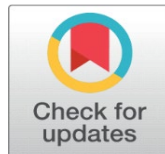


COMMUNICATION MODEL ADAPTED TO THE ENTREPRENEURIAL CONTEXT OF THE CITY OF FIANARANTSOA MADAGASCAR

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ABSTRACT

Communication, defined as an interaction between two interlocutors, is an indispensable tool that human beings can not do without. Whether traditional or digital, it is necessary in education and in entrepreneurship. The obstacles relate to the communication systems of entrepreneurial support structures in the city of Fianarantsoa, Madagascar, particularly at the level of the models they have adopted. The objective of this research is therefore to study the communication systems of these structures. Different methods were adopted for data acquisition, such as analysis of the situation of existing structures by conducting an observation, an online opinion poll, a focus group, a survey and interviews within the various entrepreneurial support structures in the city and at the University of Fianarantsoa, Madagascar. This study is based on a sample of 302 individuals (mentors, startup owners, fokontany leaders, managers in the structures). After statistical analysis of the results, a hybrid communication model adapted to the contexts of these structures was proposed. As a perspective, this research can be extended to digital mapping of entrepreneurs in the use of digital technology and tools.

Keywords: Communication Model, Entrepreneurship, Training, Development, Digital



1. INTRODUCTION

In Madagascar, the employment sector is vulnerable since nearly 80% of its working population, according to the FES communication in 2022, have precarious and unproductive jobs. A study conducted by Dr. Herinjatovo Ramiarison shows that only 5% of young people manage to get a permanent job.¹

The Haute Matsiatra Region does not have a phenomenal economic situation compared to other regions of Madagascar. The unemployment rate is still high and many inhabitants live in an unfavourable situation [RGPH-3 \(2018\)](#). Change is urgently needed; simple awareness-raising will not be enough, so the main challenges therefore lay in the creation of decent jobs for all (SDG8) and the increase in employability. Meeting the challenge of job creation to improve the financial situation of households, especially in rural areas, by promoting entrepreneurial activity is essential for the country's economic development. [Razafindrakoto L. S. \(2022\)](#); [Batazzi and Laudati \(2016\)](#).

Entrepreneurial support structures in the town of Fianarantsoa in Madagascar train young people as part of Sustainable Development Goal 8, "Access to decent jobs". Their common objective is to develop and promote entrepreneurship, but with different target groups. Going through an incubation experience contributes to the success of a business or start-up ([Patton \(2014\)](#); [Suroso et al. \(2020\)](#); [Rijnsoever and Eveleens \(2021\)](#)). These structures often guarantee networking for the start-ups or companies they support ([Hansen et al. \(2000\)](#); [Peters et al. \(2004\)](#)).

Communication is an interaction between two or more people who seek to exchange information or emotions by different means. In other words, it is seen as a process by which individuals transmit messages [Silbermann \(1980\)](#). With the advent of the Internet, communication has continued to evolve as the channels of expression have multiplied. The emergence of digital platforms offered a whole new way of communicating. When computing was born, followed by the development of the Internet, a new form of communication was created, digital communication. Digital communication emerged with the appearance and exponential development of the Internet and the appearance of the Web [Togoumbaye \(2020\)](#). The support structures in the town of Fianarantsoa each have their own communication method and strategy to ensure the success of their projects. One structure opts to use the traditional communication model, another includes very advanced digital applications, while yet another uses both. However, the general problem is to study the communication systems of these support structures in the city of Fianarantsoa in order to standardise the models used in their programmes. How can these models be merged in order to design a single basic model to improve communication strategies for promoting entrepreneurship? The overall aim of this research is to study the communication systems of support structures in the town of Fianarantsoa, Madagascar. The specific objectives are to understand the current status in the support structures and to design a communication model adapted to the general context of the city of Fianarantsoa. The following research questions are presented: Are the communication models used by the support structures in the town of Fianarantsoa appropriate to the reality in this town? Does developing a communication model adapted to the context of this study area contribute to the effectiveness of entrepreneurship promotion? The following hypotheses are put

¹ Herinjatovo R. "Presentation of the results of the job creation study in Madagascar, challenges and recommendations". Report Round table of MTEFPLS, DGPP and FES [online] <https://madagascar.fes.de/e/presentation-des-resultats-de-letude-creation-demplois-a-madagascar-defis-et-recommandations>

forward: traditional communication models are not appropriate to the reality of promoting entrepreneurship in the town of Fianarantsoa, Madagascar; an effective communication model makes it possible to define a more appropriate communication strategy.²³

2. MATERIALS AND METHODES

The study was conducted in the urban commune of Fianarantsoa, which is located in the Haute Matsiatra Region, part of Madagascar's central highlands. It lays between 21° 27' 00" south and 47° 05' 13" east. The urban commune of Fianarantsoa is made up of 51 smaller communities, called "Fokontany⁴," whose main activities, like those of the Haute Matsiatra region, are based on agriculture and trade. More than 84% of the population engaged in agriculture in 2018 (RGPH 3, 2018). This is a key point for undertaking and promoting job creation through these activities. In some Fokontany, the activities of the population as well as their way of life are similar to those of rural people.⁵

The characteristics of this locality are notable in the context of this analysis because it represents current problems in the Highlands of Madagascar. This locality is one of the major high-potential areas for economic resources or human resources, but it is in an unfavorable economic situation. Nevertheless, we can see that entrepreneurship is gaining ground with self-entrepreneurship and micro-businesses increasingly being adopted by local people, especially young people.⁶

Different methods were adopted for data acquisition. A semi-directive interview was organised to obtain the views of the stakeholders, namely some representatives of the local authority, such as the Presidents of the surrounding fokontany and the Secretary of the Regional Directorate of Youth and Sports, and the players involved in supporting young people, such as the founder of the association Arinosy communication, the executive director of the NGO Ndao Hifanosika Fianar, and finally the managers at the University of Fianarantsoa, such as the Director of Communications, the head of the Radio ROFIA department, the head of the E-atiala park department, the website development manager and the web editor. A survey was conducted out with 120 students. Participant observation was carried out during the first entrepreneurship training course at the University of Fianarantsoa. The focus group was conducted with 170 members, most of whom were students.

Three data collection tools were used, including Kobotoolbox, Google Forms and Diagramme UML. Kobocollect was used to collect data on the realities of coaching offers from stakeholders for the promotion of entrepreneurship. The data collected is then centralized in a data visualization platform called kobotoolbox. The latter is a free, open-source tool. It has been developed by Harvard Humanitarian Initiative & Brigham And Women's Hospital. It has been developed to meet the needs of users traveling to crisis and natural disaster areas. It is structured around 3 modules: creating forms, filling in and sending data, and analyzing data.

Google Forms is a tool developed by Google for conducting online surveys, and it is useful in connecting with stakeholders to promote entrepreneurship. In this

² <https://intuitive-process.com/quest-ce-que-la-communication-interpersonnelle> <https://intuitive-process.com/quest-ce-que-la-communication-interpersonnelle>

³ <https://realisaprint.com> <https://realisaprint.com>

⁴ This community structure name only exists in Madagascar.

⁵ Monography of Haute Matsiatra

⁶ Interview with CCI

application, one can create a quiz, a form or an online survey. It is a practical tool for collecting and analysing data.

In the Unified Modeling Language (UML), a communication diagram represents the interactions between objects or roles associated with lifelines and the messages transmitted between lifelines. Communication diagrams are interaction diagrams that can be used to explore the dynamic behaviour of a system. This tool was used to design the communication models used by the structures and the proposed new model.⁷

3. RESULTS

The results present the current status of the support structures and the communication model adapted to the entrepreneurial context of the town of Fianarantsoa in Madagascar.

3.1. THE REALITY OF SUPPORT STRUCTURES

The four support structures each have their own method for achieving a common objective, in particular promoting entrepreneurship through their programme. Knowledge of these methods helps to understand the reality of the situation in relation to their target audience and the success of their project.

1) University of Fianarantsoa

This is the method used by the Centre d'Incubation Entrepreneuriale (CIE) to obtain a diagram of the communication model.

- **Communication method used by the University of Fianarantsoa for business incubation and acceleration**
- The programme focuses on the leadership seminar and entrepreneurship training. Digital communication tools were used, including publications on Facebook, sharing information in Whatsapp and Facebook discussion groups, and sharing information in the news section of the University's website. However, announcements were also made on Radio ROFIA, which can be listened to online during the candidate selection phase. Media coverage on local and national television and radio stations has also been mobilised. Information about the programme was shared on social networks and the University of Fianarantsoa's website to raise the profile of start-ups.
- **Diagram of the CIE communication model**

The University of Fianarantsoa has opted for digital communication tools. It uses the same language and the same method for all its audiences.

The message is the content when sharing information or the educational content during training. The digital channel used is the Facebook social network and website for information sharing, and digital tools such as videoconferencing for training. As the students benefiting from the programme are the recipients, the effect can be seen after the training courses.

⁷<https://www.ibm.com/docs/fr/rsas/7.5.0?topic=uml-communication-diagrams>

Figure 1

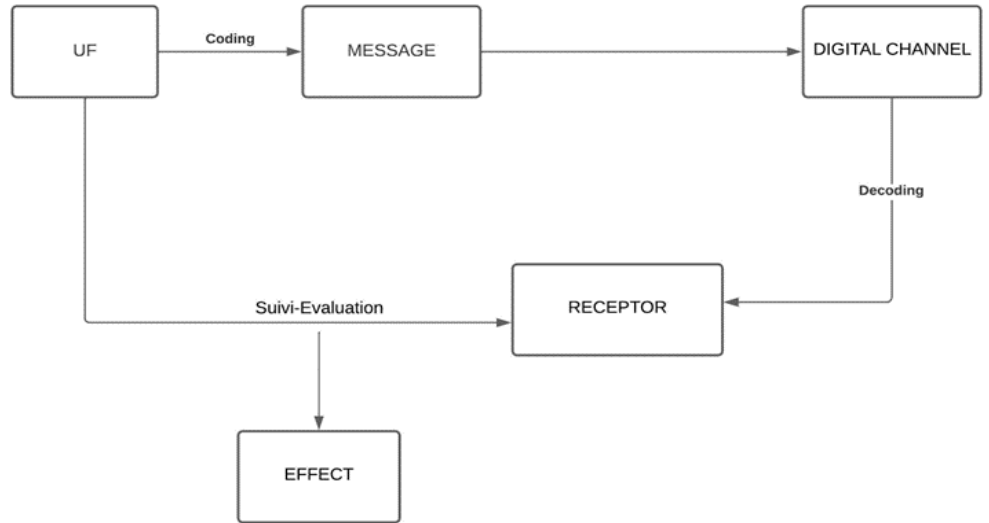


Figure 1 CIE Communication model

2) Chamber of Commerce and Industry (CCI)

- **Communication method used by CCI**

Information is shared via the bulletin board behind their office. The choice of poster depends on the destination of the announcements and its adaptation to different audiences. However, the CCI sometimes uses mailings to inform its partners. It often uses telephone calls. Information sessions and conferences are also used. To raise the profile of supported businesses, the CCI provides them with a permanent showroom for their products. It also ensures that these companies are visible at events by providing visual aids such as brochures and flyers.

- **Diagram of CCI communication model**

The CCI works with the general public and uses a single communication model for all its programmes.

Figure 2

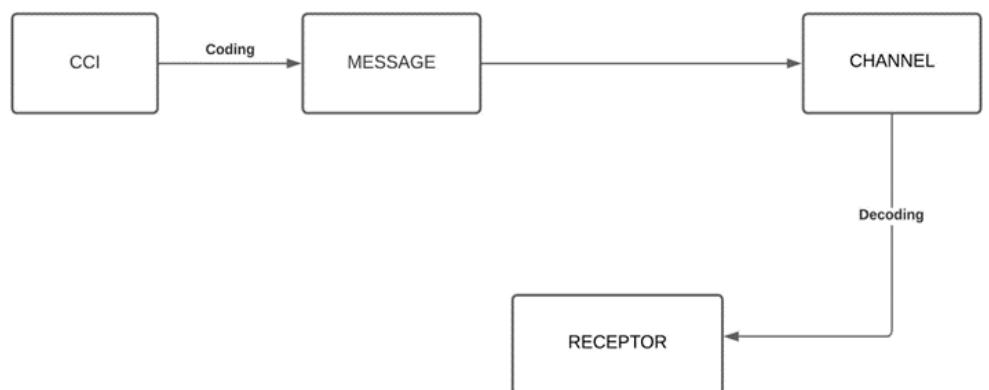


Figure 2 CCI Communication Model

The receiver is the beneficiary of the training or support, the message is the content of the training in the same language as the farmers, and the channel used is posters. Since the CCI does not carry out monitoring and evaluation, it has no objectively verifiable data to measure the effectiveness of its method. The recipients are large companies, start-ups, rural operators or farmers' groups. The strategy is the same for them, and the language used is the same for the posters and training courses.

3) ONG Ndao Hifanosika Fianara (ONG NHF)

- **Communication Method used by l'ONG NHF**

The communication method and strategy used by the non-governmental organization (NGO) Ndao Hifanosika Fianara is the same for all the events it organises, with a post on the Facebook page at least a month in advance. It organises an information session in person or live on Facebook and shares posters online for sponsors and partners. Poster printing for the board is rare. The NGO produces video and audio spots and broadcasts them on local radio and television stations. It also participates in a television or radio programme to support the sharing of information as well as broadcast from speakers of a car in the city two or three days before the event.

- **Diagram of Ndao Hifanosika TV (NHTV) communication model**

To ensure that communications are effective and reach a wide audience quickly, the NGO has opted for television, using new technology and in particular the Facebook social network.

Figure 3

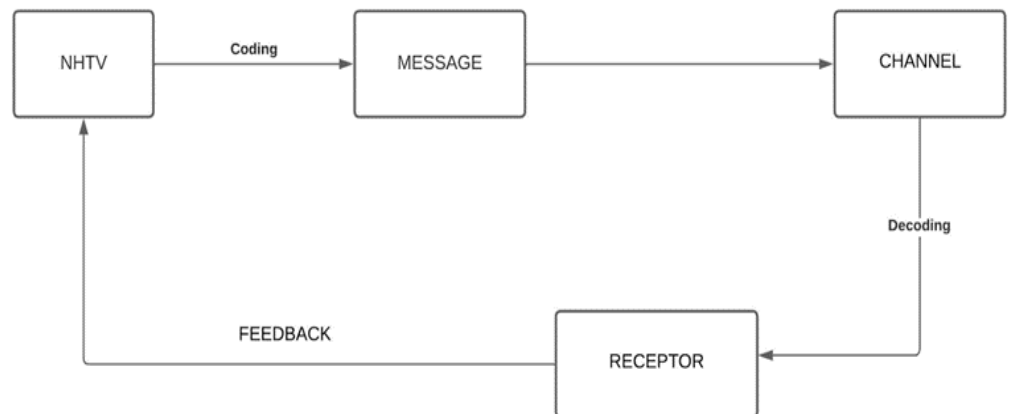


Figure 3 NHTV Communication Model

The feedback is the comments received from subscribers to its Facebook page, while the message is the content of the training courses or information sharing, using the same language for all audiences. In the case of NHTV, the channel is the Facebook social network. It should be noted that the other NHF programmes use the same model and some do not consider feedback. The language used varies according to the type of audience it serves.

4) Chambre d'Agriculture (CA)

- **Communication model used by CA**

For the CA, the method is the same for all its audiences during training sessions or consultations in rural areas. Representatives from each commune have been trained for all interventions so that they can use the same language as the farmers in the area, both in terms of information and training. The only beneficiaries are rural farmers. Before starting an activity, it approaches the local authorities, sometimes making announcements on local radio stations (Radio Tsiry and Radio Mampita) and holding an awareness-raising or pre-campaign session. After the training, support is given to the farmers, with monitoring and evaluation, and depending on the results obtained, capacity building is provided where necessary. The CA continues to promote the visibility of projects.

- **Diagram of Champ Ecole Paysans by CA communication model**

Figure 4 below shows CA's communication model in relation to its communication method.

Figure 4

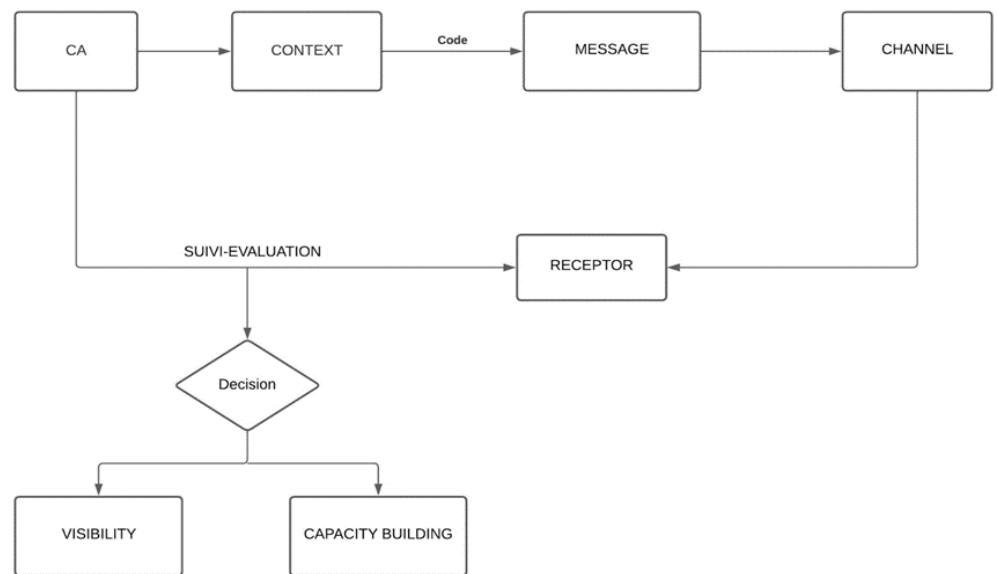


Figure 4 Communication model of the Chambre d'Agriculture

The CA conducts a study of the social context of the target beneficiaries who represent the receivers by making a field visit. Word-of-mouth communication via local leaders is also often used before information sessions, on the radio or live. Monitoring and evaluation are carried out after the training courses to see whether the techniques taught are effective or not, and if not, capacity building is planned.

3.2. COMMUNICATION MODEL ADAPTED TO THE ENTREPRENEURIAL CONTEXT

1) MODEL DESIGN

This model is obtained by combining the communication models used by the University of Fianarantsoa, the Chamber of Commerce and Industry, the NGO Ndao Hifanosika Fianara, and the Chamber of Agriculture. It also combines Wiener's systemic model, Jakobson's model, Shannon and Weaver's model, Lasswell's model and the Palo Alto school model adapted to the context of the town of Fianarantsoa in the Haute Matsiatra region to promote entrepreneurship. It involves developing a hybrid model as shown in Figure 5.

Figure 5

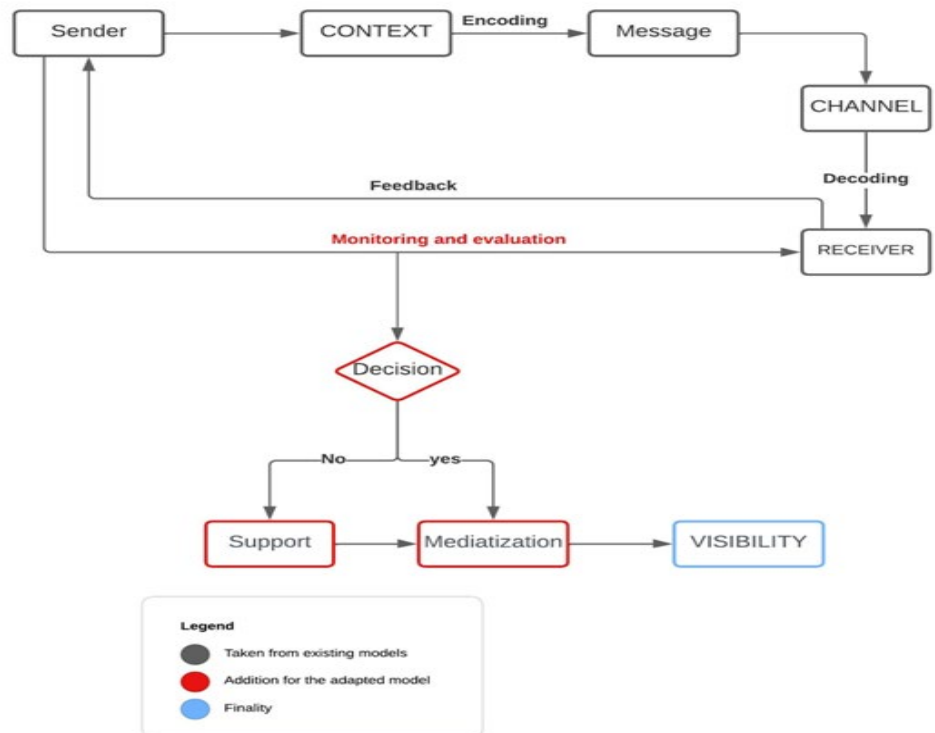


Figure 5 Communication Model Adapted to the Entrepreneurial Context

This model brings together the technical, linguistic and psycho-sociological models of communication. Each of the points described below is important for developing an effective communication strategy:

- **Sender:** refers to the person who broadcasts the message; he or she is the author of the structure's messages. This person may be a mediator or a trainer during an intervention.
- **Context:** this is a study of the audience's needs to help design solutions adapted to their environment, behavior and cultural identity. Thanks to this contextual study, the organisation will have as much information as possible about its audience before proceeding with the intervention. The audience can then be classified into categories. Thanks to the context, we can measure the objectives of support.

- Code (encoding and decoding): this can be linguistic or metalinguistic (if one of the interlocutors has to use another language to understand each other). Using a single language does not guarantee that the audience will understand. Encoding therefore consists of sending a language that is understood by the whole audience, based on the context. Decoding depends on the channel, mediator or trainer used to transmit the message. The receiver may also be able to decode the message since it has already been designed using his or her language.
- Message: this is the content. In this model, the message is defined according to the audience's social background. The message is specified even in the case of mass communication.
- Channel: this is essential to ensure that the message to be conveyed will reach the audience and that it will be consistent with the context being studied. It defines the appropriate medium for this audience for mass dissemination in terms of information sharing, training tools and learning methods. The channel will be defined according to the result evoked in the social context of the audience in relation to access to traditional or digital communication tools and it is suggested to always use both type for channel.
- Receiver: this refers to the beneficiaries or audience.
- Feedback: this is verbal or non-verbal feedback from the audience. The feedback is generated by the audience's behavior or received through their response to opinion polls or feedback.
- Monitoring and evaluation: this involves monitoring beneficiaries, evaluating the results of the programme and the communication method adopted.
- Decision-making: this involves deciding what action to take after analyzing the effects of the communication strategy and its impact on beneficiaries.
- Support: this involves assistance or capacity-building if needed after monitoring and evaluation.
- Mediatization: this involves making the startup known in different media
- Visibility: this can take the form of networking, B2B or B2C meetings, or online visibility,...

2) STRENGTHS OF THIS MODEL

This model is adapted to the different types of population in Fianarantsoa. The structure used can be a more appropriate strategy for its audience. Firstly, it solves the problem of language in communication between the author coming from the structure and his audience. In this model, the study of the audience's social context facilitates the choice of language to be used during support. One of its key values is to maintain traditional communication methods and models, while at the same time using those of the digital age. Adopting this model gradually promotes the transition to the use of digital communication. The existence of a control and monitoring body is also an advantage in terms of continuing and verifying the effectiveness of the model. The company's visibility is the first indicator of the success of the support.

3) LIMITATIONS OF THIS MODEL

The structure needs to make a great effort to provide the points required, especially in context. Classifying the audience is also a compulsory task for the purposes of metalinguistic adaptation, which requires prior analysis. In order to extend or correct the model, monitoring and evaluation require a great deal of time and validation tests in several areas of the city and in the Haute Matsiatra region. This will enhance its effectiveness.

4) MODEL TEST

The proposed model needs to be tested to detect and correct any errors that could hamper its effectiveness. It is also essential to test the model with the various target groups in Fianarantsoa, the Haute Matsiatra region, and even in another town or region of Madagascar. This will give us more experience and results to back up the adaptability of the model to various public stakeholders.

5) MODEL VALIDATION

Validating the model through tests with different audiences and contexts requires a great deal of effort and patience. It is determined on the basis of the objectives identified before the model was designed. The successful launch of supported businesses is one of the indicators of the model's suitability for entrepreneurship. This depends on compliance with the flows added to the model. Validating the results takes time. A great deal of funding is required to collect data during the implementation phase, but this is essential in order to produce a final version. This helps to overcome the various problems for sending messages and avoiding to lose information in using the proposed model.

4. DISCUSSION

The traditional communication models used by entrepreneurial structures are not adequate to achieve their objectives. Each model has its strengths and weaknesses. Each organisation's audience is different. Entrepreneurial structures should therefore develop an effective communication strategy for their programmes. It is best to use a method that is adapted to the target audience. At the same time, it is preferable to gradually introduce digital methods to align with its future use with the digital and technological development that is arriving at high speed.

For the University of Fianarantsoa, the communication model is closer to the Lasswell model. The University does not take into account feedback from students, but only carries out monitoring and evaluation of these activities to measure the success of the programme and the effectiveness of the training and the chosen method on the beneficiary. This is the strength of its model. The channels used are often digital. Capacity building in the use of digital tools is desirable. This is a point that needs to be improved if we are to succeed and benefit from the advantages of digital transformation. Dounia Ziadi (2021) has conducted a study on the issue of digital communication in associations and states that its use is beneficial provided that the association has the ability to use the tools in a controlled way and that the strategy is in line with the organisation's values and principles. The message is the same for all its audiences, using a single language without taking into account the differences that may exist between them. The language to be used, whatever form it

takes in communication, should not be stigmatised, given that it is a non-negligible medium in everyday life, especially in terms of the success of the message sent to the listener. In his article, Chang-Hoom (2013) confirms this renewed emphasis on the forgotten dimension of language in today's digital age.

For the CCI, information sharing does not focus on a defined audience. It is a mass communication strategy that simply displays information. Phillipe Breton and Serge Proulx (2012) point out the weakness of this strategy, which consists of thinking only about the influence of message content without taking into account the action of the medium as a sensory and cognitive vehicle, independently of the content transmitted. The CCI uses a linear model of communication without any intervention to receive the slightest feedback from its audience, unless after training. The audience needs more support and returns to the CCI for advice or capacity building. This concept is based on the Lasswell model, which requires a minimum mastery of the notion of "mass" according to Gustave Le Bon (1895).

This totally linear model has many limitations. According to Paul Watzlawick, feedback enables a self-construction that evolves because this relationship in communication with the receiver provides inputs for the other. The method and strategy used should be differentiated according to the target audience and the context (level of study, background, area of intervention). The CCI should also carry out monitoring and evaluation to determine the progress of the entrepreneurs it supports, or at least the effects of its support on the beneficiaries.

As far as Ndao Hifanosika TV is concerned, the model adopted is Wiener's systemic model of communication with feedback from the public in comments on publications on social networks. The feedback is not complete because there is no return from NHTV to the public. A hybrid channel is used for NHTV and the NGO's other programmes. It often opts for mass communication, broadcasting the same message to all audiences. In the case of the other Ndao Hifanosika Fianara programmes, the basic model is the same; the NGO does not carry out any follow-up and does not take into account the effect of their interventions after the training courses. On the other hand, it plans evaluations at the end of the training courses to measure the change in beneficiaries before and after their interventions. So, the sustainability of the project is not assessed. The NGO provides advice to beneficiaries when necessary.

According to J. T. Klapper (1960), communication does not necessarily act as a necessary and sufficient cause of effects on the audience, but rather within it via a network of influences and media factors. In other words, Olivier Burgelin explains that, apart from a few exceptional situations, it is not possible to link data concerning the message or medium with sociological data, as in the case of audience behavioural traits.⁸

The NGO Ndao Hifanosika Fianarantsoa works with different groups of people. If it applies much more of a hybrid strategy of traditional and new media, then it should also adopt a little more of the traditional means for out-of-school audiences or those who don't have access to digital. Information sessions are often online, so the NGO should utilise a traditional means of dissemination to go with that.

As for the Chamber of Agriculture's communication model, it is closer to Jakobson's model. It is important to know the context in the areas of intervention before launching the project or programme. Michel Billières (2015) has discussed the importance and value of language in the social approach, as it guarantees

⁸ Burgelin O. "Communication-Mass Communication", Encyclopaedia Universalis [Online] <https://www.universalis.fr/encyclopedie/communication-communication-de-masse/3-les-effects/>

exchanges between interlocutors. What is lacking is the absence of feedback, whereas feedback from its audience could help to improve strategies for future training. This is a function that Jakobson undoubtedly ignored, even though it highlights the interaction between the sender and the receiver. For his part, Claude Gillet (1983) sets out this problem by suggesting that there could be a theoretical risk and a pedagogical risk. The Chamber of Agriculture monitors and evaluates the use of the techniques taught. However, this monitoring and evaluation is inadequate. The team focuses much more on the effectiveness of the techniques taught than on the success of the training and the communication method used.

5. CONCLUSION

Entrepreneurship is a key factor in development as it creates jobs. Entrepreneurial initiatives are appearing at the commune level thanks to the efforts of support structures such as the University of Fianarantsoa, the Chamber of Commerce and Industry, the NGO Ndao Hifanosika Fianara and the Chamber of Agriculture, which provide a great deal of support along with other existing local and regional players. A communication model adapted to the contexts of the city of Fianarantsoa Madagascar is then proposed to solve the impertinence of the traditional models. This model is the result of a fusion of the models of existing support structures and the major designers of classic communication models.

The aim is to produce high-quality digital cartography and share the tools and results of the research, by creating a digital atlas of the city of Fianarantsoa. In this sense, cartography and spatial analysis facilitate the use of data and decision-making to promote entrepreneurship. Digital cartography is a tool that facilitates and optimises the reading of data. It is no longer a simple 'graphic language' but a medium, a communication support where multiple theoretical issues are at stake, according to Christine ZANIN (2013; 2022). It is an innovative technological sector, integrating the contributions of remote sensing, mobile geolocation data and collaborative practices. To achieve an even more optimal result, mapping the data obtained before validating the proposed model will enable it to be used in many areas depending on several parameters. This will enable the model to be used easily throughout the region. To achieve this, three criteria will need to be mapped, including the population's use of digital technology, the entrepreneur's level of use of communication tools and channels, and the entrepreneurial sector.⁹

CONFLICT OF INTERESTS

None.

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None.

REFERENCES

- Aurelli L. (2024). The Evolution of Communication Since its Creation.
Batazzi, C. and Laudati, P. (2016). Entrepreneurial Commitment and Territories, in Communication and Organization, n°50, 5-18.
<https://doi.org/10.4000/communicationorganisation.5320>
Billières M. (2015). The Emergence of Communication Linguistics in Fle.

⁹ Madatlas

- Breton P., Proulx S., (2012). The Explosion of Communication. Introduction to Theories and Practices of Communication, 4th edition, Paris, ed. The Discovery, Col. Manuals, 384. <https://doi.org/10.3917/dec.breto.2012.01>
- Burgelin O. (2022). "Communication-Mass Communication", Encyclopaedia Universalis. <https://www.universalis.fr/encyclopedie/communication-communication-de-masse/3-les-effects/>
- Chang-Hoom L., (2013). "Language is a Place of Communication", in Societies, 83-91.
- Communication Diagram (2022). <https://www.ibm.com/docs/fr/rsas/7.5.0?topic=uml-communication-diagrams>
- Dounia Ziadi (2021). Practices and Challenges of Digital Communication in Associations, Professional License Thesis Aix-Marseille University, 45.
- Gillet C., (1983). "On the dangers of Abusing the Jacobsonian schema on communication", in Etude de Communication, 2, B4-B7. <https://doi.org/10.4000/edc.3322>
- Hansen, M.T., H. Chesbrough, N. Nohria, and D.S. Sull, (2000). "Networked Incubators: Hothouses of the New Economy", in Harvard Business Review 78, 74-84.
- Herinjatovo R. (2022). "Presentation of the Results of the Job Creation Study in Madagascar, Challenges and Recommendations". Report Round table of MTEFPLS, DGPP and FES.
- Madatlas (2024). "Digital Cartography", <https://www.madatlas.mg> page consulted on November 19, 2022 <https://www.madatlas.mg>
- Singh R. "What is interpersonal communication? » <https://intuitive-process.com/quest-ce-que-la-communication-interpersonnelle>
- Monograph of the Matsiatra Ambony Region (2011). 126.
- Patton, D. (2014). Realizing Potential: The Impact of Business Incubation on the Absorptive Capacity of New Technology-Based Firms", in International Small Business Journal, 32, 897-917. <https://doi.org/10.1177/0266242613482134>
- Peters, L., Rice, M. & Sundararajan, M. (2004). "The Role of Incubators in the Entrepreneurial Process". in The Journal of Technology Transfer 29, 83-91. <https://doi.org/10.1023/B:JOTT.0000011182.82350.df>
- Razafindrakoto L. S. (2022). Household Financing System in Rural Areas. Doctoral Thesis in Agro-Management, University of Antananarivo, 191.
- Rijnsoever F., Eveleens C., (2021). "Money Doesn't Matter? How Incubation Experience Affects Start-up Entrepreneurs' Resource Evaluation." Technovation. 106, 102-294. <https://doi.org/10.1016/j.technovation.2021.102294>
- RGPH-3 (2018). 1, 99.
- Silbermann A. (1980). Communication Dilemma: Technology Versus Community? » in International Journal of Social Sciences, XXXII, 2, 239-253.
- Suroso, A., Rafinda, A., & Gal, T. (2020). "The Evaluation of Entrepreneur Incubation Program at Higher Education", in International Journal of Entrepreneurial Knowledge, 8(2), 14-26. <https://doi.org/10.37335/ijek.v8i2.113>
- Togoumbaye M. (2020). The Contribution of Digital Communication to Consumer Behavior, Case of Moov Africa Chad. Master's Thesis in Communication and Marketing from King Mohammed 1st University of Oujda, 56.
- Watzlawick P., Helmick J, Beavin K, Jakobson, Don D. (1979). A Logic of Communication, Col. Points Essays, 794-795.
- Zanin, C. (2013). Mapping and Territorial Analysis. Doctoral Thesis in Cartography, Paris Diderot University, Paris, 513.

Zanin, C. (2022). "The Fact of the Cartographer: Communication Between Rules and Seduction". in Mericskay, B., Cartographic Communication: Graphic Semiology, Semiotics and Geovisualization. in Great Britain, 11 - 41. <https://doi.org/10.51926/ISTE.9091.ch1>