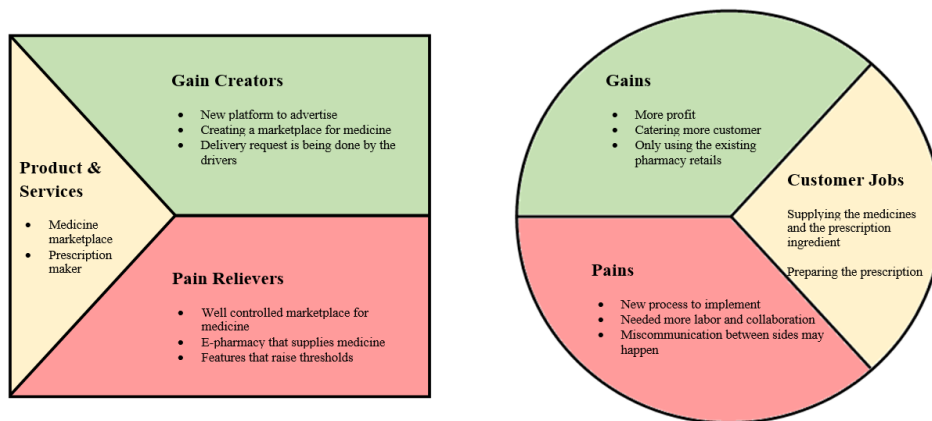


Figure 8: Initial VPC Value Proposition Canvas for medicine supplier (Pharmacy)

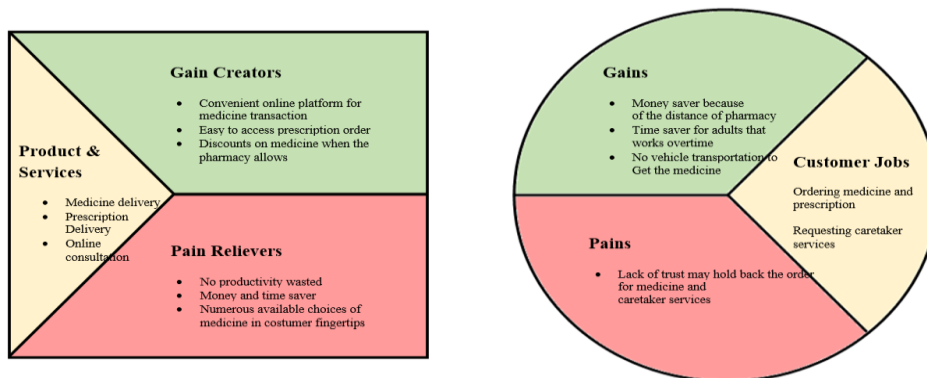


Figure 9: Initial VPC Value Proposition Canvas for working adults

IX. VALIDATION OF INITIAL BUSINESS MODEL

1. METHODOLOGY:

We will explain the method adopted in our project in this section. We will mention all participants types involved in conducting our project from the population, which is divided into three categories: working adults, drivers, doctors and pharmacists in our society, and sampling techniques used for the questionnaire. Lastly, in this part, we will provide more in-depth details and explanations of the methods that we chose to analyze and collect the data. We had conducted a Google form response method to reach out to the intended customer segments, and that was a suitable method for the research objective and collected the required information on our project. With this survey, we will know precisely what each category of the customer segments (C.S.) needs and obtain insight and ideas from busy people, patients, doctors,

pharmacists, and drivers. According to the needs of each group, we will develop our business to meet the needs of people in society as well as using the Design Thinking Approach and Business Modeling tools, i.e. Business Model Canvas (BMC) and Value Proposition Design Canvas (VPC). The approach involves carrying out a literature review to identify critical challenges and issues of various customer segments (C.S., formulating and devising an initial conceptual business model – in the form of BMC and VPC, and a value proposition to enhance the busy people, patients, doctors, pharmacists and drivers (CS). The initial BMC is validated by interviewing some doctors from IIUM clinic, and some other hospitals and the initial VPC is validated by interviewing various customer segments (C.S.) (working people, patients, pharmacists) within the international Islamic University of Malaysia (IIUM) and some hospitals in Malaysia.

2. VALIDATIONS

As we planned for the survey, we spread it among people in the society, especially the categories we took as our target for the business. And all the results of the questionnaire were analyzed deeply to enhance the business and bring it in the best possible way for the people.

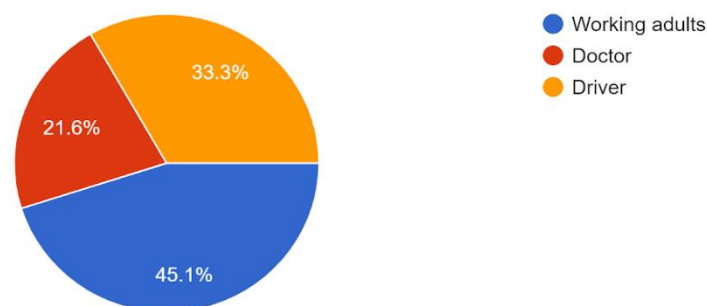
3. FINDINGS

The survey is filled up by the targeted segment in the society that can be benefited from this business. It was distributed through social media platforms like WhatsApp, Instagram, Facebook, Snapchat, and Twitter. The survey is made using a google form to simplify the process of analysis, and all the responds that we got are put below:

a. Background questions

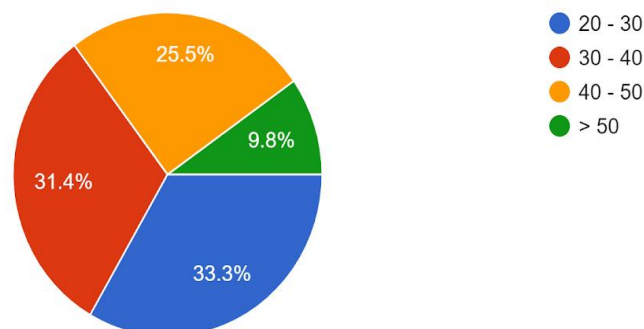
What is your occupation?

51 responses



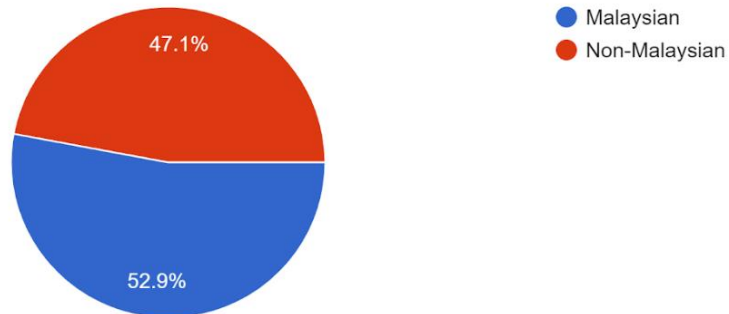
What is your age?

51 responses



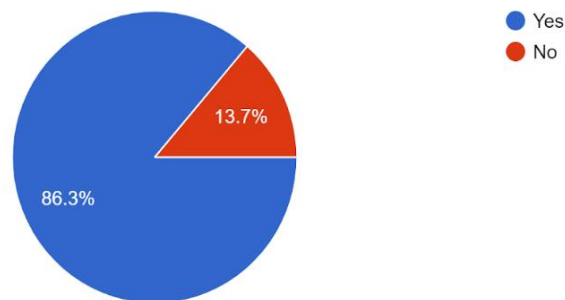
Are you Malaysian or Non-Malaysian?

51 responses



Are you familiar with online shopping via applications or websites?

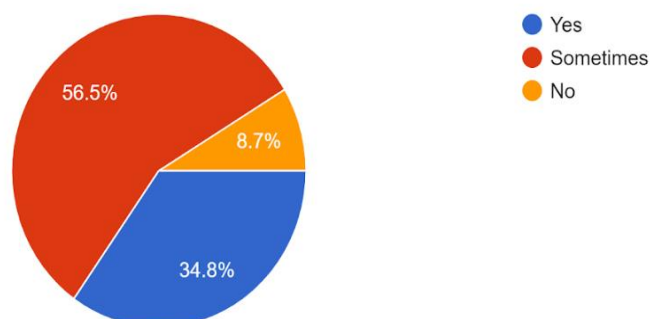
51 responses



b. Working Adults 23 respondents

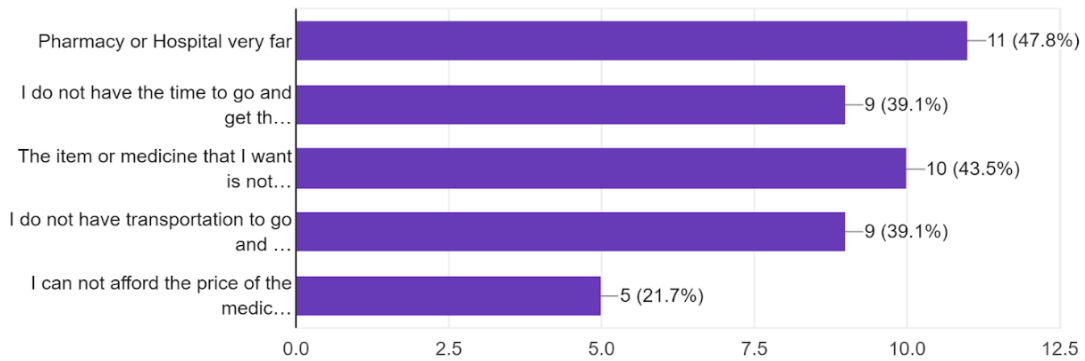
Do you face any difficulties to get medical items or medicine from the pharmacy or hospital?

23 responses



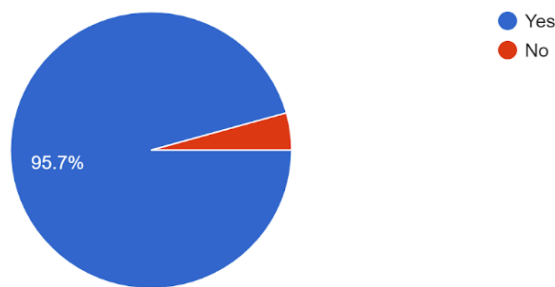
If you face difficulties, what are they?

23 responses



Would you like to have a website or application that helps you to get medicine or medical item from the pharmacy to your doorsteps?

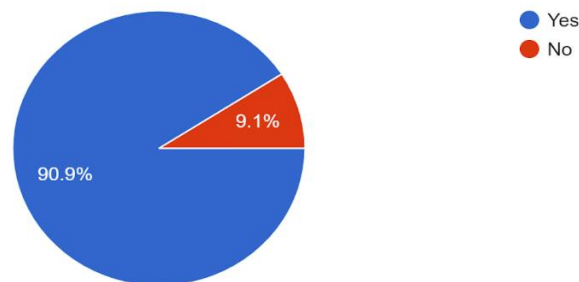
23 responses



c. Doctors 11 respondents

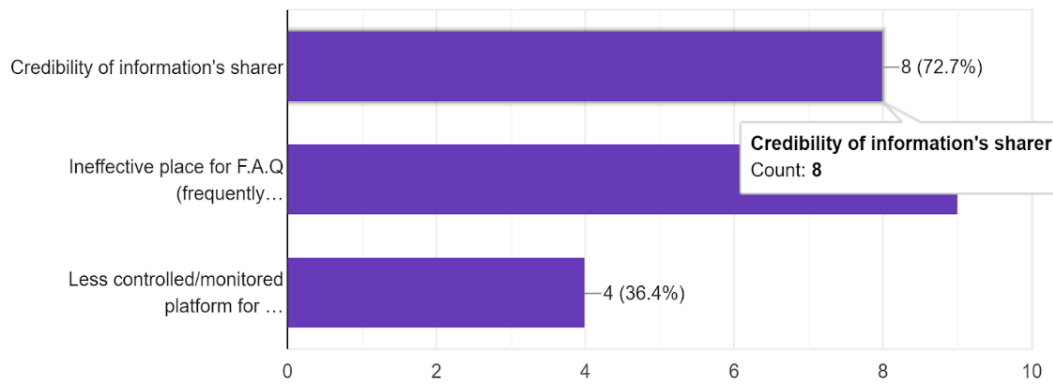
Do you need an online platform to share professional health information?

11 responses



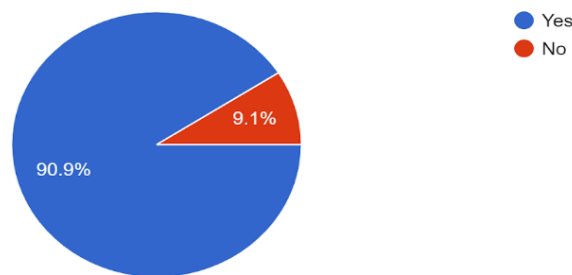
Is there any problem or disadvantages on using similar online platform to share ideas?

11 responses



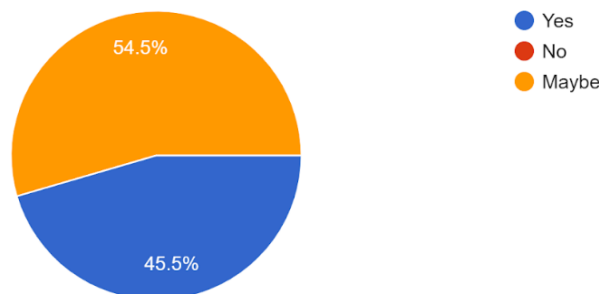
Would you try a new controlled platform designed for doctor and health professional to express their ideas?

11 responses



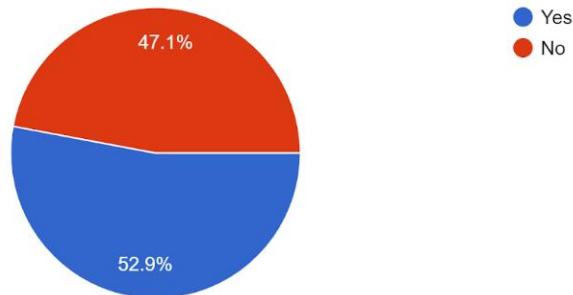
As a doctor, would you like to take from or give medical prescriptions and interact with patients online?

11 responses

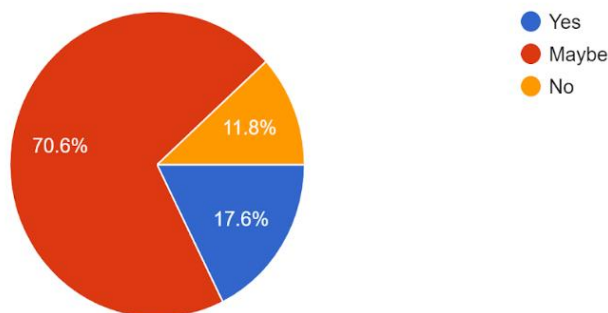


d. Drivers 17 respondents

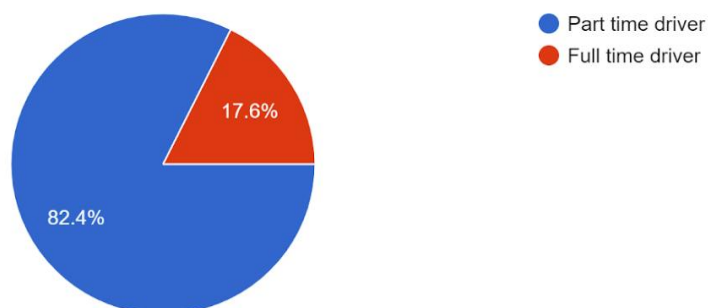
Have you worked as a driver for a company that provides orders online?
17 responses



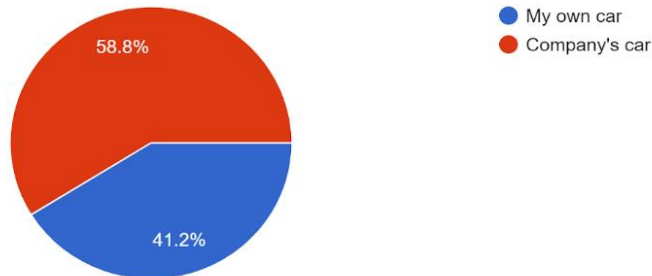
Would you like to work with a company that provides medicine and medical items for people?
17 responses



If you would like to work, would you like to work as a
17 responses



Would you like to work using your own car or the company's car?
 17 responses



As we noticed from the statistics, the findings that we got, support our project. For the working adults, the majority of them face a lot of problems when they want to get medicine or medical products from pharmacies or hospitals, and they actively welcome the idea of this kind of service which will be a pain killer for their struggle. On the other hand, the statistics showed that many drivers would like to get a part-time job that helps them to increase their income, and they are ready to work and experience a situation like this. For the doctors, the vast majority of them gave a good impression about having a platform like this which enables them to interact and prescribe medicine for the patients.

X. CONCEPTUAL VALIDATED BUSINESS MODEL & SOLUTION

Enhanced BMC

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
Hospital Medical centre Health professional International/Local Pharmacy Global/Local Delivery Company Payment gateway	Delivering the medicine/prescription Managing the caretaker services Information for news feed Interviewing doctors for tips to prevent disease Monitoring and controlling platform for expressing health ideas and opinion Management of KP(Key Partners) and CS (Customer Segment)	Trusted platform for our customer as we work with verified and professional key partners. International and local delivery of medicine/prescription to your home. Passionate and caring caretaker for the sick elderly and needy people. Saving time for those who do not have enough time to get the medicine. E-market for medicine and sanitary products (excluding fatal and cancerous illness).	Points for discount or freebies Discount on products Engagement of Virtual platform Channels Virtual Channel (Social medias, Website)	❖ Sick - Elderly/Needy. - Normal ❖ Busy working adults ❖ Mother or Father who cant afford to leave home ❖ Supplier of medicine ❖ Doctors ❖ Drivers ❖ Caretakers
Key Resources Drivers Health experts Platform administrator Caretakers Software developer		News feeds for current situation on a pandemic or recent health-related news. Forum for F.A.Q answered by experts in their field. Provide tips to prevent the disaster. Provide opportunities of jobs for drivers and caretakers. Online health consultation by health professional.		
Cost Structure IT infrastructure Maintenance and development of applications Employee wages Advertisement for our early stage of our business Royalties for doctors information and health/lifestyle related advices		Revenue Streams Medicine and prescription selling Caretaker services Advertisement inside the online platform		

XI. SUMMARY

Briefly, this conceptual solution that we come up within this project will provide a wide range of opportunities for the individuals, Muslims, the society and humanity at large to get benefits and maintain health and wellbeing. We as Muslims, Allah (SWT) in the Holy Qur'an and his messenger Prophet Muhammed (PBUH) in his Sunnah emphasize and encourage the Muslim society to contribute more to other people, regardless of the nationality, religion, skin colour or tribe of people. So that eHealthCare4U ensures that this business can achieve our value and also can satisfy user requirements so that eHealthCare4U can be accepted and used widely in Malaysia.

XII. CONCLUSION AND FUTURE WORKS

To conclude, based on the proposed modelling presented above, we highlighted the vision and the final image of the Business Model of eHealthCare4U; a systematic web-based platform that has all the requirements of the digital world. By implementing different methodologies, mechanisms, and strategies, it will help us quickly to create a framework and business roadmap to conduct a great business in the future for eHealthCare4U and contribute to enhancing the Healthcare and wellbeing of people in the society. eHealthCare4U is an online platform that connects patients, doctors, and pharmacies through a web-based platform. eHealthCare4U will satisfy the working adults to bring their medical services through the internet as well as it will increase the economy by making new opportunities for drivers and caretakers. Also, taking good care of the sick people and also educating healthy people by giving them useful awareness is based on Sustainable Development Goals 3 and 8. The following step is to put what we have demonstrated into reality by starting to develop a business plan by applying the V2MOM (Vision, Values, Methods, Obstacles, and Measures) Model. Coming up with a well-planned business plan will not only support and secure funding at the start-up business, but it provides significant aid to manage and develop eHealthCare4U correctly.

REFERENCES

- [1] Osterwalder, A., Pigneur, Y., Bernarda, G., Smith, A. & Papadacos, P., Value Proposition Design, Hoboken, New Jersey: John Wiley & Sons, Inc, 2014.
- [2] Procedia Economics and Finance. Yi Jin Lim, Abdullah Osman, Shahrul Nizam Salahuddin, Abdul Rahim Rome, SafizalAbdullahe., Factors Influencing Online Shopping Behavior: The Mediating Role of Purchase Intention 2016 [Online]. Available: <https://www.sciencedirect.com/science/article/pii/S2212567116000502>
- [3] Amazon is hiring people to break into the multibillion-dollar pharmacy market. CNBC May 2017. Available at: <http://www.cnbc.com/2017/05/16/amazon-selling-drugs-pharmaceuticals.html> (accessed April 2018) <https://www.pharmaceutical-journal.com/news-and-analysis/opinion/comment/amazonising-pharmacy-reality-or-just-a-rumour/20204678.article?firstPass=false>
- [4] Farr C. Amazon's moves in health care over the last year are finally starting to make sense. CNBC January 2018. Available at: <https://www.cnbc.com/2018/01/30/amazons-early-moves-in-health-care-are-only-now-making-sense.html> (accessed April 2018) <https://www.pharmaceutical-journal.com/news-and-analysis/opinion/comment/amazonising-pharmacy-reality-or-just-a-rumour/20204678.article?firstPass=false>
- [5] Harrison Jacobs, "One photo shows that China is already in a cashless future", April 2018. [Online]. Available: <https://www.businessinsider.my/Alipay-wechat-pay-china-mobile-payments-street-vendors-musicians-2018-5?r=US&IR=T>. [Accessed 2nd March 2020].
- [6] Koppel R. (2016) Great Promises of Healthcare Information Technology Deliver Less. In: Weaver C., Ball M., Kim G., Kiel J. (eds) Healthcare Information Management Systems. Health Informatics. Springer, Cham. [Online]. Available: https://citations.springer.com/item?doi=10.1007/978-3-319-20765-0_6
- [7] Fog Computing: Breakthroughs in Research and Practice. Gunasekaran M, Varatharajan R, Priyan M., Centralized Fog Computing Security Platform for IoT and Cloud in Healthcare System, 2018. [Online]. Available: <https://www.igi-global.com/chapter/centralized-fog-computing-security-platform-for-iot-and-cloud-in-healthcare-system/205985>

- [8] Wazaify, M & Scott, J 2017, 'Prescription/Non-prescription Medicine Misuse and Regulation – Time for a Modern, Fit for Purpose Approach', *Journal of Pharmacy Practice and Community Medicine*, vol. 3, no. 4, pp.197-199. <https://doi.org/10.5530/jppcm.2017.4> [Online]. Available: https://purehost.bath.ac.uk/ws/portalfiles/portal/158165312/Published_Version.pdf
- [9] Rahman & Bintu & Aman "Non-cash payment method using Q.R. codes in an automated microcontroller-based vending machine". [Online] Available: https://www.academia.edu/23988813/Non-cash_payment_method_using_QR_codes_in_an_automated_microcontroller-_based_vending_machine. [Accessed 12th March]
- [10] Chiraag Mittal, Vladas Griskevicius, Silver Spoons and Platinum Plans: How Childhood Environment Affects Adult Health Care Decisions, *Journal of Consumer Research*, Volume 43, Issue 4, December 2016, Pages 636–656, <https://doi.org/10.1093/jcr/ucw046> [Online]. Available: <https://academic.oup.com/jcr/article-abstract/43/4/636/2630515>
- [11] Malaysia's healthcare industry spending. Website. theSunDaily, 2018, Website. [Online]. Available: <https://www.thesundaily.my/archive/malysias-healthcare-industry-spending-reach-rm80b-2020-DUARCH586092>
- [12] Asia Pacific, Consumerization of Healthcare. Dean Koh. Malaysia-based digital health platform DoctorOnCall 2020. [Online]. Available: <https://www.mobihealthnews.com/news/asia-pacific/malaysia-based-digital-health-platform-doctoroncall-partners-merchantrade-expand>
- [13] The "Online Pharmacy Market in Europe - Industry Outlook and Forecast 2020-2025". ResearchAndMarkets.com's. 2020 (GLOBE NEWSWIRE). [Online]. Available: <https://www.globenewswire.com/news-release/2020/04/08/2013547/0/en/Europe-s-Online-Pharmacy-Industry-2020-Analysis-by-Platform-Type-and-Geography.html>
- [14] Ali Pay for global business, "Vending Machine", April 2019 [Online]. Available: <https://intl.alipay.com/doc/vendingmachine/>. [Accessed 4th March]
- [15] DIGITAL HOSPITAL; AN EXAMPLE OF BEST PRACTICE Taşkın KILIÇ1. Available: <https://dergipark.org.tr/en/download/article-file/329474>
- [16] Public Awareness of Digital Healthcare Services. Available : <https://core.ac.uk/download/pdf/225444769.pdf>
- [17] Public health for the people: participatory infectious disease surveillance in the digital age :<https://ete-online.biomedcentral.com/articles/10.1186/1742-7622-11-7>