Marketing of Start-ups and Innovations in Agricultural Entrepreneurship

Maria Dykha
Department of Economics of Enterprise and Entrepreneurship, Khmelnytsky National University, Khmelnytsky, Ukraine

Anastasiia Mohylova
Department of Marketing and International Management, Oles Honchar Dnipro National University, Dnipro, Ukraine

Tetiana Ustik
Department of Marketing and Logistics, Sumy National Agrarian University, Sumy, Ukraine

Kseniia Bliumska-Danko
Department of Marketing and Logistics, Sumy National Agrarian University, Sumy, Ukraine

Valentina Morokhova
Department of Marketing, Lutsk National Technical University, Lutsk, Ukraine

Li Tchon (Corresponding Author)
Department of International Business & Marketing, Yanka Kupala State University of Grodno, Grodno, Belarus
Email: oks.zyb@gmail.com

Abstract
Agricultural development is a determining factor in ensuring food security. The intensification and innovation of agriculture is a prerequisite for meeting the food needs of the world's population. Any innovative activity is Entrepreneurial and is based on the search for new ideas and their assessment; finding the necessary resources; Enterprise creation and management; receiving cash income, and personal satisfaction with the achieved result. The specificity of innovation is its riskiness, so often, investors simply ignore insufficiently substantiated projects. Currently, the due diligence procedure is gaining popularity, during which an investment study is carried out to establish the risks of a proposed capital transaction and develop a competent mayor to manage them. In the article, the authors considered the features and difficulties of marketing for startups and innovations in agricultural entrepreneurship and proposed a due diligence procedure to improve it. Due diligence is actions aimed at obtaining an objective picture of the object of financing. Due diligence is necessary both before investing, merging or buying a company and before starting any kind of cooperation with startups and innovations. The authors considered introducing the due diligence procedure and alternative ways of acquiring a business, indicated and analyzed the main stages of the financial due diligence procedure and gave an example of the report of the diligence procedure for an agricultural startup.

Keywords: Agriculture; Agroindustrial complex; Entrepreneurship; Innovations; Marketing; Startup.

1. Introduction
The innovative way of economic development in the 21st century is the most priority and the only correct one, considering the global challenges facing the world's leading economies. For a sustainable movement along the innovative path of economic development, it is necessary to constantly replenish the base of innovative technologies, goods and services, implementing the so-called “continues innovation”. This replenishment involves both large companies and very small and beginner - startups. In startups, there is a significant potential for the creation of innovative technologies, goods and services, and the continuous circulation of innovative activity. An example is Google, Amazon and Alibaba, which were startups no more than 20 years ago and are now the world's largest innovative companies [1, 2].

Recently, there has been an increase in entrepreneurial activity in the agricultural sector. This is not surprising because food is at the first step of Maslow's pyramid of needs; humanity will always need it.

Financial due diligence is a tool for preparing information for making important management decisions in various investment projects and startups. It presents an analysis of the state of the enterprise, an assessment of the most important problems associated with the activity, as well as the factors that affect the benefits of the activity.

2. Features of Start-ups and Innovations in Agricultural Entrepreneurship
Concerning various industries and spheres of the national economy, the essence of innovation does not have fundamental differences; however, the nature and directions of the innovation process in them may have significant differences.

In particular, the innovation process in the agro-industrial complex has its specifics, due, first of all, to the peculiarities of agro-industrial production and, in particular, the agriculture included in it (Fig. 1).
The innovation process in the agricultural entrepreneurship can take different forms. In particular, it can develop intensively, at a slower pace, or very slowly, that is, extensively. At certain stages of agricultural development, attempts were made to accelerate the pace of development of the innovation process [3, 4]. A typical example of such an attempt is the massive introduction of intensive technologies in agriculture in the first half of the 1980s. Intensive technologies for the cultivation of agricultural crops are the result of scientific research in the field of agricultural production technology. The assimilation of innovations by commodity producers of the agro-industrial complex is gradually creating conditions for accelerating scientific and technological progress in the industry. At the same time, a certain effect is created in production from the development of innovations, which is expressed in an additional output of products per unit area, a reduction in costs per unit of production and an additional income. Ideally, this total additional income should exceed the cost of creating and mastering innovations. It should be borne in mind that the additional cumulative effect obtained directly in production from scientific and technological progress is not enough to finance the scientific and technical sphere of the industry. Therefore, in all countries, the scientific and technical sphere is financed mainly from the state budget. And the more funds are allocated for the development of science, the higher the rate of development of scientific and technological progress. This pattern has been steadily visible over the past century, especially in states with a sufficiently high level of development of scientific and technical potential. Allocation of the innovation process stages is conditional and refers to the process itself and not to its organization. If we consider this process from the point of view of its organization, then it is necessary to highlight the organizational blocks of innovation in addition to the stages. Organizationally, there are four main blocks in innovation activity interconnected (Fig. 2).

![Figure-2. Organization of innovative activities in the agro-industrial complex](image)

**Figure-1. Components of the innovation process in the agricultural entrepreneurship**

| Specific features | Features of the development of innovative process |
|-------------------|-----------------------------------------------|
| The plurality of types of agricultural products and products of its processing, a significant difference in the technologies of their cultivation and production; | The plurality of forms and connections of agricultural producers with innovative formations; |
| Significant dependence of production technologies in agriculture on the prevailing natural and weather conditions; | The isolation of the majority of agricultural producers at all levels: from organizations producing scientific and technical products to enterprises implementing them; |
| A big difference in the period of production for certain types of agricultural products and products of its processing; | The lack of a clear and scientifically grounded organizational and economic mechanism for transferring scientific achievements to agricultural producers and, as a result, significant backwardness of the industry in developing innovations in agricultural entrepreneurship. |
| A high degree of territorial disunity of agricultural production and significant differentiation of individual regions in terms of production conditions; | |
| The different social levels of agricultural workers, requiring much more attention to training and raising their qualifications. | |

**Source:** Developed by the authors

![Innovative activities in the agro-industrial complex](image)
The general block for managing innovation in the agro-industrial complex presented in the schematic diagram contains a block for managing agro-industrial production, a block for managing scientific and technical activities, and managing an innovative process.

Experience shows that a clear performance of a function largely predetermines the effectiveness of innovation in the industry. At the same time, the basis for managing the innovation process is a clear delineation of functions and powers both at the federal and regional levels, the main of which is the timely allocation of funds for agricultural science and ensuring a constant stream of high-quality innovations for their development in production. To a certain extent, the effective activity of agrarian science in creating innovations and the successful activity of the information and consulting service of the agro-industrial complex in promoting their development in agro-industrial production will depend on the specific activities of the managing block [5, 6].

There is no single concept of marketing an innovative product or startup [7, 8]. The principle can be defined as a composition, as a bundle of different stages, from building a concept to real sales. The main marketing models concerning the current stage of a startup are shown in Table 1.

Table 1. Relationship between marketing models and startup stages

| Stages of an innovative startup | Marketing model                      |
|---------------------------------|--------------------------------------|
| pre-sowing                      | information-analytical model         |
| sowing                          | Lauterborn model 4C                  |
| startup                         | 4p model for startup                 |
| sales growth in the niche       | modified 4p model for growth         |
| product development and product line expansion | model 4 + strategic |

Source: Developed by the authors

3. Actual Problems of Start-Ups

No more than 5% of the total number of startups goes into the stage of an innovative company [9]. This is due to the large number of difficulties that a startup needs to overcome on its way to becoming an innovative company. Based on the definition of innovation proposed in the Oslo guidelines: "149. Innovation activities are all scientific, technological, organizational, financial and commercial actions that actually lead to implementing innovations or are conceived for this purpose. Some types of innovation are innovative in themselves, others do not have this property, but they are also necessary for innovation. Innovation activities also include research and development that are not directly related to the preparation of any specific innovation" [10]. We have identified non-scientific and technical problems that prevent a startup from becoming an innovative company:

- Financing of innovative activities;
- Marketing of innovative activities;
- Advertising of innovative activities.

The theoretical basis of marketing is created for already established companies; however, it is not entirely suitable for startups. In this case, let’s consider in more detail the tasks of marketing:

1. Research, analysis and assessment of the needs of real and potential consumers of the company’s products in areas of interest to the company;
2. Analysis, assessment and forecasting of the state and development of the markets in which the company operates or will operate, including the study of competitors' activities;
3. Development of the company's pricing policy;
4. Sales of products and services of the company [11].

It turns out that for a startup that develops an innovative product or service, marketing tasks are also relevant and, in their essence, only slightly differ from the company's marketing tasks. The difference is that a startup has one or more innovative products that will help meet customer needs. The life cycle of a startup's product is shortened, which entails the need for accelerated implementation of marketing innovations, which will ensure its superiority over similar products. Such an accelerated implementation is possible with the help of modern marketing promotion channels, namely, using Internet promotion, which, among other things, has significant advantages:

- The breadth of coverage of the potential audience;
- Possibility of personalized interaction with consumers;
- Information richness;
- Ability to track consumer behavior as a reaction to a startup's product.

Taking these advantages into account, the potential importance of one of the methods of online promotion, namely social media marketing (SMM, social media marketing), increases as the most advanced and promising way of online promotion of innovative startup products. A simple confirmation of this fact follows from the fact that social networks are now ubiquitous in people's daily lives, which allows them to influence potential consumers in their natural environment of communication. The evolution of user interaction through social media and the impact of e-commerce has led to the emergence of the phenomenon of crowdfunding or co-financing, which in the future can become a powerful way of online promotion and will help solve the problems of marketing startup innovation.

The main problem of those trying to innovate and innovate is those who are even worse than potential investors and do not expect them to work for an hour. An effective tool for marketing startups and innovations in the agricultural industry is the due diligence procedure.

Due diligence has existed for a long time; during its existence, this procedure has changed its main directions and remains very useful and necessary. Due diligence was first used in jurisprudence in the United States at the
beginning of the last century. It was used to indicate the broker's disclosure procedure to a potential investor about a company whose shares are traded on a stock exchange \([12, 13]\).

Due diligence is most often used in the work of Western investment banks, but its principles have spread around the world and expanded its scope. Due diligence is needed where an independent professional opinion on a future agreement is required, be it investing, lending or even sponsoring a startup project. In addition, due diligence helps the customer ensure that his potential partners' activities are legal.

Today there are a large number of translations of this term into Ukrainian. This phrase is translated as "due diligence", "due diligence", or "comprehensive study of the reliability of the information provided".

Typically, due diligence is applied before the change of ownership of the enterprise, the conclusion of partnership agreements for large sums, mergers or acquisitions of weaker competitors, in other cases involving the need for significant investments.

4. Results

It has been proven that due diligence is based on the study of factual data about the object of inspection, obtained as a result of studying internal documents, data of operational and financial reporting, industry specifics and legislation. The inspection object is an opportunity to identify the largest risk areas and increase the attractiveness for investors or potential buyers \([14, 15]\).

In fact, due diligence allows you to reduce the potential risks that arise in the enterprise and successfully invest in large enterprises or corporations.

It should be noted that due diligence customers can be commercial banks, investors or companies that want to attract investment.

The information base for due diligence is the company's internal documentation and information obtained from competitors and other sources. As a result of the procedure, the person who ordered it receives objective information about the activities of a company.

There are several alternative ways to acquire an existing business, which can be used by the investor (Fig. 3).

![Figure-3. Characteristics of financial risks of the organization](source: Developed by the authors)

Appraisers, auditors, financial analysts and lawyers work closely together to conduct financial due diligence. Each group of specialists prepares a detailed report on the state of the enterprise for the customer.

The first group is appraisers and financial analysts, who determine the real value of a business or investment object. Conduct an analysis of its financial and economic activities, indicating weaknesses.

The second group is auditors who conduct an audit of financial and accounting with confirmation of its reliability and assessment of tax risks existing in the enterprise.

The third group is lawyers who review the constituent documents, analyze the company's agreements and debts, and correct labour law.

The organization and provision of financial due diligence services to verify the activities of the enterprise involve the implementation of certain stages (Fig. 4).

![Figure-4. Characteristics of financial risks of the organization](source: Developed by the authors)
Due diligence is one of the most effective ways to assess financial risk, which is based on the analytical assessment of information about changes in the external and internal environment by examining all components of the business, including: legal, financial, accounting, tax, marketing, information, management, environmental, technical, operational nature (Fig. 5).

**Figure 5.** Key areas of due diligence in risk assessment of startups/innovative products

| Financial Due diligence | Operational Due diligence | Technological Due diligence | Information Due diligence |
|------------------------|---------------------------|-----------------------------|--------------------------|
| - involves the analysis of legal aspects of the legal entity: legal status, quality of contracts and the degree of their implementation, as well as the study of the following risks. | - focuses on the study of activities, analysis of opportunities for growth of production (sales) and potential, the quality of innovation, as well as the study of: | - focuses on the study of production technologies, security and condition of production equipment, environmental friendliness of production, as well as the study of: | - involves the analysis of information support of business partners, as well as focuses: |
| Risks of patenting and licensing | Risks of overestimating the importance of a startup for consumers | Risks of construction delays | Risks of information availability |
| Risks of intellectual property protection | Marketing risks of supply and marketing | Risks of inefficient selection of technologies | Risks of completeness of information |
| Risks of changes in legislation | Market risks | Risks of equipment incompatibility | Risks of timeliness of information |
| Risks of concluding contracts | | Risks of exposure to force majeure | Risk of reliability of information |

Accordingly, financial due diligence should be understood as a set of analytical measures (Fig. 6), which provide for etiological diagnosis based on financial information (confirmed by independent auditors), the results of which will allow, based on financial and production indicators, to assess the real financial condition, the level of economic security of business entities, identify risks of the external and internal environment and outline areas of strategic management initiatives are presented in more detail in Fig. 6.

In today's financial due diligence is a very important issue because the use of such a wide range of control procedures, economic diagnostic methods allow identifying risks and threats and identifying the contours of strategic management initiatives that strengthen preventive control functions and optimize the management process. Together, they will contribute to the successful implementation of a strategy to ensure sustainable development and increase the value of a business.

Financial due diligence is a financial analysis that gives conclusions about the ability of an enterprise to make a profit. It is advisable to conduct financial analysis simultaneously with the audit of the enterprise, during which the correctness of accounting, reliability of reporting and other documentation and their compliance with regulations are determined. In the process of financial analysis, the structure of assets and liabilities of the enterprise, its income, financial ratios and the system of financial planning and control are analyzed, as well as the basics of valuation and recognition of liabilities. The commercial results' factors are explained and commented on, and unusual and non-periodic indicators that significantly affect the results have been reported in recent years. The nature of cash flows in recent times and the factors that significantly affect it are considered. The comments of the management's forecasts on the prospects of commercial activity, cash flows, paying special attention to their relationship with the current volume of trade.

Source: Developed by the authors
In the process of financial due diligence, counterparties should be ranked at-risk groups, such as probable bankruptcies, groups with poor liquidity or poor payment reputation. This approach is necessary to assess the company's security, identify risks, create or adjust a plan of measures to minimize risks, improve the interaction of structures responsible for risk control and management.

Therefore, due diligence is defined as a proper study conducted by stakeholders in preparing documents on the agreement to form a confident basis for the truth and completeness of the provisions of the documents and the facts contained therein. In some cases, this term refers to collecting and analyzing information about potential or existing customers and partners to assess their financial condition and reliability.

Thus, the above areas with the distinctions of the elementary composition of the functionalities (financial, tax, legal, marketing, business planning) were incorporated into the general due diligence procedure, which provides the generation of specific techniques and methods of its implementation according to the criteria of forming an objective idea of the investment project, taking into account investment risks and achieving adaptability in an unstable economical environment. The objectivity and reliability of the results of the due diligence procedure will allow a potential buyer to make a relevant management decision in such a situation.

5. Discussion

The main component of the Management Report is the formation of the necessary information on the status of enterprises and existing threats to their economic security. One of the effective tools to prevent threats to the economic security of the enterprise is recognized as financial and operational due diligence.

The operational due diligence involves reviewing the results of operating activities, assessing the feasibility of short-term and long-term strategies, as well as anticipating existing risks and threats.

Operating due diligence is given the greatest advantage because its results practically show the face of the enterprise, its advantages over competitors, investment attractiveness and development prospects.

The main source of information for the implementation of operating due diligence is form 2 "Statement of financial performance (Statement of comprehensive income)". EBIT and EBITDA and OIBDA were the most widespread in the group of operating and profitability indicators. (Table 2)

### Table 2. The essence of indicators of operating activities and profitability

| Indicator                                      | Essence                                                                 |
|------------------------------------------------|-------------------------------------------------------------------------|
| EBIT (earnings before interest and taxes)     | Intermediate profit before interest and taxes. EBIT characterizes the measure of profitability and is the basis for assessing the business; it is of particular interest to banking structures, as it characterizes the ability of enterprises to repay loans and bank interest. |
| EBITDA (earnings before interest, taxes, depreciation and amortization) | Net ("cleared") income from the impact of depreciation, interest and income tax, which allows you to estimate the company's profit regardless of the impact: the size of the investment (adjustment for the amount of accrued depreciation); debt burden (interest adjustment); tax regime (adjustment for income tax). |
| OIBDA (operating income before depreciation and amortization) | Operating profit before excluding depreciation on fixed assets and intangible assets. |

Thus, entrepreneurs who were able to hook the investor with their speech/presentation and arouse his active interest in their idea are wary of the stage of due diligence because many look at it as an exhausting process in which the investor goes through all the "problems" and "contra".
Classic due diligence is a complex process, often long and looks like a legal and financial audit mixed with a detective investigation. The volume, duration, and complexity of this process depend on the volume and object of investment and the wishes of the investor himself.

In reality, however, due diligence is different. Business angels investing in a startup early on may or may not do minimal due diligence. Efforts and knowledge often throw off groups (associations) of business angels to conduct an in-house audit for a complete understanding of the business. An example of such a report for an agricultural startup is shown in Fig. 7. Well, venture capital funds seriously resort to the help of teams of lawyers and analysts for this.

**Figure-7. Example of due diligence for an agricultural startup**

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Content
Annotation
List of charts
List of tables
  1. General information on the startup product (innovative feed)
1.1 General classification of feed for cattle
1.2 Specifications
  1. Analysis of the domestic market for cattle feed
2.1 Market volume
2.2 General dynamics and structure of the market
2.3 Market segmentation
2.4 Production analysis
2.5 Consumption analysis
2.6 Trends and Prospects
  1. Analysis of the world market for cattle feed
3.1 World market for cattle feed
3.2 Volume, structure and dynamics of imports
3.3 Export volume, structure and dynamics
  1. Conclusions
  2. Recommendations
  3. Application. Price lists of manufacturers
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*Source: Developed by the authors*

In the due diligence process, the investor looks at the team, market, product or service, business potential, margin and return on investment. All kinds of risks are identified and assessed, including market, human, technological, intellectual property and innovation, regulatory, financial and many others. As a result of such an assessment, the investor seeks to understand how "the game is worth the candle" by weighing the risks concerning potential benefits.

### 6. Conclusions

The key to successful and sustainable development based on an innovative economic development model is "continuous innovation". Startups play an important role in ensuring the continuous circulation of innovation activity. However, on the way to becoming a startup into an innovative company, there are many non-scientific and technical problems associated with bringing an innovative product to the market. Among them, there is the problem of marketing the innovative activity of a startup. As the product lifecycle of an innovative startup is shortened, it needs to be marketed faster. One of the modern tools is due diligence, including marketing. It allows you to improve the marketing activities of a startup and, thereby, contributes to the formation of a startup as an innovative company.

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