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Artículos científicos

Marketing, la mejor herramienta para que el emprendedor universitario tenga éxito en el mercado digital

Marketing, the Best Tool for the University Entrepreneur to Succeed in the Digital Market

Marketing, a melhor ferramenta para o empreendedor universitário ter sucesso no mercado digital

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Resumen

El problema de los proyectos, en la mayoría de las ocasiones, no es su implementación; es convertirlos en emprendimientos capaces de ser generadores de empleos. El *marketing* es una herramienta mediante la cual todos aquellos proyectos escolares pueden convertirse en emprendimientos, tal y como sucedió con el proyecto que aquí se describe, ya que se logró, gracias a los docentes que se interesaron y dieron asesoría, convertir una idea en un emprendimiento que está teniendo muy buena aceptación entre los clientes. Aun cuando al inicio todo estaba en contra debido a la pandemia de covid-19, se pudo aprovechar la situación originada por esta, ya que muchos de los estragos que ha causado se relacionan con la alimentación y la falta de actividad física. Por ello, contando con el apoyo de especialistas de *marketing* del Centro Universitario de los Altos de la Universidad de Guadalajara, se pudo desarrollar My_Nutriólgo_Personal, un producto fácil de ser usado por nutriólogos, médicos,



enfermeras, preparadores físicos y personas interesadas en la salud física. Sin duda, se debe considerar al *marketing* como una herramienta que debe tener todo estudiante universitario, de lo contrario, cuando concluya sus estudios, solo será un egresado, en lugar de un emprendedor capaz de generar trabajo para otros.

Palabras clave: alimentación, asesoría, emprendedurismo, *marketing*, nutrición.

Abstract

The problem with projects, in most cases, is not their implementation; it is turning them into enterprises capable of generating employment. Marketing is a tool through which all those school projects can become ventures, as it happened with the project described here, since it was possible, thanks to the teachers who were interested and gave advice, to turn an idea into a venture that is having very good acceptance among customers. Even though at the beginning everything was against us due to the COVID-19 pandemic, we were able to take advantage of the situation caused by it, since many of the damages it has caused are related to nutrition and lack of physical activity. Therefore, with the support of marketing specialists from the Centro Universitario de Los Altos of the University of Guadalajara, it was possible to develop My_Nutriólgo_Personal, a product easy to be used by nutritionists, doctors, nurses, physical trainers and people interested in physical health. Undoubtedly, marketing should be considered as a tool that university students should have, otherwise, they will only be graduates, instead of entrepreneurs capable of generating work for others.

Keywords: food, advice, entrepreneurship, marketing, nutrition.

Resumo

O problema dos projetos, na maioria dos casos, não é sua implementação; é transformá-los em empresas capazes de gerar empregos. O marketing é uma ferramenta através da qual todos aqueles projetos escolares podem se tornar empreendimentos, como aconteceu com o projeto aqui descrito, pois foi possível, graças aos professores que se interessaram e deram conselhos, transformar uma ideia em um empreendimento que está tendo muito bom aceitação entre os clientes. Mesmo quando tudo estava contra ela no início devido à pandemia de covid-19, foi possível aproveitar a situação causada por ela, já que muitos dos estragos que causou estão relacionados à dieta e à falta de atividade física. Por esse motivo, com o apoio de especialistas em marketing do Centro Universitário Los Altos da Universidade de Guadalajara, foi



desenvolvido o My_Nutriólgo_Personal, um produto fácil de usar por nutricionistas, médicos, enfermeiros, preparadores físicos e pessoas interessadas em saúde física. . Sem dúvida, o marketing deve ser considerado como uma ferramenta que todo estudante universitário deve ter, caso contrário, ao terminar seus estudos, ele será apenas um graduado, em vez de um empreendedor capaz de gerar trabalho para os outros.

Palavras-chave: alimentação, assessoria, empreendedorismo, marketing, nutrição.

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Introduction

One of the main problems that exists in universities is related to the projects that are generated within their facilities. Students and teachers carry out high-impact research, many of them, in the area in which they were generated; but unfortunately, when the student becomes a professional or the teacher changes the project, it is lost in oblivion. This usually happens because they lack the necessary knowledge to turn that project into an enterprise and take it outside the walls of the university, that is, they do not have notions of marketing, which is the key for many ideas to come to fruition. .

Therefore, in the present work the objective was to convert an idea into a product, which was achieved using the best tool that exists for it, marketing. As it is a project in the nutrition area, it began with a related investigation on how and to what extent the 2019 coronavirus disease (covid-19) pandemic affected the eating and physical activity habits of the Mexican population.

In Mexico, according to the Statista Research Department (July 20, 2022), there have been around 301,000 deaths from the pandemic in the 2020-2022 period. On the other hand, it is the first place in Latin America and second in the world with cases of overweight and obesity, which are considered comorbidities that increase the risk of not surviving in case of contracting covid-19. Furthermore, according to the Organization for Economic Cooperation and Development [OECD] (2019), 75% of the population over 15 years of age is overweight or obese, which brings with it a high number of cases of diabetes, hypertension and other cardiovascular ailments.

This was the basis for assuming that the overweight and obesity statistics of the child population in the country changed negatively during the pandemic. Even studies prior to the pandemic already revealed that only 44.5% of this sector had food security, 22.6% moderate and severe food insecurity and the remaining 32.9% mild insecurity. (Secretaría de Salud-



Instituto Nacional de Salud Pública [INSP]-Centro de Investigación en Evaluación y Encuestas [CIEE], 2018).

Likewise, prior to the pandemic and according to the National Health and Nutrition Survey (Ensanut) of 2018 (Secretaria de Salud-INSP-CIEE, 2018), 17.5% of Mexican children between 5 and 11 years old were obese. At the same time, the INSP (August 26, 2020) underlined that in Mexico the main cause of death among women was diabetes and the second among men. And in addition to all this, according to the Center for Economic and Budgetary Research [CIEP] (2022), Mexico to date has assigned only 6% of the gross domestic product (GDP) to care for health problems. Hence the need to design food and nutritional policies that contribute to the health of the population and change eating habits. Therefore, any tool that emerges to improve the health conditions (diet and exercise) of the population in general is an opportunity to improve their living conditions.

Theoretical framework

At the University of Guadalajara (UdeG), and specifically at the Los Altos University Center (CUAltos), students have been supported by teaching staff from the institution's marketing area to get ahead when they are independent professionals. The mission is that, based on marketing, strategic planning, leadership, nutrition, entrepreneurship, communication systems and remote control, they manage to stand out as professionals, entrepreneurs and businessmen wherever they collaborate.

It is a fact that the digital world allows connections at all times, and a cutting-edge tool is digital marketing, which continues to grow by leaps and bounds, encompassing business strategies that, as explained by the Andalusian Federation of Autonomous Women Entrepreneurs [Famet -Andalucía] (2016), have become the guideline for undertakings to have greater opportunities for success.

That is why this project focuses on digital marketing. In this regard, Fuente (March 15, 2022) defines it as the application of digital technologies to contribute to marketing activities, achieve profitability and attract customers through digital technology and planned development, which allows knowing the customer better, integrated communication and online services to meet your needs. In short, it is in charge of the new dimensions of the 21st century and is essential in new companies, a technology that cannot be absent in any project.

On the other hand, the objective of this entrepreneurial project was to investigate the changes that took place in diet and physical exercise during the covid-19 pandemic, since poor diet plus little physical exercise plus comorbidities (chronic and metabolic diseases), according to López-Gatell (July 23, 2020), are preponderant factors in the deterioration of health.

These changes in diet and physical exercise, during the covid-19 pandemic, occurred because face-to-face activities were reduced to the maximum. The above became an opportunity to undertake, as university students, in the area of distance health (food and exercises). To achieve this, it was established that the optimal way was through a product accessible to health personnel (medicine, nursing, nutritionists and physical trainers) to care for patients remotely, and make it accessible through digital marketing strategies, in addition to being able to be used by anyone because it is user-friendly (easy to handle and understand by any user) and thus control their health personally (diet and exercise).

The starting point lies in strategic planning, since through it the foundations of the entrepreneurial project are laid, as explained by Cruz (July 15, 2020), which is based on the fact that the development and implementation of plans to achieve the company's objectives, they are essential, and it is applied in businesses that face the daily battle to retain the customer's preference.

Marketing allows visualizing financial, technological and human resource development strategies, among others. It is currently essential to achieve the goals set, personal, commercial, economic, human and technological growth of any enterprise. Thus, through this approach, the key points of a company can be established when starting, penetrating the market and remaining in the taste and preference of the client.

Ventures that were successful and ventures that failed

According to Golán (December 9, 2021), in marketing, converting a viable idea into a business model with opportunity in the market, through its profitability and social benefit, entails: strategy, digital innovation, motivation and risk, everything which will depend on the attitude of the entrepreneur who wants to be a future entrepreneur. The influence of this author, Pablo Golán, in this project is of vital importance, since it indicates step by step, in a very strict way, how to turn an idea into a successful undertaking, and emphasizes that the

initial size of the project does not matter. this, but its evolution and the results that are obtained.

In line with the above, it should be noted that there have been companies that started as ventures in a garage and became emporiums, the most emblematic cases being Apple and Microsoft (Durán, October 26, 2016; Santos, 2021). On the contrary, Drummond (2019) mentions Blockbuster, which achieved success in the pre-digital era, but by not entering the digital format, it left the market; Another case is described by the BBC World Newsroom (February 5, 2018) when referring to the failure of the Xerox company, which after being the one who introduced personal computers and photocopiers, went bankrupt.

Methodology

This work is based on the scientific method. The original question of the project is related to what a recently graduated nutritionist can do to achieve success in his profession, taking into consideration the existing conditions of a pandemic in the world, which led to the establishment of the hypothesis that a product would have to be developed that helps any person, through the use of a system to develop, improve their nutritional and physical conditions and consequently improve their quality of life, regardless of sex, age and occupation. To make the study valid, the variables of portability, acceptance, functionality and updating were taken into consideration in comparison with the products currently on the market.

Subsequently, the ways that exist to provide solutions to achieve the objective were investigated, including traditional methods (face-to-face interview) and those of recent creation and innovation, where the use of marketing is present. Later, the concepts of marketing, entrepreneurship and multidisciplinary teamwork were analyzed to enhance the scope of the final product and its projection in the market. Finally, the data obtained as results were evaluated to know the degree of deviation between what was achieved and what was projected.

Developing

The possible results obtained depend on the way a tool is applied. Marketing in this undertaking is aimed at being used as a safe, reliable and low-cost tool so that health personnel (nutritionists, doctors and nurses) and anyone (physical trainers and individuals) can have access to a digital tool that allow weight control, diet and exercise, including the possibility of readjustment, and thus help in changing eating habits and exercise.

Thus, My_Nutriologist_Personal is a product that integrates collaborative marketing knowledge (nutrition, medicine and software) and CUALtos teacher-advisors. To carry out the product tests, there is the staff (teaching, administrative and sports) who use the product in development and start by establishing the following characteristics:

- Vision: to be the leading company in remote nutritional care in the country.
- Mission: to be the leading company in the marketing of remote nutritional digital technology that efficiently satisfies customers. Have a large participation in the nutritional market through the remote platform used in the nutrition area. To be leaders in the nutritional market with acceptance among all professionals in the health area and the general public.
- Values: to be a company with social responsibility committed to customers and members, always seeking to have a social support orientation.

Objectives

Ensure that the product that is intended to be obtained from this undertaking is used appropriately and is a reference among all students to motivate them to become successful entrepreneurs, appropriating marketing knowledge and its use as a tool in their life.

Objectives term goals

Emplear las herramientas del *marketing* entre los miembros para convertir el emprendimiento My_Nutriólogo_Personal en un producto que sea desarrollado y probado, y proponer su forma de comercialización.

Medium-term Objectives

Deliver 30-day trial versions to established nutritionists, professors and sports trainers from the UdeG in the university centers where courses related to the health system are taught.

Integrate nutritionists who help enrich the databases with food so that suggestions on diets and exercises are extended, and give free consultation in support of the population to verify the behavior of the product, have another member to constantly update the app.

Long-term objectives

Turn My_Nutriologist_Personal into an emblematic product known nationally and displayed on social networks, without overlooking the fact that, being a successful product, it is an example of the use of marketing tools that encourage other students to adopt them and include them in their own projects.

Strategies

My_Nutriólogo_Personal is aimed at being the best product capable of recommending healthy diets and appropriate exercises for each user, that is, to be used in the health sector (doctors, nurses and nutritionists) and individuals (sports trainers, physical trainers or anyone), for what should be established are the core points that drive it, taking successful products or companies as an example.

Knowing where you want to go implies continuously listening to the members of the work team, applying the dynamics of conventional and digital marketing and integrating new areas of opportunity.

To meet this goal, it is necessary that, within the work team, the talent of each collaborator is recognized and thus each one occupies the correct position, with which it is sought to increase their performance, take advantage of their experience and optimal strengths.

Finally, the company must make a constant count of resources: human, economic, processes, assets, liabilities, policies and information to achieve the objectives.

Market research

A very important part in the implementation of this project is market research. Nuño (June 10, 2017) mentions that it provides information on the needs of the market, from which the objectives of the product are derived and what the client requires is defined, as well as the best alternative for the product to be successful.

The market niche

Moreira (January 24, 2019) states that in marketing it is essential to look for market needs that have not been met, which will become a great opportunity to stand out from the like and be competitive (table 1). Therefore, for this project, it was investigated what products exist in the current market that are similar to the project.

As a starting point, it can be established that the initial market niche of this undertaking is the health sector, among nutritionists, and may include doctors and nurses, physical trainers, people who wish to control their way of eating according to their age and sex. To detail the above, data from the National Institute of Statistics and Geography [Inegi] (2021) were taken, which reflect that in Mexico there are just over 126 million people and, according to the National Survey of Occupation and Employment (ENOE) (Inegi, 2021), in the second quarter of 2020 there were 2.4 nutritionists for every 1,000 inhabitants. According to the data found, it is determined that the potential market size, only among nutritionists, is 268,800, which increases by including doctors, nurses, physical trainers and people interested in their health.

Table 1. Market size of nutritionists only

Nutriólogo con ingreso	Tamaño del universo	Ingreso mensual	Ingreso total
Medio	188 160	\$7500.00	\$1 411 200 000.00
Alto	80 640	\$28 000.00	\$2 257 920 000.00
Total	268 800		\$3 669 120 000.00

Source: Inegi (2021)

To locate the niche through the market segment, data related to similar products used by nutritionists, doctors, nurses, physical trainers of the CUAltos representative teams, and some of the physical trainers that were in operation during the time of the pandemic were collected. . The data collected was of vital importance to determine whether or not to continue with the project.

The competition

Diet monitoring software on the market today is intended to be used exclusively by nutritionists. To next, some of them.

Alimentazione profesional

On its website, Eat Smart Apps (2017) is described as specialized software for nutritionists and nutrition students and is delivered on a USB stick. It has a cost of 1980.00 pesos and has the following characteristics: diet store, follow-up consultations, food editing, evolution graphs, eating plan, complementary tests, printed report, ideal values, insulin therapy, hospitalized patient, history dietetics, dietary evaluation, clinical record, anthropometric evaluation, laboratory data and didactic guides.

Its website does not have a mission, vision or objectives, its orientation cannot be analyzed and it does not have much participation in social networks.

NutriKcal VO

It was born to be used in teaching, so it can be installed on desktop computers at universities and institutes that have a nutrition degree, and for this reason it is widely used for teaching and research, although it is little known among nutritionists. Your page does not contain mission, vision and objectives, and does not allow the communication strategy in a simple way.

Its price is 4500.00 Mexican pesos and it is provided with the following functions: analyzes anthropometric and biochemical measurements and issues a risk diagnosis, calculates energy needs, vitamins and inorganic nutrients in a personalized way according to the anthropometric, clinical and physical activity characteristics of the patient. patient, automatically calculates and reports the food guide, makes it easier for the nutritionist to make modifications to the report and adapt it to the patient's needs, evaluates the nutritional contribution of the diet and issues an opinion on its adequacy with respect to food consumption and energy nutrient recommendations , vitamins and inorganic nutrients, based on the recommended daily intake (RDI) for the Mexican population.

Nutrimind

Nutrimind.net is described as software that has been evolving and can now be installed on almost any electronic communication device. Its web page only shows the benefits of its product, it does not include a description of itself and it does not have a mission, vision, objectives or orientation, all the attention on the product is done through the Internet and prevents the patient from knowing the nutritionist of personal way.

It costs 910.00 Mexican pesos, and has the following functions: adds food, diets and patients in an unlimited way, stores physical activity, clinical and laboratory data of the patient and their eating habits, analysis of sports patients, diet design, the software calculates nutrients and micronutrients for the diet, patient records and graphs of the evolution of all measurements.

Own proposal

The objective of collecting the data that was carried out was to know in advance whether or not there was any possibility that the product would have a favorable or unfavorable acceptance rate, since whether or not to continue with the project would depend on it.

For this, a survey was designed that should be applied in the areas of Los Altos (where the CUAAltos is located) and south of Jalisco (where the CUSur is located); The possible candidates to be interviewed should be selected from among independent nutritionists (in their own offices or in clinics), physical trainers from some gyms that were in operation, medical personnel (teachers from university centers or clinics) and nursing staff (in teaching or clinic) and some individuals unrelated to the categories mentioned (such as bodybuilders). It was used following the recommendations of QuestionPro (2022), which were of the utmost importance to reflect the thoughts of the interviewees.

As already mentioned, it was applied in the area of Los Altos de Jalisco (where the CUAAltos is located) and in the south of Jalisco (where the Centro Universitario del Sur [CUSur] is located). The sample consisted of 200 surveys (100 in each area) and was as shown below (figure 1).

Figure 1. Survey to find out the possible impact of My_Nutriologist_Personal.

1.- ¿ALGUNA VES HAS USADO UN PAQUETE DE SOFTWARE QUE TE PERMITA OPTIMIZAR TU TRABAJO?

SI	NO
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2.- ¿CUÁNTO TIEMPO LLEVAS COMPRANDO Y USANDO EL SOFTWARE?

MENOS DE UN AÑO	DE 1 A 3 AÑOS	MÁS DE 3 AÑOS
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3.- ¿ENUMERA LAS MARCAS DE SOFTWARE QUE HAS ADQUIRIDO?

COLEGIO MEXICANO DE NUTRIÓLOGOS	ALIMENTAZIONE
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4.- ¿ACTIVIDADES REALIZADAS DE RUTINA PARA EL CONTROL NUTRIMENTAL?

ACTIVIDAD	SI	NO
Calcular el IMC (Índice de Masa Corporal)		
Controlar el avance del paciente		
Entregar seguimiento al paciente		
Estructurar dietas que se ajusten a las necesidades de sus pacientes		
Llevar registro de expediente		
Mantener historial clínico		
Mantener la comunicación constante con el paciente		

5.- ¿HAY OTRAS ACTIVIDADES IMPORTANTES QUE REALIZAS DÍA A DÍA?

6.- ¿QUÉ OPINAS DE QUE TODA LA INFORMACIÓN GENERADA ESTÉ RESPALDADA EN LA NUBE, PARA QUE NO SEA HACKEADA O ROBADA?

RELEVANCIA	SI	NO
MUY IMPORTANTE		
IMPORTANTE		
POCO IMPORTANTE		
NADA IMPORTANTE		

7.- ¿QUÉ OPINAS DE UN SOFTWARE PARA ATENDER PACIENTES DE FORMA REMOTA O FORMA PERSONAL?

INTERÉS	SI	NO
MUY IMPORTANTE		
IMPORTANTE		
NADA IMPORTANTE		

8.- ¿QUÉ IMPORTANCIA QUE LE DAS A CADA ASPECTO DE LOS SIGUIENTES PARA ADQUIRIR EL SOFTWARE?

PRECIO	DISEÑO	COMODIDAD	CALIDAD	FUNCIONALIDAD	DURABILIDAD	ACCESIBILIDAD

9.- ¿QUÉ CARACTERÍSTICA ES MÁS IMPORTANTE PARA DEDICIR COMPRAR SOFTWARE?

COSTO	DISEÑO	COMODIDAD	CALIDAD	FUNCIONALIDAD

10.- ¿USARÍAS UN SOFTWARE PARA HACER TU CONTROL DE DIETA RÁPIDO, EFICIENTE Y SEGURO?

SI	NO ESTOY SEGURO	HASTA VER RESULTADOS

11.- ¿INVERTIRÍAS \$ 200,00 MENSUALES POR EL SERVICIO QUE FACILITE EL CONTROL DE DIETAS?

NO LO SÉ	NADA PROBABLE	POCO PROBABLE	PROBABLE	MUY PROBABLE

12.- ¿TU OPINIÓN DEL NOMBRE "My_Nutriólogo_Personal" PARA CONTROL DE DIETAS?

NADA INTERESANTE	POCO INTERESANTE	NEUTRO	INTERESANTE	MUY INTERESANTE

13.- ¿EN DÓNDE TE CONVENDRÍA CONTRATAR EL SOFTWARE?

VÍA INTERNET	DISTRIBUIDOR ESPECIALIZADO
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14.- ¿QUÉ MEDIO PREFIERES RECIBIR INFORMACIÓN SOBRE EL SOFTWARE?

VÍA INTERNET	VOLANTES	PERIÓDICO O REVISTA	TV

15.- ¿CUÁL ES TU GÉNERO?

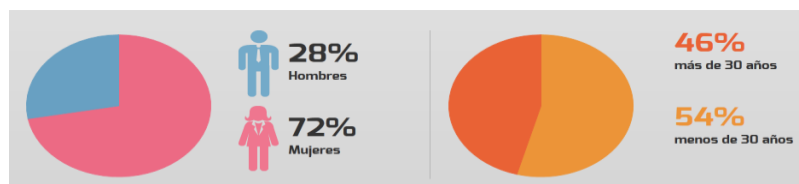
MASCULINO	FEMENINO
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Source: Own elaboration based on QuestionPro (2022)

Analysis of potential primary demand

The size of the primary market segment is made up of health professionals (nutritionists) whose number, according to the Inegi (2021) (figure 2), amounts to approximately 268,800, does not include potential clients such as: doctors, nurses, trainers, physical trainers and people interested in their health.

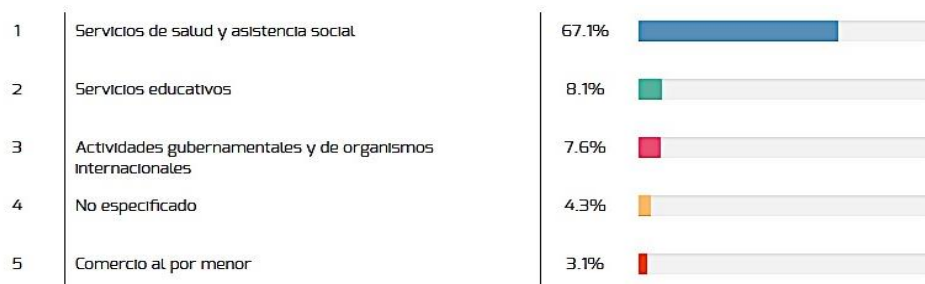
Figure 2. Nutritionists in Mexico classified by gender and age



Source: Inegi (2021)

Figure 3 shows the sectors where nutritionists are located.

Figure 3. Sector of work where the nutritionist is located



Source: Inegi (2021)

Results

Software testing phases

The product is tested to find possible errors until a final version is obtained for the user. Tests are made of:

- a) The internal logic of the components of the Web.
- b) The domains of the program to discover functional and behavioral errors.
- c) Test on Android and iOS devices.

In the first stage of testing, the support of students and nutrition teachers from CUALtos and CUSur was counted on. Before proceeding to the second stage, the product was purified and adjusted.

Subsequently, it was delivered to the same students, teachers and administrative staff, coaches of the different careers of the same study centers, as well as some trainers in gyms of the towns that house said educational centers.

Benefits of using My_Personal_Nutriologist

The benefits of the product are: a) having the information secure in the cloud and accessible at any time; b) solve problems of: obesity, overweight and chronic-degenerative diseases; c) generate reminders; d) generate instantaneous specific diet for each person; e) avoid the use of miracle products, and f) substitution of foods and diets.

The four P's of My_Nutriologist_Personal

Because it is a product that facilitates personal diets designed by nutritionists, it can be used by other nutritionists, teachers, doctors, nurses, physical trainers or anyone who purchases it, who will be able to obtain better results in less time and at a lower cost. . It has the great advantage that it can be downloaded from the page created to communicate with the client. In it you will find complete information on the service, use and method of acquisition. You can download a trial version (free for evaluation for 15 days) so that later you can purchase the final version for a monthly fee. The original sales plan includes two proposals that resulted from the market study: a cost of \$160.00 and another \$200.00 pesos per month for a period of one month of service. Table 2 shows the two sales estimates at \$160.00 and \$200.00.

Table 2. Sales estimate

Número de usuarios	Mes	Ventas a	
		\$200	\$160
30	Primero	\$6000.00	\$4800.00
60	Segundo	\$12 000.00	\$9600.00
90	Tercero	\$18 000.00	\$14 400.00
120	Cuarto	\$24 000.00	\$19 200.00
150	Quinto	\$30 000.00	\$24 000.00
180	Sexto	\$36 000.00	\$28 800.00

Source: self made

Marketing strategy

The product's strategy to facilitate its use and commercialization is based on its competitive advantages, which are: a) easy access to the product, b) it resides in the cloud and c) application for mobiles (laptops, cell phones and tablets) and desktop computers.

Marketing plan

Marketing, the most important aspect of a business or product, indicates that without income there is no product or company, therefore the specific needs of the client, company, competitors, collaborators and context were detected and analyzed, since there is a primary potential market for This project, made up of nutritionists who work independently, but its dimension grows if doctors, nurses, physical trainers and any individual are included.

Therefore, it is emphasized that My_Nutriologist_Personal is an easy product to be used by nutritionists, doctors, nurses, physical trainers and people interested in their health.

It allows the control of personal files (of any member of the family) and clients (of physical trainers, nutritionists, doctors and nurses) with the data that is entered, which is stored in the cloud to be consulted, modified and expanded at any time, from anywhere you have an internet connection.

Sales process

The initial contact with the potential customer can be given in two ways: direct sale or through the product page. Once the interested client has been identified, an advisor (specialized salesperson who is a nutritionist who is a member of the project team) is assigned, who is in charge of closing the sale of the subscription and making the contract. The collection is periodic and on a pre-established cut-off date in the contract. The customer chooses whether it is by credit card or online payment receipt.

Results of the test

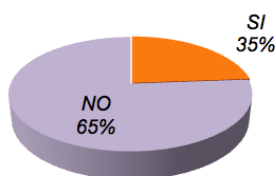
The application of the survey allowed to know the characteristics of what the public expects from the product that motivated the venture.

200 surveys were applied among nutritionists, doctors, nurses, trainers and physical trainers. It was suggested to visit established professionals in the areas of nutrition, professors of courses in medicine, nursing and nutrition, administrative staff, students, team coaches from the various sports disciplines of the CUAltos and CUSur teams.

Also, they went to gyms in the towns that were in service, since people go there to prepare physically and take care of their diet.

Figure 4 shows the result for question one: "Have you ever used a software package that allows you to optimize your work?".

Figure 4. Most of the interviewees have used software before

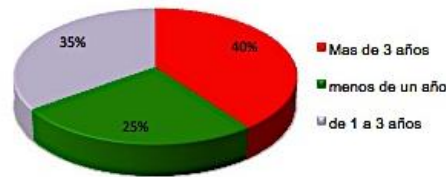


Source: self made

Most of the interviewees use the Internet as a source of consultation, where weight control systems, exercise programs and diets are offered. 130 of the interviewees (65%) already have prior knowledge, while 70 (35%) have not used anything similar.

Figure 5 shows the result for question two: "How long have you been buying and using the software?"

Figure 5. Most of the interviewees have used software for more than three years

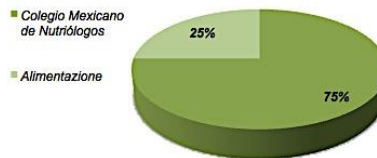


Source: self made

Figure 5 shows that of the 200 respondents, 80 (40%) have used diet management software for more than three years, 70 (35%) had experience using it between one and three years, but 50 (25%) have less than a year using that kind of software.

Figure 6 shows the result of item three: "List the brands of software you have purchased." In this question they were given a choice between the best known, which are Alimentazione and the Mexican College of Nutritionists.

Figure 6. Most of those surveyed have used Alimentazione

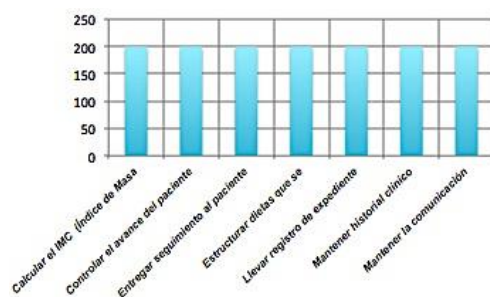


Source: self made

When capturing the surveys, it was possible to see that the software called Alimentazione currently enjoys great preference among users of the service for managing diets: 150 (75%) respondents selected it; only 50 (25%), the software of the Mexican College of Nutritionists.

Figure 7 shows the result for question four: "Activities performed routinely for nutritional control?".

Figure 7. On this occasion 100% of the respondents chose all the options

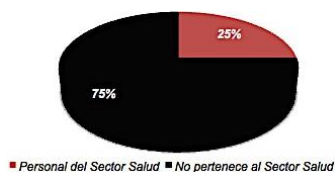


Source: self made

The 200 respondents selected the proposed activities, which coincides with and slightly exceeds what was established by Sierra (2021), who found that 96% of nutritionists carry out these activities as part of their daily routine to maintain strict control of the patient.

Figure 8 shows the results chosen by the respondents in question five: “Are there other important activities that you do every day?”

Figure 8. 25% of respondents are from the health sector

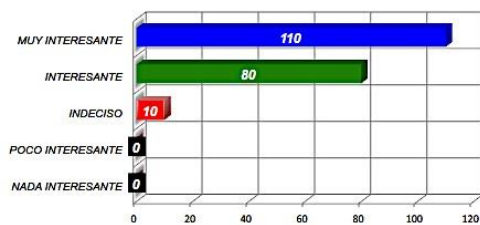


Source: self made

Of the 200 interviewees, 25% of them (50) were personnel from the health area, so it is common for them to take skinfolds in patients with pathologies, 150 (75%) did not know what the question referred to, for not be health personnel.

Figure 9 shows the results to question six: "What do you think about all the information generated being backed up in the cloud, so that it is not hacked or stolen?"

Figure 9. Respondents were divided into three groups

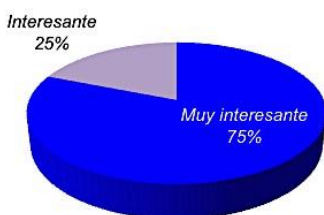


Source: self made

110 (55%) respondents said it was very interesting, while 80 (40%) said it was interesting and five (10%) were undecided, none answered that it was not interesting.

Figure 10 shows the result for question seven: “What do you think of a software to care for patients remotely or to be used personally?”

Figure 10. Preference for using our product

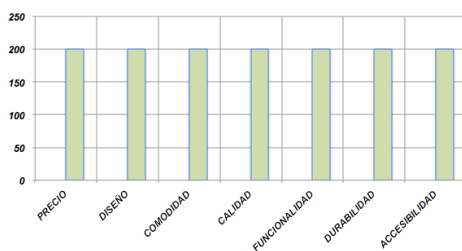


Source: self made

Here the benefits offered by the product being introduced were explained and 50 (25%) interviewees answered that they found it interesting, while 150 (75%) answered that they found it very interesting.

Figure 11 shows the result for question eight: "How important would you give each of the following aspects to acquire the software?"

Figure 11. Factors that would help them decide when choosing software

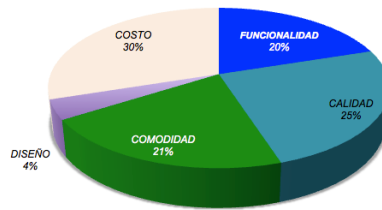


Source: self made

All 200 (100%) respondents mentioned that the factors shown to them are of equal value when selecting a software product.

Figure 12 shows the result for question nine: "Which feature is most important to decide to buy software?"

Figure 12. Most important factors to acquire software

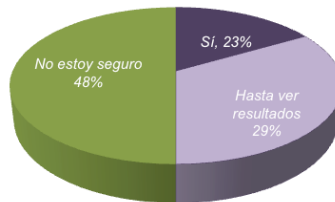


Source: self made

The cost represented the most decisive factor to purchase the software: 60 interviewees (30%) selected it; the quality was for 50 interviewees (25%); comfort was the next factor chosen by 42 interviewees (21%); the functionality was chosen by 40 respondents (20%), and the design was only chosen by eight respondents (4%).

Figure 13 shows the result for question 10: "Would you use software to control your diet quickly, efficiently and safely?"

Figure 13. Confidence in using the software

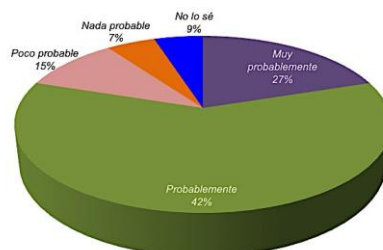


Source: self made

Of the 200 interviewees, 96 (48%) of them answered that they are not sure about using it, 58 (29%) said they would buy it until they see results, and only 12 (23%) said they would buy it.

Figure 14 shows the result for question 11: "Would you invest \$200.00 per month for the service that facilitates diet control?"

Figure 14. Those interviewed would be willing to invest in their health

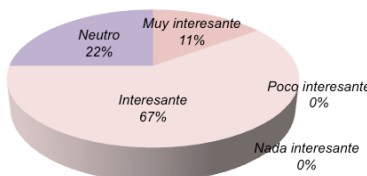


Source: self made

42% (84 respondents) said they probably will, 27% (54 respondents) said they are very likely to, 15% (30 respondents) said unlikely, 9% (18 respondents) don't know they would acquire it or not and 7% (14 respondents) would not acquire it.

Figure 15 shows the result for question 12: “Your opinion of the name My_Nutriologist_Personal for diet control?”

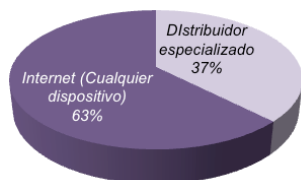
Figure 15. Trying to position the brand among nutritionists



Source: self made

Of the 200 interviewees, 134 (67%) said that they find the name interesting, 22 (11%) said that it was very interesting, 44 (22%) said that they did not have an opinion about the name, but the important thing is that nobody he selected it to be little or not at all interesting. Figure 16 shows the result for question 13: "Where would you find it convenient to hire the software?"

Figure 16. Trying to position the brand among the interviewees

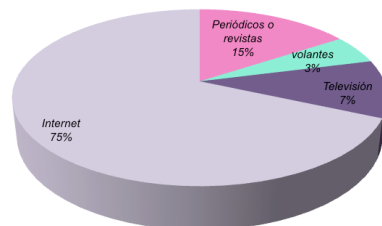


Source: self made

It should be mentioned that currently people have been doing a lot of shopping online, since 126 responses (63%) indicate that they prefer to do it this way, while 74 of them (37%) prefer to do it the traditional way in a distributor.

Figure 17 shows the result for question 14: “Which medium do you prefer to receive information about the software?”

Figure 17. How they prefer to receive information

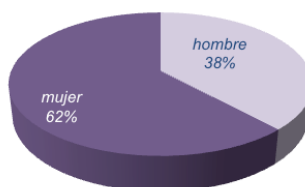


Source: self made

In this question, it can be confirmed that most people prefer to receive information via the Internet, since of the 200 interviewees, 150 (75%) chose it as the best option, 30 (15%) prefer to see newspapers and magazines, 14 (7%) prefer to see it on television and six (3%) prefer to see it on flyers.

Figure 18 shows the result for question 15: “What is your gender?”

Figure 18. Women care more about their health



Source: self made

This response allows verifying that there is a greater number of women dedicated to the nutrition profession, since 124 (62%) were the people who agreed to answer the survey because they were interested in learning about this product, which can be of great help in the exercise of their professional, while 76 of them (38%) were men who answered the survey.

Discussion

During the development of this project, aspects related to the covid-19 pandemic had to be analyzed and how it came to change the lifestyle of all people in general. The college student faced a distance education learning model.

It depends on each person what to do to take advantage of the prevailing situation. In the present case, it was decided to look for complementary activities, such as getting into marketing and what to do with it, since it is not part of the nutrition knowledge imparted.

The knowledge acquired in marketing, supported by the advice of specialist teachers in that area, allowed us to have a broad overview of what can be done when multidisciplinary societies are established and a project is chosen in the area of specialization of one of them (nutrition in the present case).

Thus, it became feasible to apply an entrepreneurship model and make it possible through marketing: an idea became a product that is economically between four and five times cheaper than those of the competition.

Due to the above, it is inferred that this project was just the beginning of an even greater work that will require more preparation in the area of digital marketing to evolve the product and that it becomes the pillar of a company where the client actively participates in the following functions that the product will perform. Of course, it is envisioned that it would be a company related to health, which would bring product diversification.

From what has been visualized, although it has not yet been achieved, if an SME is formed, other people will be employed. In this way, instead of being a professional looking for a job opportunity in any company, you will become an entrepreneur in the full sense of the word.

In the same way, during the development of the project, a maturity and vision were obtained that can be shared not only through the product obtained, but also through talks to the new students who are currently studying their degree.

Conclusions

It should be highlighted the fact that this project would never have been possible to make it a reality without the use of marketing, since it is a vitally important tool for ideas to be converted into ventures and not to be forgotten when a project is concluded. course, career or cycle.

When using it, the analysis of the information from the market study was carried out, and it was identified that few nutritionists have specialized software as versatile as the one achieved here, since it allows them to carry out their activities efficiently and optimizes their work. For this project, a group of multidisciplinary specialists was brought together, each one a leader in their area. The pandemic was taken as a unique opportunity to carry out a venture with the greatest benefits for each member.

A determining point in the project was to have the marketing advisory support of its CUALtos teaching staff, in addition to the great support of the staff that supported the different stages of the product.

There was a lot of criticism from people in the health area (medicine, nursing and nutrition) because it was not contemplated to invite other teachers who could give more help to achieve better results, but the first approach was made with personnel who had references by some acquaintances who study that specialty.

This project would never have become a venture without the selfless help provided by all those who gave their time helping us.

Finally, it must be emphasized that the members of the computer area provided and developed the support or help that the client may require live via videoconference, from their own account as a client, or using email messages. text with images and videos included. This is an advantage that puts the product over the competition, since these consultations will be given in a 24/7 scheme, that is, 24 hours a day, seven days a week.

Future work

In the first place, carry out the required procedures with the university authorities so that the project is used as an example of a successful business model capable of encouraging students to be entrepreneurs using marketing as a tool to achieve it.

Due to the fact that some nutritionists, doctors and nurses have approached to offer their services and form part of the team, supporting users in handling the product and expanding diet and exercise programs, it will be possible to extend the database with combinations of exercise and diet, more reliable recommendations will be made for those with comorbidities.

In the marketing area, the possibilities that may be had in the perhaps very near future have been analyzed, when the necessary capital is available to be incorporated into digital marketing, with the purpose of making it reach a greater number of clients. .

Lastly, since consultancies are given by videoconference, video and text, at the suggestion of the computer team, the opportunities to integrate ChatBots for customer service are being analyzed.

References

- Centro de Investigación Económica y Presupuestaria [CIEP]. (2022). <https://cipe.mx/presuneto-para-la-salud-2022-prioridad-en-la-creación-de-plazas-meicas/>
- Cómo llegó el fin de xerox, la compañía que inventó. las fotocopiadoras y las primeras computadoras personales. (5 de febrero de 2018). *BBC Mundo*. Recuperado de <https://www.bbc.com/mundo/noticias-42913422>.
- Cruz, S. (15 de julio de 2020). 7 puntos clave para lograr una planeación estratégica exitosa. TBM. Recuperado de <https://www.tbmcg.mx/recursos/blog/7-puntos-para-lograr-una-planeacion-estrategica-exitosa/>.
- Drummond, C. (22 de marzo de 2019). De Lego a Starbucks: 9 empresas de éxito que estuvieron al borde del fracaso pero lograron remontar a tiempo. *Business Insider*. Recuperado de <https://www.businessinsider.es/9-empresas-estuvieron-borde-fracaso-exito-mundial-actualidad-376519>.
- Durán, C. (26 de octubre de 2016). Emprendimiento en el garaje de Jobs. *Forbes*. Recuperado de <https://www.forbes.com.mx/emprendimiento-en-el-garaje-de-steve-jobs/>.
- Eat Smart Apps. (2017). Alimentazione. Recuperado de <http://www.alimentazione.com.mx/profesional/>.
- Federación Andaluza de Mujeres Empresarias Autónomas [Famet-Andalucía]. (2016). *Introducción al marketing digital*. Sevilla, España: Federación Andaluza de Mujeres Empresarias Autónomas. Recuperado de https://autonomasenred.files.wordpress.com/2015/03/ebook2-_introduccion3b3n-al-marketing-digital.pdf.
- Fuente, O. (15 de marzo de 2022). Marketing digital: qué es y sus ventajas. IEBS. Recuperado de <https://www.iebschool.com/blog/que-es-marketing-digital-marketing-digital/>.
- Golán, P. (9 de diciembre de 2021). ¿Qué es el emprendedurismo y en qué consiste? Blogs de Shopify. Recuperado de <https://www.shopify.com.mx/blog/emprendedurismo>.
- Instituto Nacional de Geografía y Estadística [Inegi]. (19 de enero de 2021). Encuesta Nacional de Ocupación y Empleo (ENOE). México: Instituto Nacional de Geografía y Estadística. Recuperado de <https://www.inegi.org.mx/programas/enoe/15ymas/>.

- Instituto Nacional de Salud Pública [INSP]. (2020). Diabetes en México. Recuperado de <https://cipe.mx/presuneto-para-la-salud-2022-prioridad-en-la-creación-de-plazas-meicas/>.
- Jaquez, C. (2014). Las 5 claves para una planeación estratégica en tiempos de cambio. *Forbes*. Recuperado de <https://www.forbes.com.mx/brand-voice/5-claves-planeacion-estrategica-tiempos-cambio/>.
- López-Gatell, H. (23 de julio de 2020). Versión estenográfica. Conferencia de prensa. Informe diario sobre coronavirus COVID-19 en México. Recuperado de <https://www.gob.mx/presidencia/articulos/version-estenografica-conferencia-de-prensa-informe-diario-sobre-coronavirus-covid-19-en-mexico-248815?idiom=es>.
- Moreira, B. (24 de enero de 2019). Descubre qué es nicho de mercado y cómo descubrir el tuyo. Rockcontent. Recuperado de <https://rockcontent.com/es/blog/nicho-de-mercados/>.
- Nuño, P. (10 de julio de 2017). Objetivos de la investigación de mercado. *Emprende Pyme*. Recuperado de <https://www.emprendepyme.net/objetivos-de-la-investigacion-de-mercado.html>.
- Nutrimind (s.f.). Nutrimind Software de Nutrición. https://www.nutrimind.net/page/software_de_nutricion
- Organisation for Economic Co-operation and Development [OECD]. (2019). *The Heavy Burden of Obesity. The Economics of Prevention*. Paris, France: OECD Publishing. Retrieved from <https://www.oecd.org/health/the-heavy-burden-of-obesity-67450d67-en.htm>.
- QuestionPro. (2022). 7 puntos que necesitas saber para el diseño de encuestas. Recuperado de <https://www.questionpro.com/blog/es/7-puntos-importantes-que-debe-considerar-en-el-diseno-de-encuestas/>.
- Ramos, G. (2014). Definición de USB. Definición. Recuperado de <https://definicion.mx/usb/>.
- Santos, B. (6 de abril de 2021). ¿Quiénes son los emprendedores más famosos del mundo? Hotmart/Blog. Recuperado de <https://blog.hotmart.com/es/emprendedores-mas-famosos-del-mundo/#t2>.
- Secretaría de Salud-Instituto Nacional de Salud Pública [INSP]-Centro de Investigación en Evaluación y Encuestas [CIEE]. (2018). Encuesta Nacional de Salud y Nutrición 2018. México: Secretaría de Salud-Instituto Nacional de Salud Pública-Centro de

Investigación en Evaluación y Encuestas. Recuperado de <https://ensanut.insp.mx/encuestas/ensanut2018/index.php>.

Secretaría de Salud-Instituto Nacional de Salud Pública [INSP]-Centro de Investigación en Evaluación y Encuestas [CIEE]. (2021). Encuesta Nacional de Salud y Nutrición Continua 2021. México: Secretaría de Salud-Instituto Nacional de Salud Pública-Centro de Investigación en Evaluación y Encuestas. Recuperado de <https://ensanut.insp.mx/encuestas/ensanutcontinua2021/index.php>.

Sierra, J. (8 de junio de 2021). ¿Qué hace un nutriólogo en su día a día? Justo Sierra. Recuperado de <https://blog.justo-sierra.edu.mx/que-hace-un-nutriologo-dia-a-dia>.

Silva, A. (10 de octubre de 2018). ¿Por qué unas empresas tienen éxito y otras no? *Cambio 16*. Recuperado de <https://www.cambio16.com/exito-de-una-empresa/>.

Statista Research Department. (20 de julio de 2022). México: número semanal de casos y muertes causadas por COVID-19 2020-2022. Recuperado de <https://es.statista.com/estadisticas/1110089/numero-casos-muertes-covid-19-mexico/>.

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