


## INNOVATION AND INTERNATIONALIZATION IN THE CONTEXT OF THE HANDCRAFTED OF GOLDEN GRASS PIECES

A INOVAÇÃO E A INTERNACIONALIZAÇÃO NO CONTEXTO DO ARTESANATO DE PEÇAS DE CAPIM DOURADO  
INNOVACIÓN E INTERNACIONALIZACIÓN EN EL CONTEXTO DE LA ARTESANÍA DE PIEZAS DE HIERBA DORADA


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### ABSTRACT:

This study aimed to analyze the behavior of small companies producing golden grass in relation to innovation and internationalization. This study has a quantitative character and is considered an exploratory, descriptive investigation, with field research, using a structured questionnaire with closed questions. The unit of analysis for this study was a group of 16 artisans. The instrument was digitally applied and formulated in Google Forms. The pre-test was carried out with 7 artisans. It was possible to conclude with this study that due to the low degree of innovation among artisans, export ended up being impaired, in addition to inferring in the light of the literature studied that, given the low degree of innovative behavior, export among artisans presents fragility.

**KEYWORDS:** Innovation; Internationalization; Handicrafts; Golden Grass.

## Introduction

In the contemporary globalized and competitive economic landscape, scholars and funding institutions underscore the pivotal role of innovation and internationalization in the survival and development of organizations, including small businesses. This perspective finds support in various studies, exemplified by the works of Filipescu et al. (2013), Golovko and Valentini (2011), and Kafouros et al. (2008). Nevertheless, the significance of these endeavors transcends the findings put forth by these researchers.

Despite the increasing of governmental initiatives at supporting micro and small enterprises in their international expansion and fostering overall innovative activities, it is evident that such businesses still manifest static characteristics concerning internationalization.

Traditionally, some scholars have linked innovation and internationalization through linear causality, i.e., examining a unidirectional cause-and-effect relationship between these variables (Kafouros et al., 2008; Pittiglio; Sica; Villa, 2009).

However, conflicting conclusions from other studies suggest an inherent inconsistency in this field. In many instances, these studies present a static portrayal that fails to encapsulate the comprehensive evolution of these relationships (Chiva; Ghauri; Alegre, 2014).

Emerging research adopts more holistic and dynamic approaches with alternative perspectives characterized by mutual and reciprocal causality. These studies address for the recognition of the complexity inherent in organizations, urging researchers to incorporate this complexity into their theoretical frameworks and research designs (Boisot et al., 2010). Weick (1979) observes that a practitioner attuned to complexity perceives patterns that elude a less complex counterpart.

Tsoukas and Dooley (2011) call for a departure from the Newtonian style of abstract formalism in organizational studies. They argue that the Newtonian style seeks to abstract from contingent empirical diversity to identify universal principles under controlled conditions. The new paradigm is rooted in generalized complexity, viewing the study object as a *complexus* – in Latin – and thus seeking to interconnect and contextualize rather than segregate and isolate.

Previous research has applied complex theory to elucidate the intricacies of the innovation process and its relation with organizational learning and internationalization (Chiva; Ghauri; Alegre, 2014).

For the competitiveness of micro and small enterprises, it is essential to gain a better understanding of how these two strategic activities (internationalization and innovation) are interrelated and how they can be fostered. It is crucial for both regional and national economies that micro and small enterprises thrive and succeed in export or internationalization activities, considering that they are the main generators of employment, innovation, and growth in the country (OECD, 2005).

Building upon the previous context, the research question driving this study is: How have small businesses engaged in the production of golden grass behaved concerning innovation and internationalization? To address this investigation, the objective is to analyze the behavior of small enterprises involved in the production of golden grass regarding innovation and internationalization.

This article is structured into five sections. The first is this introduction, followed by second section that is the theoretical framework, addressing issues related to innovation, knowledge transfer, and internationalization. The third section presents the

methodology, the fourth provides an analysis of the results, and finally, the fifth section outlines the study's conclusions.

### Internationalization

According to Welch and Luostarinen (1988), internationalization is not a uniform and well-defined concept. For these authors, there is a wide variety of possible paths for any company to achieve internationalization. Thus, internationalization cannot be fully explained by one or a few theories. According to the authors, what makes understanding it more effective is the integrated way in which it is viewed. In other words, it is better to comprehend internationalization from various perspectives rather than just one or a few. In this case, it is necessary to understand the entire process and integrate its stages.

To initiate the discussion, the concept of internationalization, as presented by Javalgi, Griffith, and White (2003), is introduced. They explore it as the process through which a company or a group of companies is willing to operate beyond its local market, transforming itself to operate in international markets through operations, structure, and resources, all adapted to the international environment in which it demands to operate.

In order to solidify the perception of the various definitions, Table 1 has been raised.

**Table 1** Concepts about internalization

AUTHORS	DEFINITION
Welch and Luostarinen (1988) Luostarinen and Welch (1997)	The process by which a company gradually and increasingly engages in international operations.
Beamish (1990)	The process used by new companies to increase awareness of the direct and indirect influences of international transactions before moving on to the actual practice of transactions with other countries.
Andersen (1997)	The process of adaptation for exchanges and transactions in international markets.
Calof e Beamish (1995)	The process of adapting companies (strategy, structure, resources, etc.) to operate in the international environment.
Naidu, Cavusgil, Murthy and Sharkar (1997, p. 115)	The gradual process through which companies develop in a global network of business relationships.
Javalgi et al. (2003)	The process in which companies develop to operate not only in the domestic market but also in international markets.

Source: The authors (2012).

Based on the presented approaches, it is evident that internationalization can involve, firstly, knowledge of internal processes; secondly, knowledge of external markets; and thirdly, operational strategy, resources, and structure. It is crucial to emphasize that internationalization is also the process by which companies increase their

awareness of the domestic market, precisely to determine the probability of entering the foreign market, whether through importing or exporting.

Upon recognizing and reflecting on the internationalization concepts outlined in Table 1, it is possible to identify another concept: Internationalizing is the process that leads an organization to expand its vision beyond the domestic market, seeking exchange relationships, whether for buying, selling, or intermediating.

Internationalization research involves the study of the various activities that companies conduct across borders. It is an area of growing interest in the current market context and includes the simplest, and sometimes less committed, forms such as exportation or technology transfer, as well as more visible and risky alternatives like establishing production subsidiaries and developing multinational structures (Verbeke, 2013).

In their internationalization process, organizations go through progressive stages involving resources, risks, and international sales (Freixanet, 2012; Johanson; Vahlne, 1990).

Previous research has also resorted to a simplified dualism, dividing the degree of internationalization between low and high – a classification primarily based on the level of export intensity. High internationalization coupled with global expansion was termed global, and regional when focused on a specific set of countries (Patel; Criaco; Naldi, 2016).

For small enterprises, exportation, often through cooperation agreements, constitutes the preferred method of entering foreign markets, as it involves comparatively low levels of commitment and risk (Golovko; Valentini, 2011). The expansion of exports by small companies has been significantly facilitated in recent decades due to improvements in communication technologies, decreased transportation costs, export promotion programs, and reduced government-imposed barriers (Freixanet, 2012).

## **Innovation**

Innovation has emerged as a prominent theme in management, saving increasing attention from scholars and practitioners in recent years. Innovative activities are regarded as a pivotal source of competitive advantage, growth, and profitability for companies and institutions across diverse sectors of the economy (Slater; Mohr; Sengupta, 2014).

Previous research has conceptualized innovation as a purposeful process that instigates intentional change, focusing on the economic or social potential of an

organization. It is also seen as an interactive process initiated by the generation of new products and processes, or by significant improvements and modifications (OECD, 2005).

Innovation activities can be directed towards the introduction of more differentiated products or the enhancement of their quality and efficiency, ultimately resulting in reduced prices. This holds true for process innovation, which, although less conspicuous, plays a significant role, particularly in the context of buyer-supplier transactions (Filipescu; Rialp, 2009). Depending on the degree of novelty associated with each type of innovation, they can be categorized as either incremental or radical (Boso et al., 2016). Incremental innovations involve improvements, adaptations, or extensions while preserving the fundamental essence of the product or process. On the other hand, radical innovations encompass substantial changes to existing products or technologies, capable of transforming industries and markets, or introducing significant novelty in terms of meaning and design language (Troilo; De Luca; Atuahene-Gima, 2013).

Micro and small enterprises often handle with scale-related disadvantages, prompting them to specialize in niche markets with customized products. While scale effects may not be as prominent in such contexts, these enterprises recognize the value of specific management advantages, including sharp motivation, reduced bureaucracy, a more substantial impact of new projects, and closer proximity to the market, all contributing to improved performance and outcomes (Nooteboom, 1994).

### **Innovation and Internationalization**

Innovation can enhance the exports of small companies through a direct effect of demand expansion and an indirect effect through increased organizational productivity (Cassiman; Golovko, 2010). Moreover, companies investing in innovation may find domestic markets insufficient to recuperate their investments, stimulating them to seek additional buyers in other countries (Zahra; Ireland; Hitt, 2000).

Broader literature has also examined reverse effects. Internationalized companies can become more innovative by accessing innovation inputs such as information, researchers, technologies, and laboratories that may be superior, more diverse, more accessible, or more productive than those in their home countries (Kafourous et al., 2008). Thus, companies seeking internationalization may increase their innovation output with a similar or even lower budget compared to those choosing to innovate domestically, a crucial consideration for small enterprises given their lower investment in innovation inputs (Filipescu et al., 2013).

Research has concluded that both strategies complement the growth of micro and small enterprises or have a mutually causal interrelation (Filipescu et al., 2013). However,

these studies do not differentiate the effects based on the type of innovation according to the degree of novelty of the product or process.

Several authors argue that various types of innovation can involve completely different and sometimes opposing effects. Previous literature has also recognized the risks and management challenges involved in launching radical product innovations (Boso et al., 2016).

The market does not easily adopt radical innovations; generally, it is costly in terms of financial resources and demands the mobilization of infrastructure, market analysis, and consulting. Therefore, the higher the risk of radical innovations, the greater the expected outcome, generating benefits in the short and even medium term (Reinders; Frambach; Schoormans, 2010).

On the other hand, intentions to adopt radical innovation entail the need for more investment in marketing and product promotion. In this regard, micro and small enterprises face a disadvantage compared to larger ones due to limited physical, financial, and market-related structures. As a result, these companies incur greater risks and obstacles in their investments in radical innovations and their prospects of turning them into successful international projects (Trott, 2016).

It is essential to emphasize that these difficulties are intensified during periods of recession (such as the COVID-19 Pandemic and the War between Ukraine and Russia), when economic funding is scarce, and creditors are reluctant to provide credit for uncertain investments.

The export-innovation model (I-model) employs theories like Rogers' (2003), which explores the diffusion of innovation to explain the internationalization behavior of companies. Similar to the Uppsala model, the I-Model perceives internationalization as a sequential and incremental process with a predetermined number of stages (Andersen, 1993).

Innovation adoption models are derived from the behavioral school, which examines stage sequences, as previously elucidated; thus, after analyzing market viability, companies decide to export.

Although Rogers' (2003) initial work was on consumer behavior and not directly based on the internationalization process, it provided the conceptual framework for numerous other studies in the internationalization literature.

To effectively apply the concept of whether to adopt exportation, Rogers (2003) divides the process into stages, consisting of five characteristics: 1) awareness, 2) interest, 3) evaluation, 4) experimentation, and 5) adoption.

When examining the adoption process, Rogers argues that adoption is not an impulsive behavior but one that generally takes "time" to complete. Reflecting on the Rogers model raises two important points. First, the author highlighted that at any stage of the adoption model, there is the possibility of rejecting innovation, i.e., simply not adopting it. The second underlined point was the ability to "skip" stages.

Another model exploring innovation is Robertson's model (1971), which also examined the adoption process from the consumer marketing/behavioral school perspective. A fundamental feature of this model compared to others is the number of stages. The Robertson Model consists of eight stages for adopting an innovation. Robertson (1971) emphasizes that, despite presenting stages on the innovation process, there is no definite number of stages determining the internationalization process. The author stresses that the limit of stages depends on the researcher's ability to delineate and perceive the nuances between phases that effectively reflect the organization's behavior and effort.

Reid (1981) developed an Innovation Adoption model to highlight the export expansion process as a five-stage process, namely: 1) export awareness, 2) intention, 3) trial, 4) evaluation, and 5) acceptance. In developing this model, the author indicated that the model must overcome two significant limitations: first, the model must clearly distinguish between application in micro and small enterprises and large enterprises. Second, he highlighted that any export process must consider decision-making in expanding the export process.

The basis of this is effectively the decision-maker of micro and small organizations, considering that they have fewer and smaller structural arrangements than large enterprises.

As a means of promoting comparison among thinkers and themes related to innovation, Table 2 serves as an inspirational source for reflection on the subject.

**Table 2** Innovation and internalization models

	<b>Biikey e Tesar (1977)</b>	<b>Cavusgil (1980)</b>	<b>Czinkota (1982)</b>	<b>Reid (1981)</b>	<b>Rogers (2003)</b>
<b>1st stage</b>	Management is not interested in exporting.	Domestic marketing: The company only markets within its country.	Complete disinterest of the company.	Export-conscious: Issues recognizing opportunities.	Awareness
<b>2nd stage</b>	Management is ready to fulfill unforeseen orders but does not actively explore the	Pre-export stage: The company seeks information and	The company is partially interested.	Intention to export: Motivation, attitude, beliefs, and	Interest in exporting emerges.



	feasibility of export activities.	determines feasibility to ensure export.		expectations about exports.	
<b>3rd stage</b>	Management seeks to explore the feasibility of export activities.	Experimental Involvement: the company starts exporting, limitedly, to countries with similar psychic characteristics.	The company is exporting.	Attempt to export: personal experiences are gained from other exporters.	Evaluation
<b>4th stage</b>	The company exports experimentally to countries with similar psychic characteristics.	Active involvement: exporting directly to new countries, increasing sales volume.	The company is experimenting slowly entering the international Market.	Export value scope.	Experimentation
<b>5th stage</b>	The company is an experienced exporter.	Committed Involvement: executives make choices to allocate resources between domestic and foreign markets.	Small involvement with export.	Acceptance in exporting intensely.	Adoption
<b>6th stage</b>	Management explores the feasibility of exporting to psychologically more distant countries.		High involvement with exporting.		

Source: Adapted by Anderson (1993), & Rogers (2003).

As the objective is not exhaust the subject but to provide an overview of the innovation model, Table 2 presented a summary of the main authors addressing the topic and the stages proposed by them.

## Procedures and Methodology

This study adopts a quantitative approach and is characterized as exploratory and descriptive, utilizing a structured and closed questionnaire. The unit of analysis is a group of artisans.

The research individuals are artisans and traders of golden grass pieces. The majority of respondents are self-employed and belong to the local association in a municipality located in the Jalapão-TO region. All individuals are actively involved in the production and marketing of these products.



Anonymity regarding the identity of the association and the city where the study was conducted safeguards the individuals concerning the aspects considered in the study.

The sample consisted of 16 respondents out of the 20 associated artisans involved in the production of golden grass pieces.

The data collection instrument was administered with the assistance of the association's president, who forwarded the instrument to the members and voluntarily asked some to pass it to others, generating a snowball effect. The instrument was applied digitally and formulated on Google Forms. The pre-test was answered by 7 artisans.

The data collection tool involved two sets of questions: the first set consisted of questions related to internationalization, developed exclusively for this study with the aim of understanding artisans' behaviors in relation to export activities. The attributes associated with the stages were measured on a multiple-choice scale. The second set of questions aimed to measure the innovative capacity of artisans. This instrument, in turn, has 7 questions, identified between Q1 and Q7. To measure innovative capacity, a 5-point Likert scale based on the model developed by Bachmann and Destefani (2008) was used.

To support the statistical base on exportation, Standard Deviation and Mean were used.

It is important to consider that the Standard Deviation is a calculation that shows how much the data deviates from the Mean, i.e., the variation of the data around the mean. The more the data deviate from the mean, the more dispersion there is. For this study, the higher the dispersion, the worse; that is, the higher the standard deviation value, the more critical the data situation.

It is essential that the Standard Deviation be low, making it easier to understand the low variation around the mean. Once again, it is emphasized: that high variation means that the data deviates from the mean.

Finally, as a mean of presenting the data, Bar Charts were used, expending frequency counts. This step was presented with the aim of visually elucidating the dynamics of quantitative data.

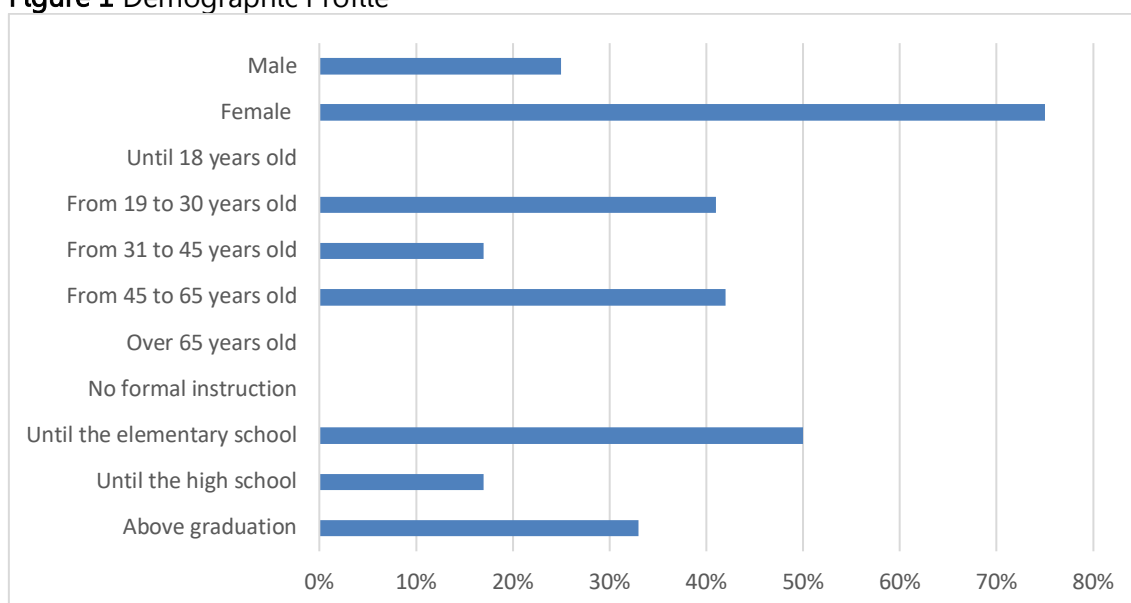
## Results and Discussion

The following data, presented in Figures 1 and 2, portray the profile of the artisans. It is important to note that the discussion of the results involves basic information about the internationalization behavior of artisans and its relationship with innovation.

To better understand these two perspectives, it is relevant to know the profile of the artisan since their profile can directly influence both internationalization and innovation practices.

Considering the artisan's profile, several factors may interfere with the results – both for internationalization and innovation, highlighting factors such as education, experience in the profession, years of practice, training, reasons for pursuing the profession, among others. Figure 1 presents the Demographic Profile of Artisans.

**Figure 1** Demographic Profile



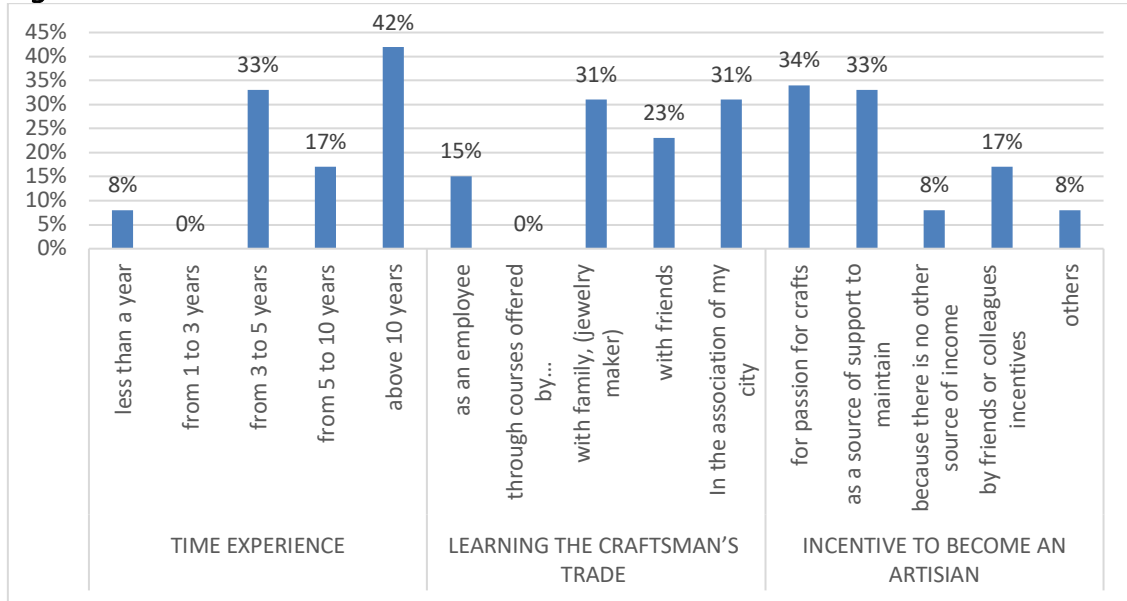
Source: The authors (2023).

In Figure 1, it is evident that the majority of artisans are female, with most falling within the age brackets of 19 to 30 years and 45 to 60 years. It is worth mentioning the prominent role of women in the craft of golden grass handcrafts, a finding supported by both this study and To.gov.br (2023).

Considering that the association is located in a municipality in the interior of the state of Tocantins, one might speculate about potential challenges in accessing the high school; however, surprisingly, 50% of the artisans have completed the high school.

Figure 2 presents the profile related to the artisans' craft.

Figure 2 Profile Related to the Craft



Source: The authors (2023).

All participants in the study identify themselves as artisans, underscoring a sense of pride in their craft. However, this positive aspect can also be a limiting factor. For business growth and development, artisans need to consider themselves not only as craftsmen but also as traders and managers. In this specific segment, productive aspects are not the sole focus; commercial, distribution, and administrative aspects are equally relevant. In many instances, the artisan is the actor performing all these functions. In addition to crafting, they engage in field harvesting, trading, distribution, procurement of raw materials, and various managerial activities.

An observed concern is that when an artisan does not recognize their role as a trader or distributor, they may neglect the responsibility of seeking learning, techniques, or strategies for these additional functions. For the progress of their small industry, acknowledging and developing proficiency in these multiple roles is crucial.

Schumpeter (1997), for instance, introduced the theory of innovation, asserting that entrepreneurial innovation is a key driver for business development or growth. Managers and analysts have used innovation theory to evaluate organizational growth and business fluctuations. Schumpeter emphasized that integrating innovation into businesses is critical for promoting production, transportation, and marketing processes, considered idiosyncratic resources for business growth (Nightingale, 2015).

From another perspective, it is evident that the participants possess significant experience, with 57% having over 5 years in the field.

Table 2 shows that 54% learned the craft from family or local friends, fostering affection and familiarity with the profession. However, this familial connection might

sometimes hinder artisans from perceiving responsibilities beyond the craft itself, such as commercialization, logistics, distribution, exportation, training, or administrative and financial matters. The passion for the profession is apparent, with 34% expressing motivation to continue in the craft driven by love.

Blye (2020) explores how maintaining trust among employees and managers contributes to business growth, and in many cases, love for the business generates confidence that a better future will always be achieved.

However, the primary objective of innovation in a business model should be to create new resources for the benefit of the organization, enhancing the value of products or services and efficiently meeting customer demands (Santos, 2015; Christensen, 2016). In other words, dedicating efforts to excellence and efficiency in various areas of the company, as mentioned earlier, is crucial.

One strategy for innovation can be internationalization, specifically referring to exportation in this study.

Table 1 presents essential items to understand the internationalization profile of artisans, including their experience with handcrafts, current and past export activities, intentions to export, motivating factors for exportation, the exportation stage in the golden grass production chain, and challenges in exporting golden grass products.

**Table 1** Behaviour of Exporting Products

No.	STATMENTS	Variable 1	Variable 2	Variable 3	Variable 4	Variable 5
Q1	How long have you been working with the production of golden grass crafts?	Less than a year	From 1 to 3 years	From 3 to 5 years	From 5 to 10 years	Above 10 years
	Do you work with the export of Golden grass crafts?	6%	0%	38%	13%	44%
Q2	What are the challenges for exporting Golden grass crafts?	Yes, I export Golden grass jewelry.	No, I do not export.	Never tried to export.	Not interested.	/
	What could stimulate the export of Golden grass crafts?	50%	0%	50%	0%	
Q3	What are the challenges for exporting Golden grass crafts?	The export process is very bureaucratic (from documentary point of view).	Very difficult to find customers in other countries.	Each country has its own behavior and rules, making the process very laborious.	A lot of demand, but we do not have production capacity.	Financially, it is not worthwhile.
	What could stimulate the export of Golden grass crafts?	50%	25%	19%	6%	0%
Q4	What could stimulate the export of Golden grass crafts?	Government support to improve knowledge	Government stimulus to improve	Credit line to invest in factory structure to	Creation of a government department to	Others:

	golden grass crafts?	about the process (training).	export tariffs/taxes.	increase production line.	attract clients abroad.	
		39%	12%	25%	13%	13%
Q5	Who generally exports more frequently?	The artisan themselves.	Retailer with a store.	The artisan through the Golden grass producers association.	Others:	
		6%	56%	31%	6%	

Source: The authors (2023).

The exportation behavior is heterogeneous, with 50% of artisans participating in exportation, and the others do not. The majority of exporters have over 5 years of experience in the golden grass market.

As a challenge, 50% of the producers mention bureaucratic and document-related in the export process. 25% find it challenging to locate customers in the international market. 19% face difficulties adapting to different behaviors and rules in each country during the export process.

Regarding incentives, 39% of producers suggest government support for improving knowledge and offering training in the export process. 12% propose government incentives for tariffs/taxes improvement. 25% recommend a credit line to invest in the factory structure, promoting an increase in production. Finally, 13% believe that the creation of a government department to attract international clients would stimulate golden grass exportation.

In terms of export action, 56% of artisans state that retailers with stores are the major exporters. Another 31% indicate that exportation is more common through the producers' association, while 6% report that individual artisans are involved in independent exportation.

In conclusion, 50% are involved in exportation, but the responses regarding incentives, challenges, and major exporters are quite diverse. The statistical data presented in Table 2 strengthens the heterogeneity of these findings, which can be further justified.

**Table 2** Questions related to Exportation

	Statments	STANDARD DEVIATION (SD)	MEAN
Q1	How long have you been working with the production of Golden grass pieces/crafts?	2,79	3,20
Q2	Do you work with the exportation of golden grass pieces/crafts?	3,92	3,20

Q3	What are the challenges for the exportation of golden grass pieces/crafts?	2,79	3,20
Q4	What could stimulate the exportation of golden grass pieces/crafts?	1,60	3,20
Q5	Who generally exports more frequently?	3,37	3,20

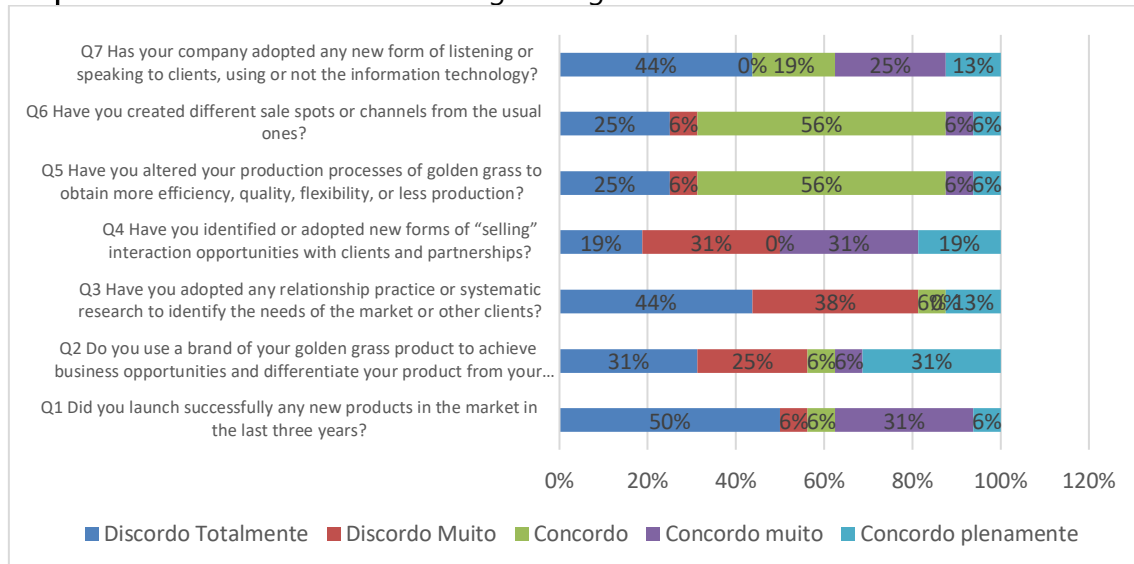
Source: The authors (2023).

The Standard Deviation provides insight into the degree of variation or dispersion in the responses, indicating how much they deviate from the mean. In general, Q5 and Q2 demonstrate higher homogeneity, aligning closely with the mean. This suggests that respondents tend to exhibit similar behaviors and opinions regarding these assertions. On the contrary, other questions deviate significantly from the mean, with Q4 being the most notable. This implies a lack of consensus among respondents regarding incentives or stimuli for exportation.

On the other hand, some observations and reflections can be made regarding the innovative behavior of artisans that may or may not limit the exportation of their products.

A reflection arises: does innovative behavior limit the artisan in exportation, or is it the other way around? To gain a holistic perspective on the innovative behavior of producers, refer to Graphic 1:

**Graphic 1** Innovative behavior of the golden grass artisans



Source: The authors (2023).

Considering Figure 1, it is noticeable that the first columns from left to right in dark blue represent negative results — variables of "strongly disagree," followed by "disagree very much." From right to left are positive responses of "strongly agree," followed by "agree very much." In the center, in gray, the neutral point is identified as "agree."

The visual "balance" tilts towards the negative side, first dark blue, followed by the orange color, reaching the gray color.

Positive perception: Considering the highest degrees of agreement by summing variables 4 and 5, the following stand out: Q4 with 50%; Q7 with 38%; Q2 and Q1 with 37% each; the others below 19% positivity; the lowest being Q6 and Q5 with 12% positivity.

Neutral perception: In order of relevance, Q6 and Q7 are discarded with 56% frequency; Q7 with 19% frequency, and lastly, Q1 and Q2 with 6% frequency.

Negative perception: Summing points 1 and 2, the variables with the highest evidence of negative scores are: Q3 with 82% frequency; Q1 and Q2 with 56% frequency; Q4 with 50%; Q7 with 44%, and the others below 31%.

The data from Figure 1 show a low degree of innovation among golden grass artisans. The high neutrality in 2 assertions (Q6 and Q5) pulls down the ruler of negativity, as the positive score for these two assertions is irrelevant. In 4 other assertions (Q1, Q2, Q3, Q7), the high level of fragility regarding innovation is evident, meaning that 6 out of the 7 evaluated questions have high deficiencies in the use of innovation. However, the existence of the innovative process cannot be denied: even if timidly, it is present.

Positive relevance can be observed among (Q1, Q2, Q4, Q7), even though their positive relevance is lower than the negative aspects.

Thus, further studies are deemed necessary to understand the correlation between exportation, confronting innovation. It is suggested to use the same scales for both constructs to obtain satisfactory results regarding statistical correlation studies.

However, this study allows us to affirm the fragility and insecurity of artisans regarding exportation, as well as their limitations in terms of innovation in production processes and continuous innovation in golden grass products.

### **Final Considerations**

This study aimed to analyze the behavior of small golden grass-producing companies concerning innovation and internationalization.

During the theoretical discussion, various authors, such as Cassiman and Golovko (2010), pointed out that innovation can influence the increase in exports of micro and small enterprises through a direct effect of expanding demand and indirectly through increased productivity.

Other authors also indicated that the innovation strategy is complementary to the growth of companies or has a mutual causality interrelation with exports (Filipescu et al., 2013).



Reid (1981) developed an innovation adoption model to highlight the export expansion process, stating that innovation can contribute to the export process.

In the theories presented, well-implemented innovations yield results, one of which would be ease of entry into exports.

In the present study, it is noticeable that, given the low degree of innovation among artisans, exportation is consequently hindered. Due to the low level of innovative behavior as a cultural aspect, internationalization is also compromised. Thus, it can be inferred, in light of the literature, that the lack of innovative behavior makes exportation or internationalization among producers fragile.

Among the research results, the recognition of producers for the lack of government support stands out as one of the justifications for the absence of exportation. Specifically, 39% point to the need for government support to improve knowledge about the process (training), and 25% demand a line of credit to invest in factory infrastructure to increase production. With insufficient knowledge to export, insecurity about export activities is naturally generated.

Finally, the summary of the frequencies of assertions that presented a negative degree in innovative behavior is highlighted: Q3 with 82% negative frequency; Q1 and Q2 with 56% negative frequency; Q4 with 50% negative frequency; Q7 with 44% negative frequency, and the others below 31%. In summary, 5 out of 7 assertions show a low degree of innovation.

Therefore, this study confirms that with the absence or low level of innovative behavior, challenges and difficulties can arise in the internationalization process.

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**RESUMO:**

Este estudo teve como objetivo analisar o comportamento das pequenas empresas produtoras de capim dourado em relação à inovação e internacionalização. Este estudo tem caráter quantitativo e é considerado uma investigação exploratória, descritiva, com pesquisa de campo, utilizando questionário estruturado, com perguntas fechadas. A unidade de análise para este estudo foi um grupo de 16 artesãos. O instrumento foi aplicado digitalmente e formulado no *Google Forms*. O pré-teste foi realizado com 7 artesãos. Foi possível concluir com este estudo que pelo baixo grau de inovação entre os artesãos a exportação acabou por ser prejudicada, além de inferir à luz da literatura estudada, que, dado ao baixo grau de comportamento inovativo, a exportação entre os artesãos apresenta fragilidade.

**PALAVRAS-CHAVE:** Inovação;  
Internacionalização; Artesanato; Capim Dourado.

**RESUMEN:**

Este estudio tuvo como objetivo analizar el comportamiento de las pequeñas empresas productoras de hierba dorada en relación con la innovación y la internacionalización. Este estudio tiene un carácter cuantitativo y se considera una investigación exploratoria, descriptiva, con investigación de campo, utilizando un cuestionario estructurado con preguntas cerradas. La unidad de análisis para este estudio fue un grupo de 16 artesanos. El instrumento fue aplicado digitalmente y formulado en *Google Forms*. La prueba previa se llevó a cabo con 7 artesanos. Fue posible concluir con este estudio que debido al bajo grado de innovación entre los artesanos, la exportación terminó siendo perjudicada, además de inferir a la luz de la literatura estudiada que, dado el bajo grado de comportamiento innovador, la exportación entre los artesanos presenta fragilidad.

**PALABRAS CLAVE:** Innovación;  
Internacionalización; Artesanía; Hierba dorada.