


	YC4Y- Business Basics						
	Project	Unit	Discipline	Type	Seq. No	Rev1	
YBB	-		BB	0001	00-0030		

YC4Y- Business Basics



ATA-PDC

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REV.	DATE	DESCRIPTION	ORIG.	PREPARED	CHECKED	APPROVED	AUTHORIZED

							
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Introduction: YC4Y Business Basics

This file is to describe the business and can be converted to **Infographic** for better demonstration. It is **PDC operation guide** for YC4Y. Business Basics is a good reference for **promotion personnel Training**.



It **includes**: Business Statistics, KPIs, KOLs, Business Frameworks, Main formulas, important measures, a rule of Thumbs of FS and more important topic the value chain, the technical basics...

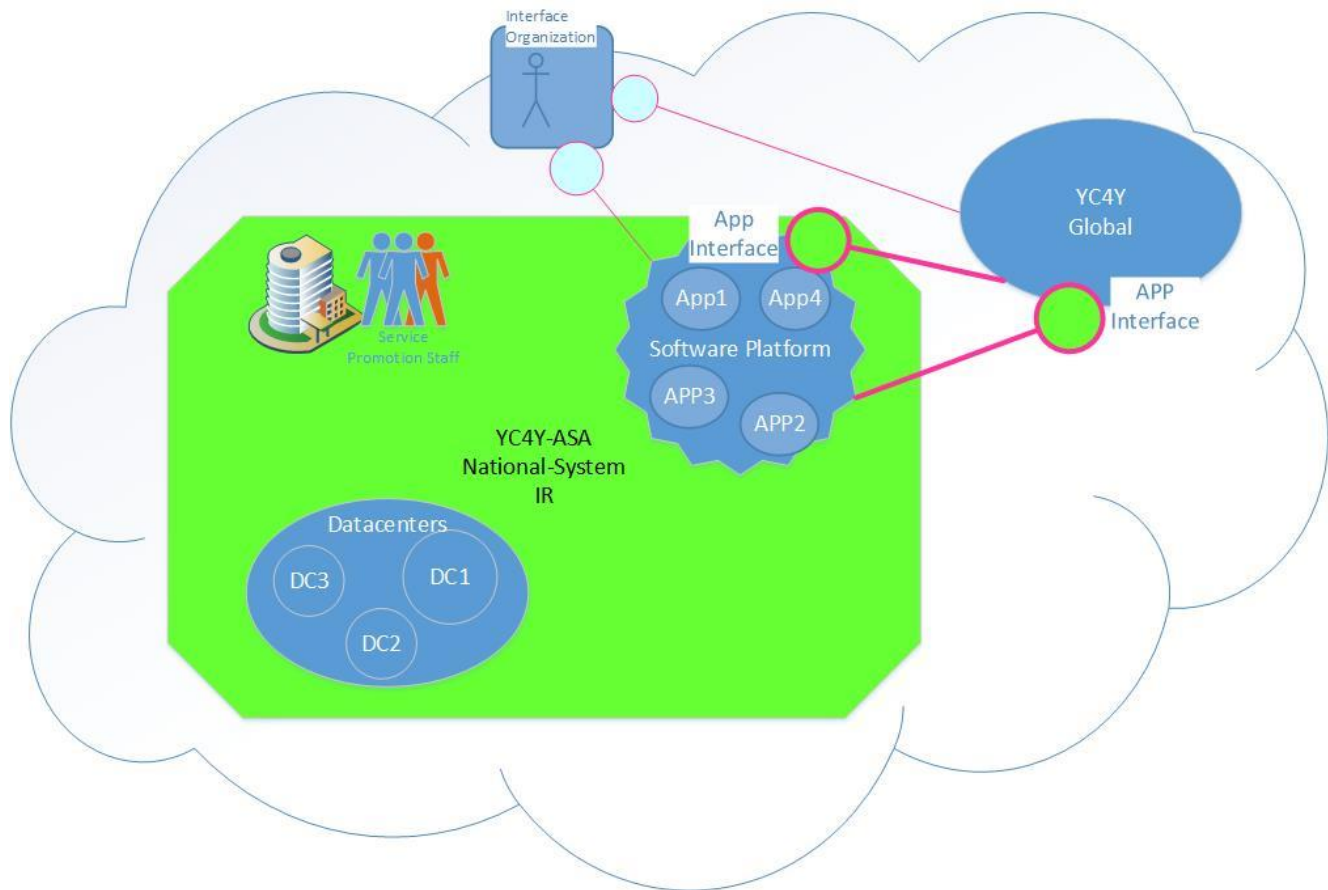
Eco-System Basics

A1	Plan	Health Eco-System - YC4Y
A2	Location of project implementation	IR Iran
A3	Main components and systems of plan	<ul style="list-style-type: none"> Exclusive data centers Internal network and comms International network and comms Mechanisms and interfaces Software systems Platforms and practical procedures The organization of promotion
A4	Duration of plan implementation	<ul style="list-style-type: none"> One year for pilot termination and starting point of operation Three years for promotion Three years for the termination and completion of whole project
A5	Significant operation processes	<ul style="list-style-type: none"> Apps exploitation Operating and upgrading data models Promotion The operation of data centers, network and comms The operation of international mechanisms
A6	Total duration of plan operation	10 years (Constant development and improvement)
A7	Operating model of beneficiary	IHO (Independent Health operator)
A8	Hiring process of project	<ul style="list-style-type: none"> Construction period: 500 to 2000 individuals Operation: 1400 individuals Promotion: 4000 individuals

							
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Summarized BOO plan for Health Eco-System		
B1	Required resources for investment	163 mil \$
B2	Number of planned phases	3 phases
B3	Duration of plan implementation	One year
B4	Duration of plan operation/exploitation	10 years
B5	Plan profitability for operator (in year 6)	From system's income and thrift: 1.1 billion \$
B6	Return on Investment	Less than three years
B7	Capacity of system users	Pilot: 100,000 users 6,000 agents After 6 years: 40,000,000 users 500,000 agents
B8	Transaction volume	1,000,000,000 per month
B9	Technical capacity of system Including BI and Backup	Storage: About 250 Peta Bytes Processing: 250,000 processor cores (BI, BU) System traffics: 18 Tb/s Archive: 1,000 Peta Bytes
B10	Location of plan implementation	Design – Europe and Iran Datacenters – 3 locations in Iran Network and comms – National Health Network Promotion capitals International mechanisms - Italy
B11	Plan organization	Beneficiary – Iranian operator Iranian EPC co. Software lab European designer

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General info for business

YC4Y is a system which will be implemented as a **data integrator**. Thus, it **shares information** among medical structures, patients and insurance providers. This project was presented because Iran has suffered from lack of unified IT system in the field of health care for many years. This project is able to **connect** people who ask for **health services** and people who offer them. This kind of communication is not accessible easily in this country. Moreover, it will be a necessity to protect sensitive data through world standards and also, all transmitted data should be safe. **Data security** will be provided by YC4Y aggregated system.

In all countries, **medical tourism** is a beneficial alternative in order to increase the **income** of the nation so, YC4Y will help foreigners to recognize the best health center in Iran which they think it will aid them better than their own country. Reportedly, the **cost** of treatment in Iran is lower than most of the countries in the world however, the **quality** of treatment is so high juxtaposed to countries neighboring Iran. This is an adequate reason for neighborhood countries to come to Iran in order to receive **high-quality health services with low cost**.

According to statistics, non-transmittable diseases are now the most menacing diseases especially in Iran in which people prefer to **conflict with diseases instead of prevention**. The lack of organized and unified health care system renders many problems such as being unacquainted with the risk of being afflicted with illnesses in the coming years. This problem can be resolved by the **health condition monitoring system of YC4Y** that can alert patients if

							
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there is a chance to be afflicted with a dangerous disease like diabetes. So, prevention will take place before treatment.

Another problem Iran had to face with through the last years was the **imbalance between rural and urban areas** (not only in networking or complex facilities but also in basic needs of medical care). The Ministry of Health endeavored to overcome this severe problem by deploying young physicians in rural areas but there is still **1 physician for 4,000¹ habitants** thus this problem is not fixed at all. One of the main goals of YC4Y is to **connect rural areas with urban regions via a unified health care aggregator system** in which people of rural areas can call for medical services including physicians, first aid or even request health houses to be constructed in these areas.

Lack of organized system in integrating and collecting all data together concerned doctors since they should be **worried about the availability of facilities and medical instruments** when they're doing checkups and even after this process they **have to read miscellaneous papers to find out the patients' medical history**. In addition, if physicians desire to consult with each other they ought to do a lot of paperwork which all of these **costs 20,000 \$ per year per medical structure²**(each medical structure includes 20 physicians). This amount can be **decreased by 75% with using YC4Y unified digital storage system**.

Although, **about 90% of people in Iran have insurance**, because of unorganized digital system for both customer and insurance provider, most of the customers have difficulty obtaining refunds from their providers. In addition, the whole process of being supported by insurance providers should be occurred physically so time would be wasted due to **inefficient booking system and non-expert digital operators**. These difficulties for both customer and insurance provider can be solved by **YC4Y online insurance providing app** which is described in the page 15.

Why did TREWIN choose Iran to develop its project?



TREWIN Company is keen to develop YC4Y project in a country which, based on reports, is mostly populated with **young people that can use this digital integrator much better than old people**. (Based on stats in 2015 about 90% of country vary from zero to 60 years old and we can estimate, the percentage of population aged below 50 is almost 70%). In other words, young population is a much better user for YC4Y digital aggregator. In addition to this benefit (being a better subscriber of digital system), this young population is going to be aged in the coming years consequently, we need an Eco-System that is able to protect Iran in next years in which most of its population consist of old people. Moreover, the level of medical education in Iran is so high compared to other countries in region besides, IT and Software engineering education in Iran is strong. Owing to these characteristics Iran has a high potential in YC4Y plan development as well as providing efficient medical services for subscribers of this ecosystem.

Forecasting of medical industry structure:

Due to inefficient mechanisms, especially when people need assistance, government is forced to gamble with national budget in order to make balance between rural and urban areas in the field of healthcare. In Iran there will be no data integrator according to the interview with people at the ministerial level however YC4Y plan can be

¹ Local interviews on Iran's health issues and opportunities
Experts' reports on Iran's health issues and opportunities

² Local interviews on Iran's health issues and opportunities
Experts' reports on Iran's health issues and opportunities

							
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the **main pioneer of a unified and integrated digital system**. As non-transmittable diseases are likely to elevate, the most accurate forecast is: burden of payments will increase on patients' end since government is reluctant to gamble with its budget. As this continues, it has the probability that private sectors will gain the highest profits in the following years. In this case, the revenue of private pharmaceutical companies will be escalated by 5% each year. Because of this event public-private relationships will be strengthened as the public sector will need to decrease its costs by putting the costs on private sector's shoulders. The consequence of this coincidence is the elevation of costs that patients have to pay for even the most fundamental drugs. So, it will induce more inefficiency in the field of medical care and even it can cause more damage to insurance facilities which leads to customer damage. There is merely one solution to prevent healthcare system from being more inefficient: a **lucrative health ecosystem** in which **all medical identifications can be monitored** and inter alia, **prevention will be a higher priority in this ecosystem**. This mechanism **will lead to the lower rate of death per year caused by non-communicable diseases, it can remove burden of payments on patients' shoulder and it can prevent the forecasted incident aforementioned above**.

Management of Medical Tourism and Medical tourism difficulties in Iran:

- 1- Lack of **monitoring of foreign requests**, which limit **complementary services such as transportations, hotels** etc.
- 2- Lack of tools that facilitate health centers for tourists: health centers are medical facilities that have contract with YC4Y to help tourists out in the field of medical care.
- 3- Lack of facilitation in terms of VISA, payment tools and medical documents: This part requires cooperation with The Ministry of Health and CAO.

YC4Y can provide procedures for safe monitoring and efficient management of foreign patients.

YC4Y can gather statistics on foreign demand

YC4Y can provide patients airport to airport services: Including accommodation, transportation and security of patient in airports.

The financial plan assumes a small number of tourists coming within Iran, starting from 200.000 on year 1 up to 255.000 by year number 6.

Why medical tourism can bring country numerous advantages



- 1- Appropriate infrastructure
- 2- High potential
- 3- Most of neighboring countries intend to come to Iran for its beautiful and distinguished Eco-System and High quality medical services.

Execution plan

Time plans: 1 year for the termination of pilot and start of the operation

3 years for promotion

3 years for termination and completion of whole project

							
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Challenges which YC4Y is likely to face with in Iran



- 1- Current player's pushback
- 2- Lack of national digitization strategy
- 3- Limited budget
- 4- Intellectual property
- 5- Governance
- 6- Data possession and regulatory

Financial information obligatory for business developers

- 1- Health budget in Iran: 489 million euros
- 2- Financial flow of health system in Iran: 147,000 billion tomans
- 3- Pharma market in the world: 1.5 trillion \$
- 4- E-Health market: 300 billion \$
- 5- Estimated E-Health market in Iran: 3 billion \$

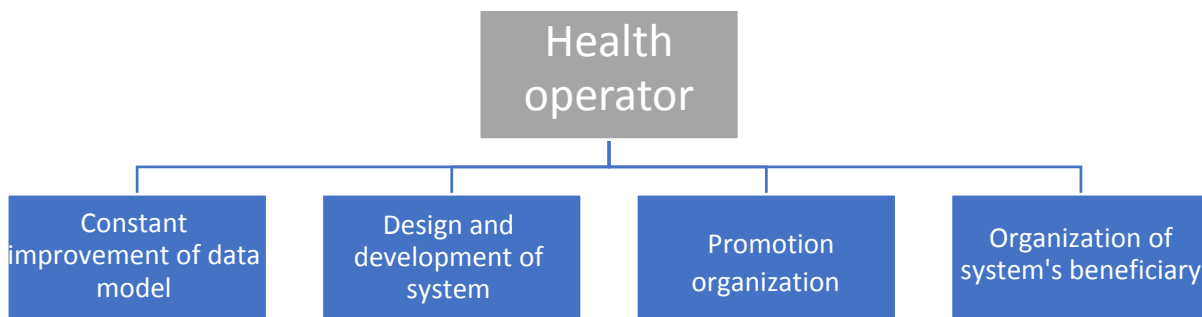
KOLs



- 1- **Dr. Ghazizadeh Hashemi:** is an [Iranian ophthalmologist](#) and [associate professor](#) of [Tehran University of Medical Sciences](#), who served as the [Minister of Health and Medical Education](#) from 2013 to 2019 in the administration of President [Hassan Rouhani](#). Ghazizadeh Hashemi is known as the designer of "Health evolution plan, also called "Rouhani-Care", a plan designed to reform [Iran's Healthcare system](#) by "granting the public fair access to healthcare, enhance equity, cover health costs and promote the quality of healthcare services that people receive".
- 2- **Dr. Namaki:** He has a Ph.D. in pharmacy and is considered as the first non-physician Iranian health minister. He is a member of Tehran's Shahid Beheshti University of Medical Sciences faculty and had served as deputy head of Planning and Budget Organization for social affairs, deputy Health Minister and also deputy chief of Iran's Department of Environment.
- 3- **Dr. Madani:** Former vice minister of health, former CEO of AVA holding and the CEO of Avita Zist Pharmed.
- 4- **Dr. Riazi:** Director of Research and Development, Ministry of Health Statistics and Information Technology Management Center.
- 5- **Dr. Safi Khani:** Deputy Minister of Planning, Coordination and Legal Affairs of the Ministry of Health, National Project Manager of Electronic Health Record.
- 6- **Dr. Abdollahi Asl:** General Manager of the Office of Information Technology and Health Systems of the Food and Drug Administration.

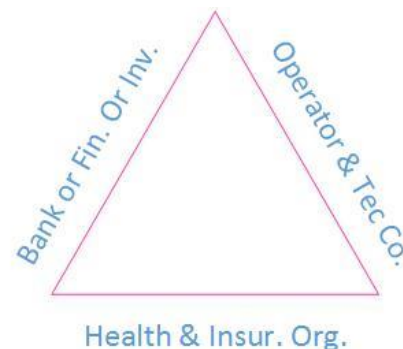
							
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- 7- **Dr. Nobakht:** Head of health commission.
- 8- **Dr. Dinarvand:** Professor of Pharmaceutical Nanotechnology, Tehran University of Medical Sciences (TUMS), Former head of Food and Drug Administration, Head of Faculty of Pharmacy, Tehran University of Medical Sciences.
- 9- **Mostafa Salari:** He was the former governor of Gilan province. He now serves as the head of social security organization.
- 10- **Dr. Shahram Ghaffari:** Head of Social Security Research Institute, Head of Department of International Affairs.
- 11- **Steering committee members in Iran:** It consists of Dr. Abdollahi Asl, Dr. Moghadaszadeh, Dr. Sanaei and Dr. Soleimani
- 12- **Dr. Sanaei:** CEO of AriaHamrah co. and the former professor of Sharif University.

Typical organizations



							
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Main organizations in the market



Organizations that can cooperate with TREWIN include public and private organizations. In addition, the cooperation of ministries is vital for the development of YC4Y.

Ministries:

- 1- **Ministry of health**
- 2- **Ministry of Information technology, security and national health channel**
- 3- **Foreign ministry**
- 4- **The ministry of economy**
- 5- **Ministry of industry, mine and trade:** This ministry is relevant since mine and trade bank can provide us financial support.
- 6- **Ministry of labor and social wealth**
- 7- **Ministry of sports and youth**

Organizations:

- 1- **Medical council and other councils in the field of healthcare**
- 2- **Planning and budgeting organization - PBO**
- 3- **Insurance providers (social security, central insurance, treatment services, etc)**
- 4- **Banks (central bank, other banks and banking services): Ayandeh, Caspian**
- 5- **Communication operators: MCI, IRCL**

							
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Vendor Company Info

TREWIN owned by:

GEKO

ASA owned by:

100% ATA

ASA will act as IHO³

Products

Booking system: There are few apps in Iran which provide customers with booking systems but they are not aggregated so patients hesitate to choose the appropriate application. YC4Y provides an integrated booking system in which you can choose the most appropriate physician among thousands of doctors throughout the country.



Online Consultation: In today's world, saving time and money has become the highest priority in everyone's life. Going to doctor's office and being physically visited occasionally wastes your time and money. It is better for everyone to consult with physicians and other medical operators online in order to save money and time. An aggregated medical consultation application can literally provide lucrative services in terms of treatment. These services will **save efforts for physicians** and also if physical checkup is required physician will **diagnose diseases more quickly** since he has consulted with patient through all consultation process. Inter alia, **patients feel more suitable while they are contacting with their personal physicians through physical or digital checkups.**

Online Pharmacy: There are now a few apps that provide online pharmacy services. However, they cannot provide patients with prescription-required medicines since they are not in contact with physicians or clinics. So YC4Y can set an application in which digital pharmacy is **directly connected to physicians and clinics that are able to E-prescribe medicines.** This method can really help patients to purchase prescription-required medicines without the need to attend pharmacy physically. (Not in all cases but in most of them this will really save patient's and physician's time)

Emergency booking system: When an unexpected coincidence occurs during a road trip or even when you are in a distant region, everybody gets shocked and frightened. This incident firstly, makes you disabled to call an emergency and describe every details of the problem, patient is facing with. Secondly, when you call the emergency you are not able to comprehend how far the emergency is and you are not sure about the duration of approach. An online emergency booking system will fix all of these difficulties besides, it will improve the services an emergency can provide hence you have to give the application some **short answers about patient's problem.**

Online insurance providing system: According to the fourth paragraph in the third page, insurance providing system is not accurately organized. Although most of the people in Iran can be supported by insurance organizations, many people complain about the way that insurance providers give the refunds. They mostly delay

³ Independent Health Operator

							
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the refunding processes or even they don't refund. According to problems aforementioned, YC4Y is accountable to categorize the system and **provide customers appropriate and time-saving insurance services in the field of healthcare.**

Medical tourism: Offering high-quality and **affordable healthcare and travel services** is YC4Y priority. In line with its mission to provide medical and cosmetic treatments to foreign people, YC4Y will **collaborate** with all of high prestigious hospitals, clinics, specialists and doctors in Iran.

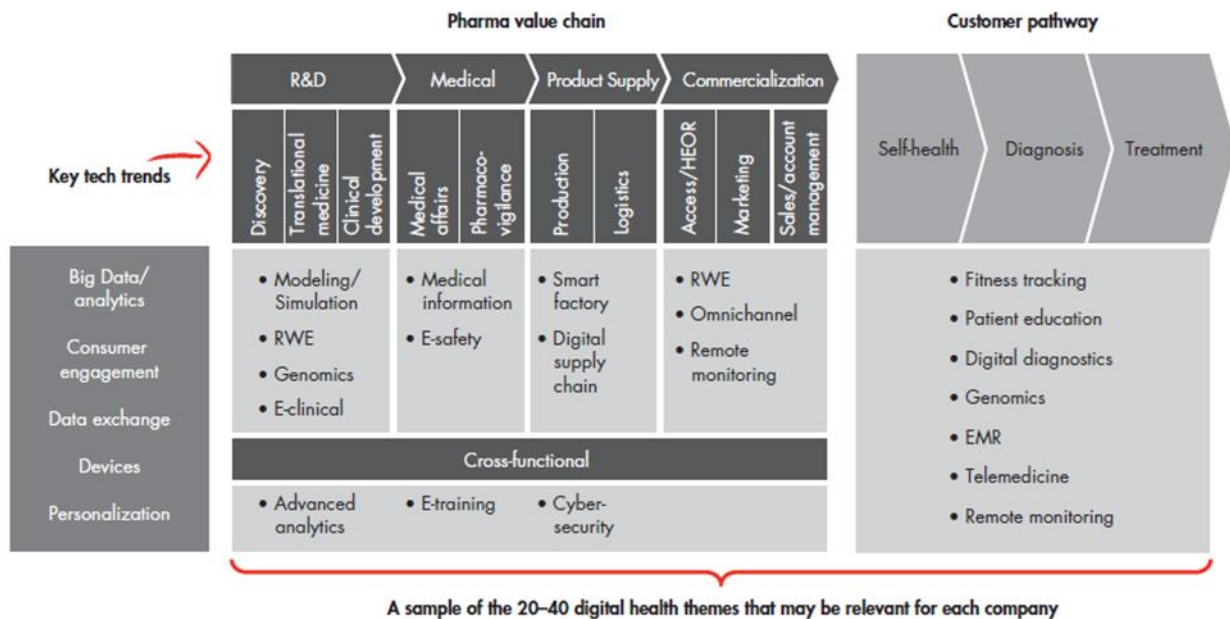
Medical and cosmetic treatments provided by YC4Y include a wide range of **plastic surgeries**, such as rhinoplasty, liposuction, breast augmentation and lift, and facelift, as well as hair transplant, weight loss surgeries (gastric sleeve, bypass, balloon, plication), **dental procedures, eye surgeries, fertility treatments, cardiac surgeries, orthopedic surgeries** (knee replacement, ankle replacement, etc.), and **treatment of different types of cancers**, and more.

Apart from healthcare services, YC4Y provides patients with other travel services such as visa, airport to airport services, private transfer, booking accommodations, flights, round-the-clock interpreting and tour guiding services, nursing, sightseeing tours, and so on.

The trips are arranged by YC4Y by drawing up a schedule agreed upon by both sides, according to which the whole process of travel and treatment will take place. Transparency in the services and costs give patients assurances that there will be no hidden costs or added expense outside the agreement. Therefore, without feeling worried about the hassle of travel, patients only think about the outcome of their treatments. These services and operations will only be possible to do with the contribution of travel agencies, hospitals and clinics, airlines and other organizations and medical facilities.

Value chain

Figure 2: Digital health is a broad and complex field; trends can be summarized in distinct clusters



Note: RWE=real-world evidence
Source: Bain analysis

Sample value chain of digital Health: This diagram illustrates a sample value chain about digital health in which, value chain has been divided into two different categories: 1- Pharma value chain 2- customer pathway.



Pharma value chain:

1- R&D:

- Discovery:** This operation is one of the most significant parts in the research and development part as it is necessary to discover some medicines and other medical components to develop digital health ecosystem.
- Translational medicine:** It is a basic scientific research with the purpose to discover new therapies, medical procedures and diagnostics.
- Clinical development:** **Clinical Development**, also called **Drug Development**, is a blanket term used to define the entire process of bringing a new **drug** or device to the market. It includes **drug** discovery / product **development**, pre-clinical research (microorganisms/animals) and **clinical trials** (on humans).

2- Medical:

- Medical affairs:** is the broad term that describes the department within a pharmaceutical or medical device company that interacts with physicians and other healthcare professionals who utilize or are involved with research related to the companies' products.

							
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b. **Pharmacovigilance:** the practice of monitoring the effects of medical drugs after they have been licensed for use, especially in order to identify and evaluate previously unreported adverse reactions.

3- Product supply:

a. **Production:** After R&D and Medical affairs, production of medical supplies should be occurred but it requires the cooperation of pharmaceutical companies to produce medical supplies in the industrial level.

b. **Logistics**

4- Commercialization:

a. **Access/HEOR:** Health economics and outcomes research (HEOR) is an obligation in the field of digital health ecosystem since physicians or clinicians should choose the right interventions in order to gain the highest amount of benefits and also to decrease costs of medical supplies.

b. **Marketing**

c. **Sales/Account management:** Selling medical supplies to clinics, hospitals and other medical facilities through digital network (YC4Y digital integrator).

Customer pathway:

1- **Self-Health:** Self-care saves money and time for patient. By using this method you are not forced to visit doctor and also spend time and money. It includes personal digital physician (You can give the application some medical information about yourself and it grants you some organized physical practices and scientific diets. This application is supported by medical technicians and real physicians who can help patients to save time and efforts.) and digital pharmacies (in the case of self-heath it is usable for non-prescribed medicines but also, it can be utilized for prescribed medicine through E-prescription. E-prescription can be provided by personal digital physician).

2- **Diagnosis:** In more severe cases of disease patient should visit a physician physically however for better doctor reservation service it is better to set up an integrated digital network in order to save time and efforts for reservation.



3- **Treatment:** Treatment includes remote monitoring, telemedicine and also suggestion of the physician in a physical visit.

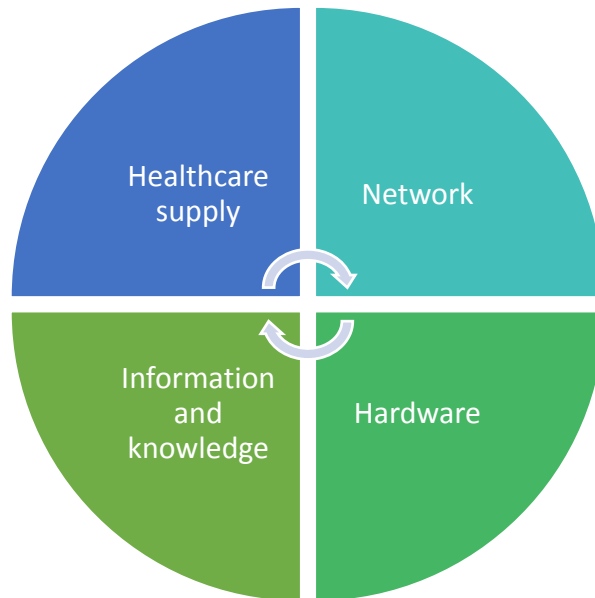
Cross-functional (It needs many experts in different fields to work as a team)

1- **Advanced analytics:** The process of digital treatment and even big data – in the field of digital health ecosystem -- transferred throughout the country, should be accurately analyzed by medical technicians or digital operators.

2- **E-training:** It is also called **internet-enabled learning** in which you are able to gain some medical skills and also learn about digital healthcare. This will lead you to be efficient enough in this field.

3- **Cyber-security:** Security of transmitted data and patients’ medical information is one of the highest priorities of YC4Y business. Cyber-security is right now an obligation for all digital ecosystems due to the importance of privacy related to customers. It is important for us and also for our digital operators to protect customers’ data.

							
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Healthcare supply:



- 1- Knowledge
- 2- Access to healthcare services
- 3- Medicines
- 4- Products
- 5- Assistants
- 6- Prevention policy

Information and knowledge

- 1- Information
- 2- Contents
- 3- Prevention
- 4- Teleconsultation
- 5- Reminder
- 6- Alert
- 7- Data
- 8- Analytics

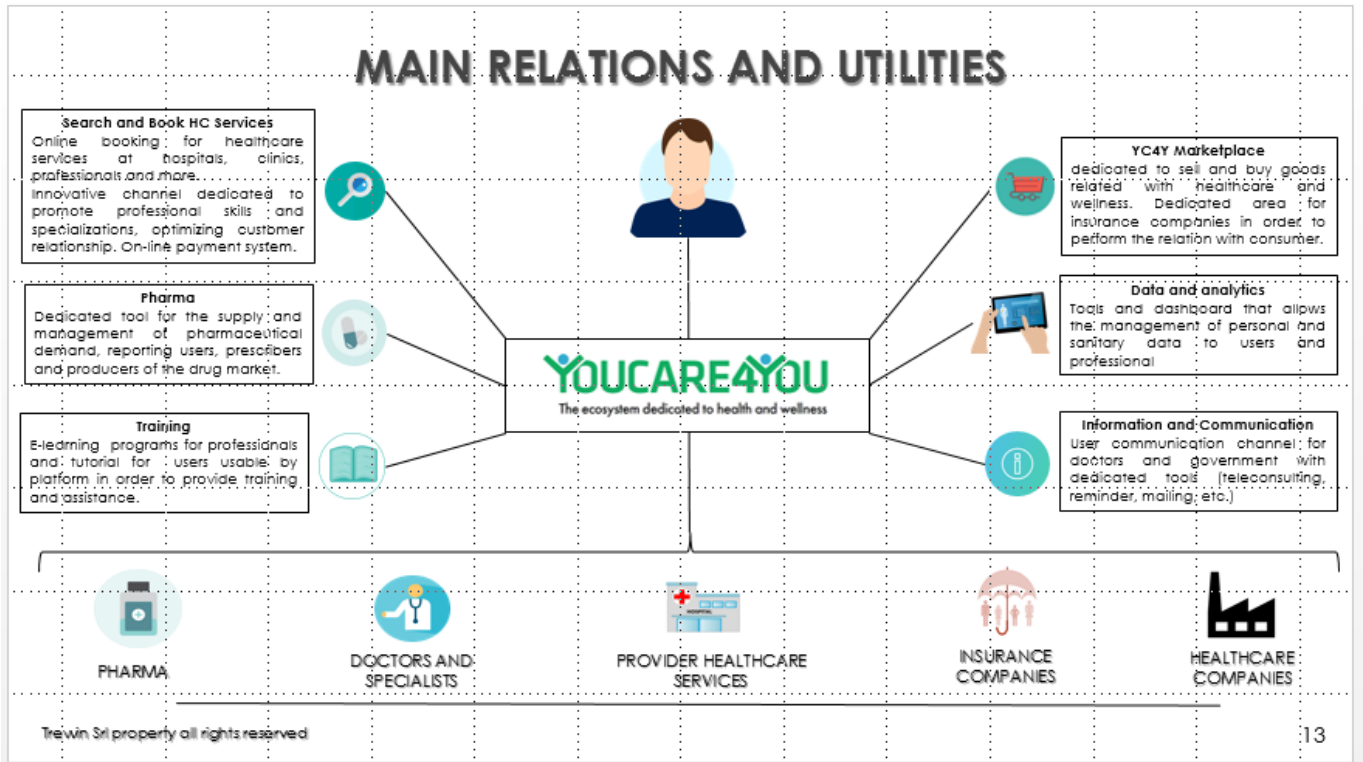
Network:



- 1- Information
- 2- Communication
- 3- Networking (universities/research centers)
- 4- Professionals

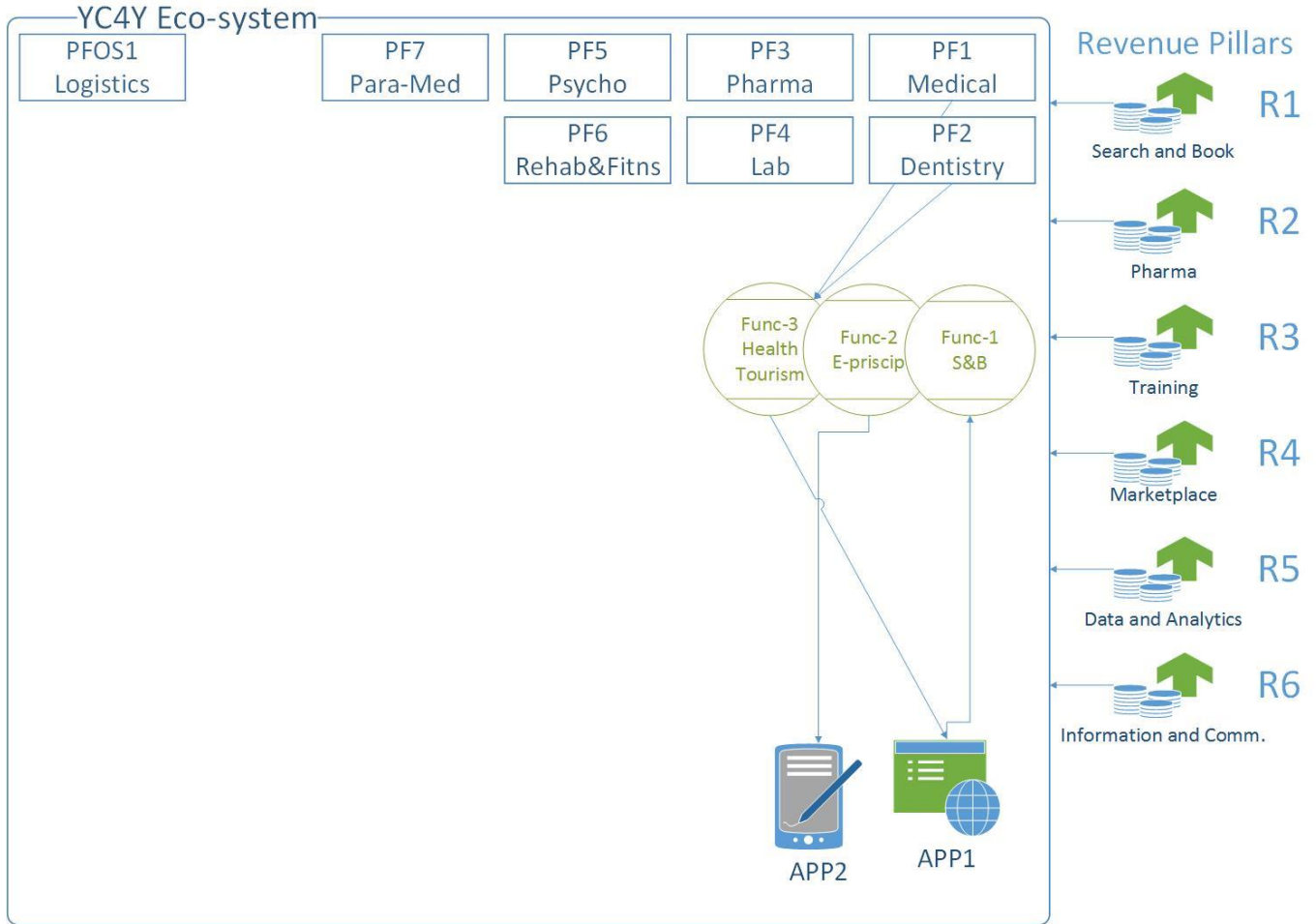
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Hardware:

- 1- Storage of personal data that can be used in case of emergency by user or physicians





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Main reference

- **YC4Y Business Plan**

							
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