"Management decisions regarding innovative projects at their early stages of development: An example of a methodology for assessing crypto projects"

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MANAGEMENT DECISIONS REGARDING INNOVATIVE PROJECTS AT THEIR EARLY STAGES OF DEVELOPMENT: AN EXAMPLE OF A METHODOLOGY FOR ASSESSING CRYPTO PROJECTS

Abstract

Innovative projects can be very costly, and making mistakes in their implementation can be expensive for organizations and investors. Therefore, appropriate procedures are needed to minimize the likelihood of such errors, facilitate strategic decision-making, and optimize investments. This paper presents a methodology for assessing the viability and potential of cryptocurrency and blockchain projects based on evaluating individual project components and synthesizing these assessments.

The proposed approach suggests considering a project as a collection of individual components with clear metrics that can be assessed; various assessments of these metrics are introduced. As a result, a project manager or investor assigns ratings to its metrics when analyzing several projects and then calculates a final assessment for each project. A project manager can determine the most promising project by comparing the reviews of several projects.

This methodology stands out for its simplicity and clarity, and a significant advantage is its reliance on only publicly available data. This approach can be applied as the first step in making investment decisions regarding a specific project when working with investment funds or launchpads, for example.

INTRODUCTION

In today's globalized world, where technological progress dictates the pace of economic development, innovative projects become a crucial factor in the competitiveness of nations and corporations. However, effectively managing such projects, especially in their early stages, poses a challenge for researchers and practitioners due to the high level of uncertainty and risk.

Cryptocurrency projects, emerging at the intersection of finance, mathematics, and information technology, have become one of the most debated and unpredictable directions in innovative development. Their specificity, volatility, and novelty require a unique approach to evaluation and management.

The scientific problem lies in developing a comprehensive methodology for evaluating cryptocurrency projects in their early stages of development. This issue is crucial since existing methods often do not consider all the peculiarities and risks associated with cryptocurrencies.

1. THEORETICAL BASIS

The methodology for evaluating early-stage cryptocurrency projects in the context of managerial decision-making by various organizations and investors is intrinsically tied to the domain of project management (Korneyev et al., 2022; Skrynnyk & Lyeonov, 2023; Bublyk et al., 2023; Panigrahi, 2023; Rahyuda & Candradewi, 2023; Waspada et al., 2023). Within the fast-paced and perpetually evolving cryptocurrency and blockchain sphere, project management principles are indispensable in orchestrating and ensuring the productive execution of these nascent initiatives (Polinkevych et al., 2021; AL Afaishat et al., 2022; Kravchenko et al., 2022; Blikhar et al., 2023). This methodological framework serves as the linchpin for a comprehensive assessment of project feasibility, facilitating the meticulous delineation of precise objectives, the establishment of meticulously defined project timelines, the reasonable allocation of available resources, and the adept management of potential risks.

In this volatile landscape, marked by its ever-shifting dynamics, effective project management emerges as the bedrock upon which these crypto endeavors stand. It empowers project managers to remain agile and responsive to the cryptocurrency industry's tumultuous nature. It equips them with the insight to seize emerging opportunities as they surface and navigate the labyrinthine regulatory challenges that frequently arise.

In a sector where innovation and adaptability are the cornerstones of progress, the art of effective project management assumes an existential role. It allows organizations and investors alike to be discerning in their decision-making processes, to optimize their investments strategically, and ultimately, to contribute substantively to the sustained growth and enduring stability of the cryptocurrency and blockchain ecosystem.

Several methods are commonly employed by venture capitalists and financial institutions that enable access to fundamental market indicators for startups at early and later stages.

One is the rate of return method (Kolbe, 1984). The venture capital method, often used for Seed and Series A stages, focuses on forecasting the value of the project at the investor's exit from the company. The critical indicators considered are:

1. Pre-money valuation or pre-investment value of the startup (the company's valuation before receiving investments).

2. Post-money valuation or post-investment value of the startup (the valuation considering the investments received and the number of years after which the investor will exit the project).

The venture capital method is simple and utilizes the following formula:

$$ROI = \frac{Exit\ value}{Post\text{-}money\ valuation}. \qquad (1)$$

From formula (1)

$$Post\text{-}money\ valuation = \frac{Exit\ value}{Expected\ ROI}. \qquad (2)$$

The Exit Value represents the sale price of the company in the future and can be estimated by assuming annual profits at the time of sale and valuing the revenues based on those profits. As for Expected ROI, most venture firms expect a 10-40x return on investment (by industry norms for early-stage startups). However, for the crypto industry, this figure is significantly higher. Investors expect returns of up to 50-100x (Mayer, 2015). These expectations can be attributed to a lower percentage of successful projects amidst higher investment volumes.

The venture capital method provides a framework for evaluating potential returns on investment in startups, considering exit valuations and the expected ROI, which varies depending on the industry and stage of the startup.

The next is the scorecard method (Fisher & Zizlavsky, 2021). The scoring method is commonly used for Pre-seed stages. It relies on comparing a startup to similar or competing companies, focusing on multiple market factors, and adjusting the average valuation based on recent funding rounds in the industry. Such compari-

sons can be made for startups in the same sector and stage of development to determine the pre-money valuation.

When assessing, factors need to be weighed and scored on a scale of -3 (worse) to +3 (better). Then, these scores are multiplied by the corresponding comparison coefficient provided in the table below (column Range) to give each factor a value. The obtained values are then summed and multiplied by the average pre-money valuation in the industry.

A drawback of this method is the lack of information about the startup itself (since each investor evaluates the startup's team differently) or its intrinsic value. Additionally, this method is not suitable for rapidly growing startups that have not been seen before, such as SpaceX, Palantir, 10X Genomics, Vir Biotechnology, Databricks, Rivian, and others, as they may need clear competitors or analog companies to compare to.

The risk factor summation method (Sarah, 2021) is often used for Pre-Seed stages in startup valuation. This method involves assessing and summing up various risk factors associated with the startup to determine its overall risk level.

The risk factor summation method considers a broader range of risk factors to determine the pre-money valuation for early-stage startups. This method can be used as an initial step in assessing potential risks and should be combined with other startup valuation methods. Industry analysts typically identify the following factors for evaluation.

Each risk factor is assessed on a scale of +2 (very positive for company development) to -2 (very negative for company development). The average pre-money valuation for pre-revenue companies in this market is adjusted as follows: $250,000 is added for each positive score (+2 = +$500,000), and $250,000 is subtracted for each negative score. By considering multiple risk factors and assigning scores, the risk factor summation method provides a structured approach to assess the risk profile of early-stage startups. This allows investors to understand the potential risks better and make more informed investment decisions. It is impor-

tant to note that this method should be used with other valuation methods to obtain a comprehensive evaluation of the startup's value and risk.

The method of comparing startups (Gosztonyi et al., 2022) is commonly used for various stages, including Pre-Seed, Seed, Minimum Viable Product (MVP), and the initial sales period. The method of comparing startups, also known as the method of comparable companies or comparative analysis, is used to evaluate startups by comparing them to similar existing companies in the market. This method assumes that similar companies may have identical market valuations, growth prospects, and risk profiles.

To apply the method of comparing startups, investors identify comparable companies that operate in the same industry, have similar business models, target similar markets, or face similar competitive dynamics. They then analyze the financial performance, growth rates, market share, and other relevant factors of these comparable companies.

By examining the valuation multiples, such as price-to-earnings (P/E) ratio, price-to-sales (P/S) ratio, or enterprise value-to-revenue (EV/Revenue) ratio, of the comparable companies, investors can derive a valuation range or multiples that can be applied to the startup under evaluation.

The method of comparing startups provides a quantitative framework for assessing the value of a startup based on the market multiples observed in comparable companies. However, it is crucial to consider the unique characteristics, growth potential, and risk factors specific to the startup being evaluated, as well as any differences in the stage of development or market position compared to the comparable companies.

Based on the above, it is evident that evaluating a startup is a complex task. Furthermore, there are numerous variations of widely accepted valuation methods, and their application depends on the presence of specific factors (d'Arge & Shogren, 1989). Therefore, for an accurate assessment, it is recommended to utilize multiple valuation methods or develop a framework that considers crucial factors and is tailored to a specific domain (FinTech, blockchain, EdTech, or healthcare).

By employing multiple methods or a domain-specific framework, investors can gain a more comprehensive understanding of the startup's value and mitigate potential biases or limitations associated with relying solely on a single valuation approach. This approach allows for a more holistic evaluation that considers market potential, team expertise, competitive landscape, and growth prospects to arrive at a well-informed and robust startup valuation.

The study aims to develop a methodology that would consider the specifics of cryptocurrency projects, their potential, and risks and assist managers in making informed decisions during the early stages of implementing such projects.

2. RESULTS AND DISCUSSION

An evaluation framework is a tool that presents a systematic and concise overview of the evaluation methodology and process. A well-thought-out evaluation framework can assist significantly with identifying the planned evaluation activities and clarifying the scope of the evaluation (Canale et al., 2018).

The methods discussed above generally allow for a high-level assessment of a project's potential. However, for a more detailed and in-depth analysis, it is essential to consider the specific domain of the project and its unique characteristics. Therefore, developing an evaluation framework tailored explicitly to projects related to the crypto industry is advisable.

A step-by-step approach should be followed to ensure that the developed method encompasses a wide range of aspects and parameters. This involves the use of an analysis and decomposition approach during development. When evaluating a project, on the other hand, the assessment should proceed from the specific to the general.

By following this approach, the evaluation framework can effectively capture the nuances and complexities of crypto-related projects. It allows for a comprehensive analysis considering technology, market dynamics, regulatory environment, token economics, team expertise, and community en-

gagement. This domain-specific framework will provide a more robust and accurate assessment of projects in the crypto industry.

The development stages of the project are as follows:

- Stage 0: Describing the desired framework and its goals.

- Stage 1: Identifying the critical evaluation components, which may encompass multiple metrics.

- Stage 2: Determining the metrics for each project evaluation component.

- Stage 3: Assigning ratings or scores for each metric.

- Stage 4: Allocating weights to each metric within a specific evaluation component.

- Stage 5: Allocating weights to the evaluation components.

- Stage 6: Identifying distinct metrics for market analysis and demand assessment.

- Stage 7: Mathematically modeling the framework.

- Stage 8: Testing and validating the framework.

These stages outline the systematic process of developing an evaluation framework for projects in the crypto industry. Each stage contributes to the overall structure and effectiveness of the framework, ensuring a comprehensive and robust evaluation process.

2.1. Stage 0: Describing the desired framework and its goals

The goal of this framework is to analyze crypto projects and, as a result, identify the most promising projects for investment. The framework aims to evaluate projects, considering both external and internal factors comprehensively. A 100-point rating scale has been chosen for the

evaluation, where 0 represents the worst project and 100 represents the best project. This rating scale is intuitive, easily interpretable, and has a wide range of values, allowing for nuanced assessments.

The framework should assess both external factors related to the project's external environment and internal factors about the project itself. By considering both perspectives, a holistic evaluation can be achieved, considering factors such as market conditions, competitive landscape, team expertise, technological innovation, and financial viability.

2.2. Stage 1: Identifying crucial evaluation components that may include multiple metrics

Any project consists of its product and the team developing that product. In the context of the crypto industry, the presence of a native token is also a crucial factor. These three parameters are essential in evaluating a startup in any domain. It is necessary to determine the components that precisely characterize the crypto industry.

Web 3.0 (Ghose, 2023) is a concept of the future Internet that envisions a transition from a network focused on information exchange between users to a network that allows intelligent agents

with enhanced functionality and independence to work with information. This concept involves using advanced technologies such as blockchain, artificial intelligence, big data, and other innovative technologies. In this context, the community plays a significant role. On the other hand, a successful product is accepted and popularized by the community. Marketing strategies for market entry and promotion are responsible for this aspect.

Another parameter is the presence of investors and communication strategies or the search for investors. Therefore, the components that can be used to evaluate a project are the product, the team, tokenomics, the community, the marketing strategy, and the investors. However, these components only allow the evaluation of the project and its potential for success in a "spherical vacuum." It is essential to analyze and consider the environment in which the project will be implemented to achieve its goals. Hence, an additional evaluation component is the market situation and the project's feasibility. These metrics are considered separately and are distinct from the evaluation of the project itself since neither the team nor the investors can directly and significantly influence the first and second components. Thus, the tree of evaluation components is the result of the first stage (Figure 1).
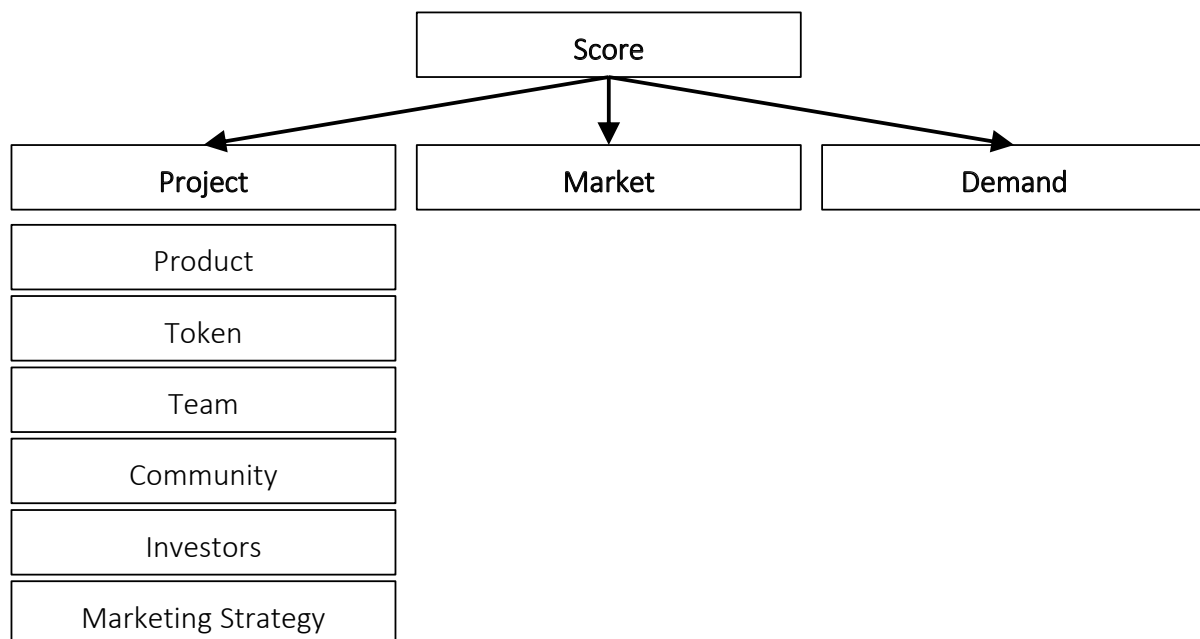

Figure 1. The tree of components for evaluating a crypto project

2.3. Stage 2: Determining the metrics for each project evaluation component

Metric refers to numerical indicators used to measure the results or effectiveness of a specific activity, project, or business. It helps assess the extent to which goals are achieved and allows the identification of weaknesses and resource-intensive areas to focus on their improvement. Decomposing the high-level component is a critical stage in developing an evaluation framework. It is essential to examine each component in detail and identify metrics by which the component can be evaluated (Young, 2022).

The product component determines the stage of the project (whether it is just an idea or a partially implemented project). This metric is important because the project stage influences the amount of funding, the presence of a validated Product-market Fit (PmF) (Bow Now, 2022), and other factors. PmF is when the product meets market needs and satisfies customer requirements so well that the proposed price reflects its value. PmF is critical for successfully launching a product and achieving sustainable sales figures. Other metrics that characterize the product include technical complexity (IEEE Xplore, n.d.), product innovation (Cote, 2022), monetization strategies (Lord, 2021), and market research (Yallop et al., 2022) (Figure 2). Selecting these metrics allows for a comprehensive product evaluation from different perspectives and assesses how well the product has been developed.

The token component plays a crucial role in providing liquidity to the project and establishing an economic system with its own rules and methods of transaction. This enables project developers to influence the commercial aspect and incentivize users to actively engage with the product. To evaluate this component, several metrics should be considered (Power & Au, 2018).

- Token Utility: This metric explains how the token will be used within the project. If this metric is low, it indicates that the token is not essential for the project, and the project may be viable without it (Book, 2022).

- Token Distribution/Token Release Schedule: Token distribution is a crucial component that reveals how the tokens will be allocated and spent. The token release schedule provides insights into the project's timeframe and development plans. While the availability of all tokens does not necessarily signify the end of the project, it often indicates a transition to subsequent development stages where the token may gain new utility and use cases (Crypto Trader & Crypto Gladiator, 2021).

- Initial Marketcap: This financial indicator reflects the initial valuation of the project and helps investors understand its growth potential. A smaller initial market capitalization allows a project to grow faster compared to competitors, as it requires fewer financial investments at the start (Lacity & Treiblmaier, 2022).

- Fully Diluted Valuation (FDV) is a metric that helps assess the overall financial valuation of the company. In venture investments, it typically represents the "pre-market exit capitalization" (Voshmgir, 2020). It serves as a reference point for the real value of the company at a given token price, illustrating the total capitalization when all tokens are available in the market. It is also used to evaluate potential returns for investors.

- Raising Amount: This metric evaluates the financial appetite and potential opportunities for product development and successful market entry. If the project team has significant ambitions but lacks adequate financial re-
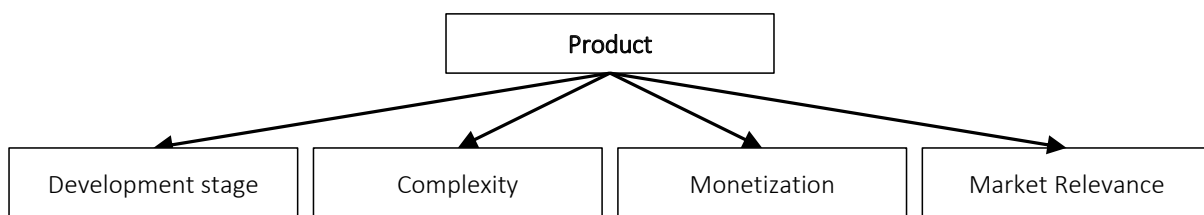

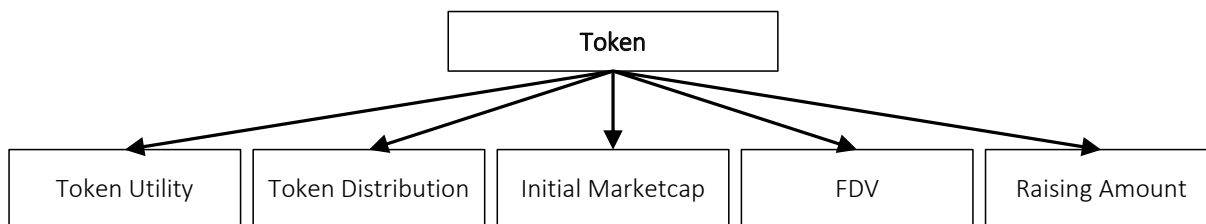**Figure 2.** Decomposing a product component into metrics

Figure 3. Decomposing a token component into metrics

sources, it may struggle to meet its long-term development and marketing needs.

These metrics can be obtained using platforms like CoinMarketCap or CoinGecko. They provide a comprehensive understanding of the token component and its role in the project's success (Figure 3).

The team component is crucial as the qualifications and knowledge of the team enable the idea to be realized and the product to be brought to the market. The project team should be highly skilled and motivated. Metrics that can be used to evaluate the team include:

- Crypto Experience: The presence of experience in the cryptocurrency field is essential. This demonstrates the team's understanding of the crypto industry and its dynamics.

- Web 2.0 Experience: characterized by increased user interaction and collaboration, including social media, video hosting, blogs, and similar platforms. Web 2.0 experience indicates the team's familiarity with user-driven content creation and engagement (Ball, 2022). This experience is valuable in building products that resonate with users in the digital landscape.

These two metrics assess whether the team has the competencies to develop the product. Additionally, the project team may include an advisor who can provide guidance and connect with relevant in-

dividuals. An advisor's industry connections and market weight can facilitate the identification of people, technologies, frameworks, and other resources to strengthen the team's skills and knowledge.

The last component is partners. Partners can be projects, companies, or individuals who contribute their expertise or achievements (technical, software-related, social) to help the product evolve more quickly and effectively (Zakaria, 2011).

Considering these metrics provides insights into the team's capabilities, expertise, and collaborations that can contribute to the project's success (Figure 4).

The community component is an essential aspect of the project as it helps to scale the product by transitioning from innovators and early adopters to the early majority and bridging the chasm in the project's development curve. The presence of an engaged community and continuous community management are key factors for project scalability.

Since the cryptocurrency industry and its community exist in the online space, metrics should focus on evaluating effective online engagement. The following metrics can be considered:

- Number of followers in socials; it analyzes the number of subscribers across social media platforms. If the project maintains multiple accounts on different social media platforms, an average can be calculated.
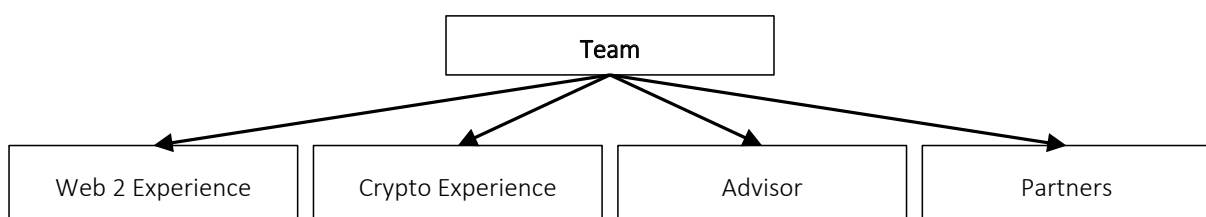

Figure 4. Decomposing a team component into metrics

- ER (Evangelist Rate); this metric indicates the number of product evangelists within the community. Evangelists strive to promote and advocate for the use of cryptocurrencies and blockchain technologies among a wider audience. They can play various roles, such as educators, marketers, technical experts, investors, etc. (Buterin, 2014). Evangelists are the ones who popularize and adopt the product early, so engaging with them and continuously increasing their numbers contributes to community expansion. ER is the ratio of evangelists to the total number of community members.

- Twitter Score; Twitter is a popular social media platform in the crypto industry (Cummings & Tapscott, 2016). Twitter Score metric assesses the account's level of engagement, notable personalities following it, and the quality of the audience. This score can be calculated using websites like twitterscore.

- Website Visitors and Regional Analysis; this metric analyzes website traffic, particularly unique visitors and their interest in the product. Third-party services like SimilarWeb can provide data on the real number of unique visitors to the project's website. It also allows for geographical analysis of the website's visitors, which can provide insights into potential purchasing power across different regions.

Considering these metrics provides an assessment of the community's engagement, reach, and potential for growth, which are essential for the success and scalability of the project (Figure 5).

To assess this component, it is essential to identify metrics that clearly reflect the direct and indirect impact of the investors involved (Malik, 2010). The following metrics can be highlighted to evaluate this component:

- VC Funds Level; this metric assesses the funds and investors already attracted to the project. Objective determination of this metric can be challenging, and empirical methods are often used. Third-party resources such as cryptorank.io can be used for validation (Maganis, 2023).

- Money Raised; this metric reflects the number of investments that have been raised. It demonstrates how interested investors are in the project and their level of belief in its potential.

- Added Investors Value; this metric indicates the potential additional value investors can bring to the project. It is an essential factor for analyzing the non-monetary assets that investors have already brought to the project, such as connections to other investors, resources, advice, and support in development (Graham, 2016).

- Seed/Private Prices; this metric focuses on the pricing strategy of the project. It typically involves analyzing the overall price levels and the ratio of investment rounds to each other. Attention is also given to the adequacy and reliability of this data.

Please note that these metrics provide an overview of the evaluation of the investor component and should be used in conjunction with other relevant factors for a comprehensive assessment (Figure 6).

First and foremost, it is essential to determine the level of Launchpads and Listings, which refers to the caliber of launchpads involved in the Initial DEX Offering (IDO) of the project and the level of centralized exchanges where the Token Generation Event (TGE) listing can occur (Solomon et al., 2022). These parameters are sig-
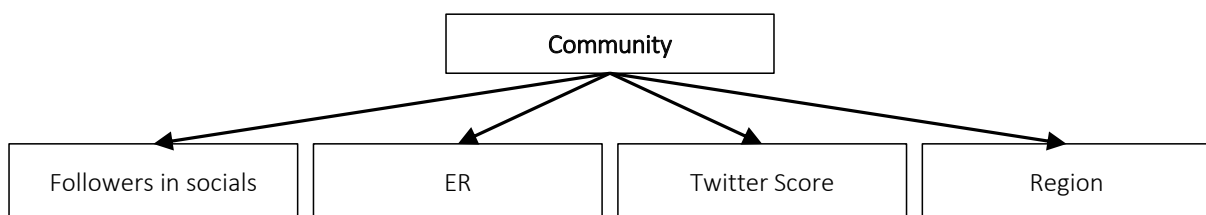
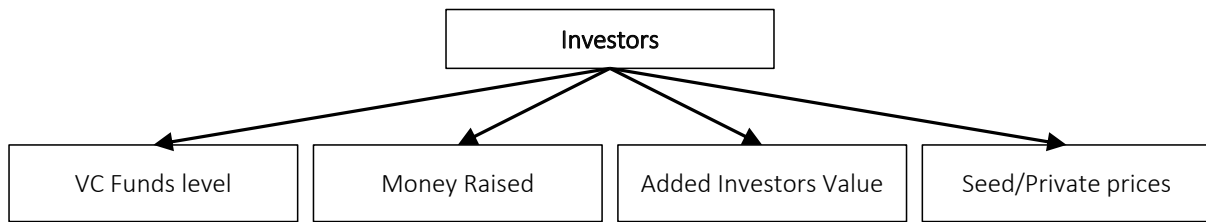**Figure 5.** Decomposing a community component into metrics

Figure 6. Decomposing an investors component into metrics

nificant and influence the potential success of the project. The level of exchanges and launch-pads indicates the breadth of the audience that can be reached for token purchases.

Every project has its own token, which serves as a means of monetization. When a project enters the market, there must be more awareness and demand for its tokens. To address this, external organizations are involved in creating artificial demand at specific times, with predetermined volumes, and on prearranged centralized exchanges. Such manipulation is carried out to ensure that the project and the growth of its token align with the projected values. The strategy often employed is explosive growth, where demand and hype are generated in the market, resulting in a 3x to 10x increase in token value. Retail investors then start buying tokens, continuing the trend and organically driving up the token value. An honest assessment of the market-making level and budget is one of the key components for a successful project launch (Cryptocurrency World, 2018).

KOLs (Key Opinion Leaders) are another parameter that determines the presence of thought leaders and influencers who explain the benefits and potential of the launching product to retail investors and buyers (Figure 7) (Gagliardelli et al., 2023). These individuals play a crucial role in educating and influencing the perception of the project among the public.

The result of the second stage is the decomposed tree of metrics, which includes metrics for evaluating each project component. This tree of metrics provides a systematic approach to assessing each component. It helps understand how effectively each component performs its functions and contributes to the overall success of the project. Each metric in the tree has its indicators and evaluation criteria that facilitate an objective assessment and comparison of different projects or different stages of development within a project. This helps the project team understand the current state and identify weaknesses of the project, enabling them to take necessary steps for improvement and development.

2.4. Stage 3: Assigning ratings or scores for each metric

For all metrics, a rating from 0 to 10 is used, where 0 represents the lowest level of the metric, and 10 corresponds to the highest and best state.

To ensure transparency of ratings and a clear interpretation of the results for each metric, it is recommended to quantify the values. However, to keep the framework simple and applicable to many projects, there should be room for interpretation and flexibility. Therefore, it is proposed to assign three ratings for each metric: 0 – the worst result, 5 – average, and 10 – the best. The data with the quantified ratings are presented in Table 1.
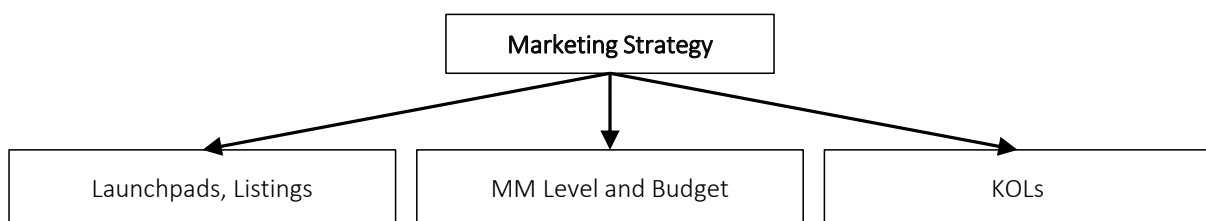

Figure 7. Decomposing a marketing strategy component into metrics

Table 1. Metrics of the crypto project and their evaluation

	Metrics	Score = 0	Score = 5	Score = 10
Product	Development stage	Not at all mature product/ promises	Alpha / Beta	Finished product
	Complexity	Basic product, there are many of them already on the crypto market	With due investment can be repeated	Technologically sophisticated/ innovative
	Monetization	Pyramid or only due to the growth of the token	Potentially good and understandable business model (at the hypothesis level)	Allows the company to consistently earn, working business model, revenue
	Market Relevance	Another mediocrity among others	Already decided by others but relevant	Super urgent and important issue in the segment/no competitors
Team	Web 2 Experience-Team	Greens, although they know how to develop	Strong guys, with experience from medium/top/noname companies	Extensive experience in implementing successful companies and working in the top
	Crypto Experience	Low crypto experience	Experience in crypto startups	Experience in TOP crypto startups
	Advisors	Tier 4+ or no advisors	Tier 2-3 (Bybit, Huobi, TOP 20 exchanges\incubators)	Tier 1 (Binance, OKX)
	Partners	No or off-topic	The presence of adversaries in the topic	Top advisers/partners on the topic of the project
Community	Number of followers in Socials, mentions, online	<5,000 (average for the top 3 communities), almost no mentions in the search	5,000 - 15,000 (on average for the top 3 communities); in the search, the feed is partially clogged with project news	> 30,000 (on average for the top of the three communities); in the search, the entire feed is crammed with project news
	ER (evangelist rate Discord)	1-10%	10-30%	30+%,
	Twitter score	<10 points	10-100 points	>100 points
	Region, website visitors	CIS, India, Asia	EU, CIS, India	USA, EU, CIS
Token	Sell Pressure (TGE/Max/Min)	>$500k	$300k - $500k	<$300k
	Initial Marketcap	>$3M	$1M - $3M	<$1M
	Inflation rate	<5%	10%	>15%
	FDV	>$50M	$10M - $50M	<$10M
	Token Distribution/ Token Release Schedule	Short Cliff/Vesting	Medium Cliff/Vesting	Long Cliffs/Vesting
	Token Utility	None or not interesting/bad	There are interesting mechanics	Many mechanics for using and withdrawing a token from circulation
Investors	VC Funds level	No funds	Tier 2/3	Tier 1
	Money Raised	<$2M	$2-5M	>$5M
	Added investors value	No added value, only $	Can provide listings Tier 2 + partnerships Tier 2	Can provide listings Tier 1 + partnerships Tier 1
	Seed/Private prices	>100% more expensive than the estimated price of IDO	50-100% cheaper than the estimated price of IDO	20-50% cheaper than the estimated price of IDO
Go-to-market strategy	Launchpads, Listings	Tier 4, No funds	Tier 2/3	Tier 1
	MM level and budget	Noname or themselves, <300k$	Tier 2-3 MM, ~$1M	GSR (or similar), $3M+
	KOLs	Low, no budget	Medium budget	Top KOLs, big budget

2.5. Stage 4: Allocating weights for each metric within a component

Each component has a total of 100 points, as defined in Stage 0, and each metric within the component needs to be evaluated based on its significance within that component.

The study considers each component separately. Within the product component, there are four metrics. They are not equally important because investors prioritize the development stage of the product. Therefore, the development stage can be allocated 40% of the total 100%. The second most important metric is complexity, which explains the potential market impact and is allocated slightly lower but still significantly at 30%. The other two metrics influence the potential demand for the product and its monetization strategy. Market fit and demand alignment are more important, so they are allocated at 20%, while monetization is allocated at 10%.

Moving on to the team component, the most crucial parameter is experienced in the crypto industry, which can be allocated at 50%. This high rating is justified because the crypto industry differs significantly from general IT, although overall team experience in IT is also essential and allocated 30%. Partners and advisors are equally important metrics, each allocated at 10% of the total.

The community component includes four metrics that characterize the engagement and interest of people in the project. Since the crypto community is predominantly active on the Discord messenger platform, its evaluation holds the highest weight of 40% (Evangelist Rate metric). The next most important metric is the evaluation of the project's website. This comprehensive metric assesses the number and sources of website visits, demonstrating the demand in the online space and potential target audience segment. This metric is allocated at 30%. An objective evaluation of the project's Twitter account, which reflects the "quality" of the account, is assigned a weight of 20%. The number of followers is the least significant parameter, as it can be easily manipulated and is allocated at 10%.

Next is the token component. It consists of the most significant number of descriptive metrics. As mentioned, token utility is the most important, allocated at 25%, followed by the sell pressure metric at 20%. These two metrics determine whether there will be demand for the token in the market. The other two equally essential metrics are Initial Marketcap and FDV, which help determine the current market size for the specific product. They are allocated 15% each. The last metric, the initial rate, is assigned a weight of 10%, corresponding to its importance for investors.

In the investors component, all metrics are equally necessary except for the ratings at different funding rounds. Usually, the planned price at the different funding rounds can change due to factors beyond the team's control. Therefore, this metric is allocated 10%, while all other metrics are allocated 30%.

A similar situation occurs in the marketing strategy component. All three parameters are almost equally important, but the presence of Key Opinion Leaders (KOLs) is slightly more significant for product promotion in the market (due to the approach in Web 3 and industry trends). It is assigned a weight of 40%, while the other two metrics are equally allocated at 30%.

2.6. Stage 5: Allocating weights to components

The sum of all components should add up to 100. Therefore, the allocation is based on the significance of each component and its impact on the project's success. All components are almost equally important, but the token and team components are slightly more significant, as they have the potential to drive the success of the entire project. Therefore, they are allocated a weight of 20%, while the other components are allocated 15% each. The decomposed tree of metrics, components, and their respective weights is presented in Figure 8.

2.7. Stage 6: Identifying isolated metrics for market and demand

According to the developed framework for assessing the market and demand for a project, the metrics that evaluate them are considered separately and do not contribute to the evaluation of the product's quality itself. To provide clear assessments and values for these metrics, a rating system needs to be introduced.
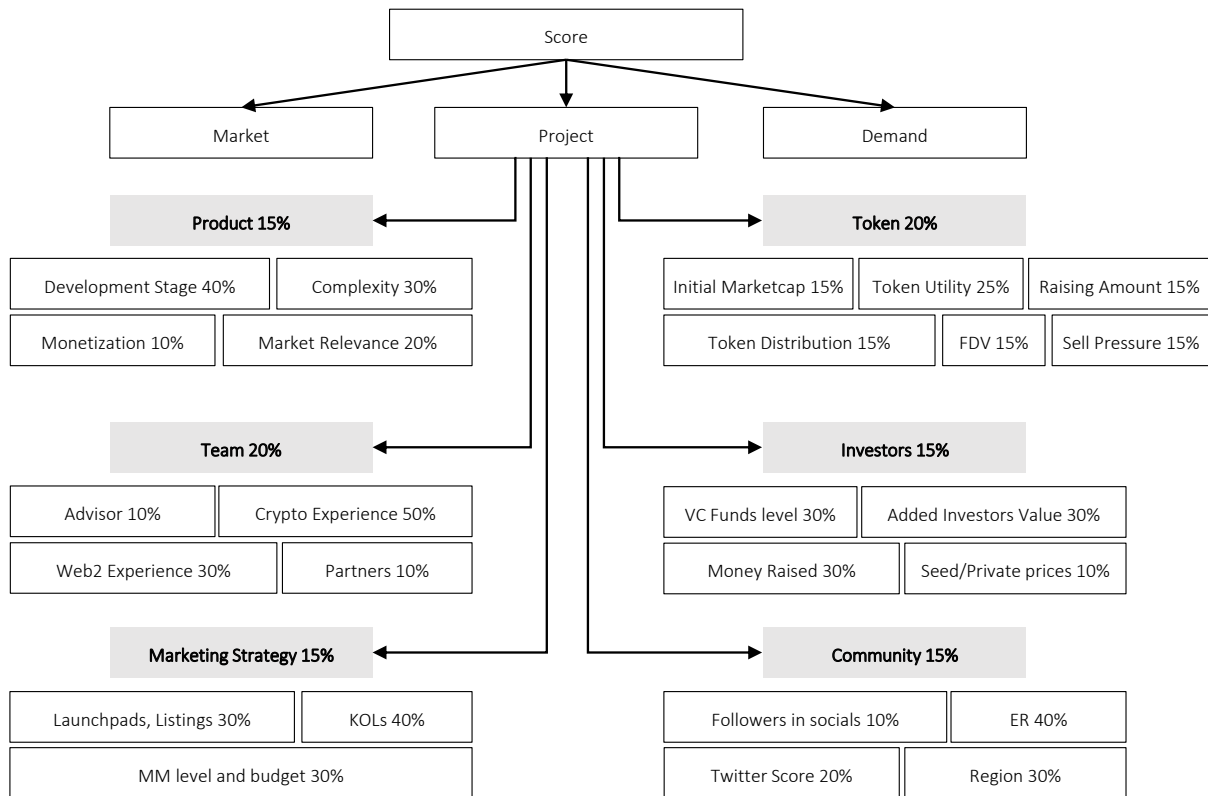
Figure 8. Decomposed tree of metrics, components, and corresponding evaluations of the crypto project

Regarding the Market component, which reflects the current market situation, four phases can be distinguished:

- Market peak – a phase (more like a point) where the maximum number of resources, including financial resources, is concentrated. This situation is highly desirable for any project as the market is favorable. Therefore, the coefficient for this situation is 1.

- Stable market growth (from the bottom to the peak) – this situation is suitable for a project. Under such conditions, the project can demonstrate its potential and scale. Therefore, the coefficient is 0.7.

- Stable market decline (transition from peak to bottom) – the market requires more effort and higher project quality. The number of investors and their trust in the market decreases. This situation is unfavorable for a project and contributes to a worsening state. Therefore, the coefficient is 0.3.

- Market consolidation (reached bottom or approaching bottom) – this situation is the most unreliable and undesirable as investor trust and resources are minimal. Any project will face very high requirements. Therefore, the coefficient is the lowest at 0.1.

The second external component of the assessment is the demand for similar products in the market. Three coefficients can be identified:

- Trending (new segment) – a project and direction that aligns with popular technologies/trends in the market. For this situation, the coefficient is 1.

- Average – a project that is not a "wow" factor for the current situation. Therefore, the coefficient is 0.5.

- "Trend 2014" – a project that utilizes past trends, for example, an NFT marketplace in 2023. Under such conditions, a diminishing coefficient of 0.3 is introduced.

2.8. Stage 7: Mathematically modeling the framework

The framework model consists of three high-level tasks:

- Project evaluation – assessing all internal project characteristics. The maximum score is 100, and the minimum score is 0.

- Market evaluation – reflecting the current market situation and investor sentiment. The maximum coefficient is 1, and the minimum coefficient is 0.1.

- Demand evaluation for technology or direction – assessing whether the applied technology or mechanism is relevant in the current period. The maximum coefficient is 1, and the minimum coefficient is 0.3.

To determine the final score, the proposed calculation formula is as follows:

$$Final\ Score = Project\ Evaluation \times$$
$$\times Market\ Coefficient \times$$
$$\times Demand\ Coefficient.$$

To validate the adequacy of the model, the study analyzes several projects:

- Project A – It has high scores in the overall project evaluation, high demand for the technology, and an optimal market condition.

- Project B – It has high scores in the overall project evaluation, average demand for the technology, and optimal market conditions.

- Project C – It has low scores in the overall project evaluation, but the market is in optimal condition, although the applied technology is no longer trendy.

- Project D – It has low scores in the overall project evaluation, and the market is in a consolidation phase, while the applied technology is no longer trendy.

The scoring results are in the "Overall Score" column in Table 2.

Table 2. Comparative evaluation of cryptocurrency projects

Cases	Project	Market	Demand	Overall Score
Project A	90	1.0	1.0	90
Project B	90	0.7	1.0	63
Project C	20	1.0	0.5	10
Project D	20	0.1	0.3	0.6

2.9. Stage 8: Testing and validating the framework

The modeled approach needs to be tested and validated on real projects. The study considers two projects: Eywa and Portus. These are two cryptocurrency projects that require investment. Therefore, the paper must determine which of these two projects is more promising. The first is Eywa examination (Table 3).

Based on the updated coefficients provided, the market coefficient for the current stable market growth situation is 0.7, and the demand coefficient indicating high demand for the project is 1.

Calculating the final score for Eywa:

$$Final\ Score\ for\ Eywa =$$
$$= Project\ Evaluation \times Market\ Coefficient \times$$
$$\times Demand\ Coefficient.$$

$$Final\ Score\ for\ Eywa = 51.45 \cdot 0.7 \cdot 1 = 36.015.$$

Therefore, the final score for Eywa is approximately 36.015. This score reflects the project's evaluation, considering the market situation and demand for the project. Next, the study examines Portus (Table 4).

Based on the updated coefficients provided, the market coefficient for the current stable market growth situation is 0.7, and the demand coefficient indicating that the project utilizes past trends is 0.3.

Calculating the final score for Portus:

$$Final\ Score\ for\ Portus =$$
$$= Project\ Evaluation \cdot Market\ Coefficient \times$$
$$\times Demand\ Coefficient.$$

$$Final\ Score\ for\ Portus = 20.45 \cdot 0.7 \cdot 0.3 = 4.29.$$

Table 3. Evaluation of the crypto project Eywa based on the developed metrics

		EYWA	51.45	<Total score
Product	Development stage	Finished product		8
	Complexity	Technologically sophisticated/innovative		10
	Monetization	Allows the company to consistently earn, working business model, revenue	12.9	8
	Market Relevance	Super urgent and important issue in the segment/no competitors		8
Team	Web 2 Experience	Strong guys, with experience from medium/top/noname companies		5
	Crypto Experience	Crypto experience		8
	Advisors	Top advisers/partners on the topic of the project	14.4	7
	Partners	The presence of adversaries in the topic		7
Community	Number of followers	5,000 - 15,000		8
	ER	1-10%, India, CIS		4
	Twitter score	<10 points	5.55	2
	Region, website visitors	CIS, India, Asia		3
Token	Sell Pressure	>$500k		1
	Initial Marketcap	<$1M		9
	Inflation rate	10%		5
	FDV	$10M - $50M	12.3	6
	Token Distribution/Token Release Schedule	Long Cliff/Vesting		8
	Token Utility	Many mechanics for using and withdrawing a token from circulation		8
Investors	VC Funds level	Tier 2/3		4
	Money Raised	$2-5M		5
	Added investors value	Can provide listings Tier 2 + partnerships Tier 2	6.3	5
	Seed/Private prices	50-100% cheaper than the estimated price of IDO		0
Go-to-market strategy	Launchpads, Listings	There is a well-thought-out strategy for entering the market and scaling		5
	MM level and budget	Tier 2-3 MM, ~$1M	6.45	4
	KOLs	Medium budget		4

Therefore, the final score for Portus is approximately 4.29. This score reflects the project's evaluation, considering the market situation and demand for the project. Considering the two project evaluations, Eywa has a significantly higher score (approximately 36.015) than Portus (approximately 4.29). Based on these scores, it is recommended for the investor to invest in the project Eywa.

In evaluating early-stage cryptocurrency projects for managerial decision-making, the significance of a structured methodology cannot be overstated. The cryptocurrency and blockchain ecosystem have become a focal point of innovation, with many projects vying for atten-

tion and investment. These projects often represent uncharted territory, where traditional evaluation methods may fall short. However, the methodology outlined in this study provides a strategic framework to tackle these complexities.

Organizations and investors can confidently navigate the intricate landscape of early-stage crypto projects by leveraging a systematic approach that combines elements of analysis, expert evaluation, systematic review, mathematical modeling, and empirical research. This methodology empowers decision-makers to assess these ventures' viability, potential profitability, and associated risks using open, publicly available data. It allows for a comprehensive

Table 4. Evaluation of the crypto project Portus based on the developed metrics

		Portus	20.45	<Total score
Product	Development stage	Alpha/Beta	6.3	3
	Complexity	Basic product, there are many of them already on the crypto market		5
	Monetization	Pyramid or only due to the growth of the token		5
	Market Relevance	Already decided by others but relevant		5
Team	Web 2 Experience	Greens, although they know how to develop	1.4	1
	Crypto Experience	Low crypto experience		0
	Advisors	No or off-topic		1
	Partners	The presence of adversaries in the topic		4
Community	Number of followers	<5,000	3.45	2
	ER	1-10%		2
	Twitter score	<10 points		2
	Region, website visitors	CIS, India, Asia		3
Token	Sell Pressure	>$500k	4.8	2
	Initial Marketcap	>$3M		1
	Inflation rate	>15%		1
	FDV	$10M - $50M		3
	Token Distribution/Token Release Schedule	Short Cliffs /Vesting		2
	Token Utility	There are interesting mechanics		4
Investors	VC Funds level	Tier 4, No funds	3	1
	Money Raised	<$2M		3
	Added investors value	No added value, only $		2
	Seed/Private prices	>100% more expensive than the estimated price of IDO		2
Go-to-market strategy	Launchpads, Listings	Tier 4, No funds	1.5	1
	MM level and budget	Noname or themselves, <300k$		1
	KOLs	Low, no budget		1

evaluation and aligns with the imperative of sound project management practices.

The framework should also be designed to evolve and adapt continuously to the ever-changing dynamics of the market. It is essential to recognize that rapid developments, regulatory changes, and evolving investor sentiments characterize the cryptocurrency and blockchain industry. Therefore, the framework presented here is particularly suited for early-stage assessment, as it provides a solid foundation for making informed decisions when initial information is limited.

However, as projects progress and mature, the evaluation criteria and risk factors may evolve, necessitating ongoing refinement and adaptation of the framework. This adaptability ensures that the methodology remains relevant and effective in capturing the nuances of different phases of project development.

In summary, the framework for evaluating cryptocurrency projects is a dynamic tool that not only serves the early-stage assessment but also evolves alongside the industry, accommodating its changing landscape and requirements. This agility is vital for organizations and investors seeking to stay ahead in the cryptocurrency and blockchain market.

CONCLUSION

The study aimed to investigate methodologies that can be applied to managerial decision-making regarding the potential of crypto projects in their early stages of implementation. The primary methodologies currently used by fund project managers were examined and identified. It was determined that there is a need to develop an evaluation methodology that considers the peculiarities of the crypto industry.

As a result, a framework was created that includes crucial characteristics of crypto projects available in open sources, and numerical indicators were proposed for their evaluation. This simplifies the analysis process for project managers.

Thanks to this framework, greater transparency and trust in crypto projects are ensured from the investors' side. Furthermore, the use of this framework can provide increased transparency and trust toward crypto projects from investors and other stakeholders. In the future, this model can be adapted and refined considering new trends and changes in the crypto industry.

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