Development of a Buyer Persona Strategy for the Design of a Digital Platform Focused on the Livestock Sector in the Colombian Caribbean Zone

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The research proposal is aimed at strengthening animal production in the Caribbean area, through e-extension consultancy mediated by the use of ICT, taking into account the problems faced by this sector in terms of access to information and use of new technologies to improve their production and business processes. With the creation of a Buyer persona, we seek to identify the type of population that would be willing to be part of a digital platform, and the type of content to provide, seeking to bring the academy closer to the productive sector, thus being able to provide solutions to real problems, allowing to test the knowledge acquired by students with the support of teachers. For this reason, it is proposed to develop a buyer persona methodology, through the use of surveys, to determine our client and service to be targeted in the diagnosis of the livestock sector in the Caribbean zone, which allows to recognize the priorities of the sector in livestock consulting and support of these, being such an important link in the economy of the area and for this, students and teachers of the Zootechnical program of the Universidad Nacional Abierta y a Distancia - UNAD, will carry out the implementation of the methodology described here. With the creation of the buyer persona, it is intended to develop in the future a technological tool from the analysis carried out in order to deliver a multimedia product where teachers and students work as a team to provide support to this sector.

Keywords: livestock consulting, rural development, livestock production, e-extension, communication and information technologies.

1. Introduction

In Colombia there are many barriers that limit productivity in rural areas, access to information is one of them, both in agriculture and livestock (animal production). The students of animal husbandry, from the National and Distance University (UNAD), focus on this important point and on looking for innovative strategies that help strengthen it.

According to Henao et al (2018), rural extension in Colombia is a pillar in the production of rural areas, as it is there where knowledge and application of it is generated, especially in small and medium-sized producers, which in turn generates an improvement in the rural environment, in different aspects, becoming the engine of agricultural development and that impacts, improving economic conditions in peasant families.

In addition to this, we have the new challenges of this new era, where connectivity, technology and innovation are the pillars of a new development that presents challenges, in a resilient society, which shows different types of needs and expectations, it is this new era that marks a social transformation that seeks a more informed and better connected society in order to be in tune with the needs of society.

In this sense, Coronel (2022) shows us how Universities are in charge of assuming an active role in generating strategies, so that agricultural development is promoted through knowledge, in the construction, transformation and evolution of this society

It is on this leading role of universities that we must delve into by participating and identifying the different scenarios and trends of our local society, to contribute to a more impactful role within a society.

In addition, Cruz et al, (2020), reminds us of the importance of recognizing and incorporating ICT in educational pedagogy, more so in these times, as well as the multiple impacts generated by the use of this type of technology.

This type of scenario will help students to strengthen their skills and self-learning, contributing to a society with knowledge, being participants providing society and the peasants of the area with knowledge and accompaniment in their productive processes.

According to Acosta (2022), the pandemic caused a lot of havoc worldwide, but at the same time it generated a change in learning in the use of different tools in education and in how students are receptive to them, generating knowledge and in turn transmitting to their peers in collaborative learning.

In this sense, Espíndola (2005) shows us how collaborative networks generate knowledge and generate some type of learning within a society, which produce learning exchanges and active participation in the participants, even more so in dispersed areas, such as the rural areas of our country.

In addition, in our country, animal production occupies a line of the economy, and is part of food security, which leads us to think that there is a need to develop integrations with the community and the guild.

Nowadays, being able to work with ICT is essential to position any educational, organizational or commercial organization, in addition to the increasingly active access to the network from tablet phones and computers; It makes the expansion of the services an institution provides more feasible within an organization.

UNESCO (2014), in its Global Education report, points out that the virtual learning environment is a totally new form of Educational Technology and offers a complex series of opportunities and work in educational institutions around the world, seeking to optimize people's time in an increasingly changing and complex society. that it advances at an accelerated pace and that the rapprochement or connections between communities is increasingly made through ICTs.

2. Material and methods

Taking into account that a Buyer persona is a semi-fictitious representation of your ideal customers or people with whom they are going to interact, what is sought is to frame and project the needs of the audience to which the strategy is going to be directed; visualizing it in a more human way.

To this end, the information will be collected with surveys to teachers and students of the National Open and Distance University -UNAD- and involving producers from the Caribbean area, to make a Buyer persona avatar, a method that helps to understand how your products or solutions can help your potential customers, for this we must carry out an interview to determine who our target customers are and to whom to direct your didactic strategy of strengthening of animal production, in the Caribbean area. Based on what was indicated by López, et al (2011) "the interview has enormous potential to allow us to access the mental part of people, but also their vital part through which we discover their daily life and the social relationships they maintain" (p.1).

In this study, it is expected to use the methodology of the survey, to each of the actors present (Producers, Students and teachers), to have a global vision of the different types of actors that will work within the study.

A total of 54 surveys will be carried out, distributed as follows: 7 Teachers from the School of Livestock and Environmental Sciences (ECAPMA) of the UNAD, 23 students of Zootechnics from the UNAD and 24 allied producers from the Caribbean area, the teachers' samples will have a confidence level of 95% with a margin of error of 5%, while for students it will be a confidence level of 95% with a margin of error of 50%, and the same for producers, where the sample size is according to the sample size of infinite population.

Figure 1. Formula for calculating sample size teachers and students

$$\mathbf{n} = \frac{Z^2. \ p. \ q. \ N}{NE^2 + Z^2 \ p. \ q.}$$

Where:

Z = Confidence Level

Nanotechnology Perceptions Vol. 20 No. S6 (2024)

N = Population Census

p = Probability in favor

q = Probability against

e = Estimation Error

n = sample size

Source: Mateu (2023)

3. Results

Within the analysis of the result of the project, it seeks to answer what type of person it is that we are going to serve on our virtual platform, based on the answers of the in-depth interview carried out with teachers, students and producers; with the answers, it seeks to create a Buyer persona, as a potential customer, determining the type of population to participate, as well as the communication channels, media and theme to be presented, for the strengthening of livestock producers in the Caribbean area of Colombia; The results of the in-depth interview are the result of the collaboration of the different parts of the study.

Estudiante Edad: 28 La mayoría no recibe asesorías, lo Sexo: Hombre que se debe articular con Estudios: Zootecnia docentes y productores. Localización: Madrid Estado Civil: Soltero Produccion animal Asesorias venta de insumos sobre la UNAD videos de la carrera Ganaderia en su mayoria pero Hola, soy Emilo, Estudiante de zootecnia tambien me interesa saber de WhatsApp de la universidad Nacional Abierta y a porcinos, peces, mascotas, Google distancia. Me encanta el campo y los equinos, aves ovinos y caprinos. Amigos Cercano animales, tengo cercanía por la familia, al campo Colombiano.

Figure 2. Characteristics of the Buyer persona.

Source: authors. In original language Spanish.

The results are evidenced in Figure 1, where we see that our Buyer persona or potential customer for our digital platform service, is a student of approximately 28 years of age, male, with a business in Colombian agriculture, whose interests are mostly livestock, in addition to pigs, fish, pets and to a lesser extent horses, sheep and goats, this potential customer of our *Nanotechnology Perceptions* Vol. 20 No. S6 (2024)

channel does not receive advice on his venture, looking for more information on YouTube, Google WhatsApp, tv. As for topics in which you want to have available and with which you want to interact are animal production, consulting, sales of inputs, UNAD topics, information videos, etc.

4. Discussion

With this Buyer persona, you can determine what the needs of the community are, as well as determine the type of individual who wants to interact with us within a digital platform.

These findings suggest that the use of a digital platform for students and interaction with producers, promoting a knowledge network, would be the most appropriate to strengthen knowledge in the classrooms and meet their requirements in a remote way where learning can be generated.

Virtual Communities (VCs) use ICTs to form a relationship in which collaboration and the exchange of experiences facilitate the creation of collective knowledge. In this way, collaborative learning is put into practice among community members, and common values and interests are shared (Araujo et al 2019).

The use of this methodology makes clear the population to be served and its needs, in order to be able to focus on it in a more direct way and according to their specific or particular needs, on the other hand, with the development of this project, not only results were obtained with respect to the improvement in the advice of this productive sector, but also allowed the students of the animal husbandry program to consolidate knowledge and improve technological skills through the use and implementation of tools such as ICTs.

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