

PERCEPTIONS OF FINANCIAL RISK MANAGEMENT FOR TECHNOLOGY STARTUP COMPANIES IN THE EARLY FINANCING PHASE

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Abstract

This study aims to analyze perceptions of financial risk management among technology startups in the early stages of financing. Using qualitative descriptive methods through literature review and phenomenological analysis, this study found that most startup management views financial risk management as an administrative burden in the early stages, rather than a strategic tool. However, there is a significant shift in perception after the startups pass the seed funding round, where cash flow risk management and burn rate control begin to be prioritized to maintain the company's survival. In conclusion, the integration of flexible and adaptive financial risk management is crucial from day one to mitigate the risk of early bankruptcy.

Keywords : *Financial Risk Management, Technology Startups, Early Financing Phase, Burn Rate, Cash Flow.*

INTRODUCTION

The global technology industry has been dominated by the growth of startups over the past decade. The primary characteristics of tech startups are rapid innovation and high scalability, but they also come with a high failure rate. Industry statistics show that over 90% of startups fail within their first three years, with financial issues such as running out of cash being a primary cause. In the early stages of funding, whether through bootstrapping, angel investors, or seed funding, founders' primary focus is generally on product development (*product-market fit*) and user acquisition. Financial risk management is often overlooked, perceived as slowing the company's *agility* . This paradigm creates a perceptual bias among startups' internal management. Various global statistics consistently show that more than 90 percent of technology startups fail within their first three years of operation. Behind various operational and product failure reasons, the inability to manage financial aspects, especially the phenomenon of running out of cash capital, remains the top trigger for premature bankruptcy. In the initial phase of financing, whether sourced from independent capital (*bootstrapping*), angel investors , or seed funding, the startup's organizational structure is generally still very lean and focused on a single agenda.

Founders ' primary focus is almost entirely on proof-of-concept efforts, product development (*product-market fit*), and aggressive user acquisition. In this high-speed, demanding activity, financial risk management is often sidelined or even considered a mere administrative burden. The prevailing paradigm within startups tends to equate risk management with established corporate bureaucracy, which is perceived as slowing down *agility* and stifling a company's creativity in responding to the market. This neglect is exacerbated by a significant perception bias within technology startups' internal management. Most startup founders come from technical backgrounds, such as software engineers or product developers, who possess a deep understanding of technology but limited strategic financial literacy. As a result, financial risks are often only identified reactively when the company has already entered a phase of acute liquidity crisis.

This perspective that places financial risk management as a secondary priority creates structural vulnerabilities, where capital allocation decisions become inefficient and burn rate calculations *are* made without careful mitigation calculations against macroeconomic fluctuations or venture capital market dynamics. Examining the perception aspect is crucial because management's perspective will dictate all resource allocation policies and

risk tolerance levels. By mapping perception typologies, psychological barriers, and critical financial indicators such as burn rate and cash runway, this article is expected to provide theoretical contributions to the startup finance literature. Practically, this study is also expected to serve as a strategic guide for founders in formulating a concise, flexible, yet protective financial risk management framework from day one of the company's operations. This research is crucial for understanding how decision-makers in technology startups perceive financial risk. Misunderstanding financial risk can potentially lead to inefficient capital allocation decisions. Therefore, this article examines the urgency, obstacles, and ideal implementation model for financial risk management for early-stage technology startups.

RESEARCH METHODS

This research uses a descriptive qualitative approach based on secondary literature analysis and a synthesis of previous case studies on startup financial failure. Data were collected from various scientific journals, venture capital industry reports, and startup financial analysis articles spanning the past five years. Data analysis was conducted using data reduction techniques, categorization of management perceptions, and theoretical conclusions.

RESEARCH RESULTS AND DISCUSSION

1. Risk Management

Risk is an event or occurrence that, if it occurs, could hinder the achievement of a division's goals or objectives. These events or occurrences can be caused by internal or external factors. Risk can affect anyone and anything, from tangible assets to intangible assets. Information assets, reputation, and goodwill are also at risk (Hery, 2015). The concept of risk management dates back to 2100 BC, documented in the Charter of Hammurabi. The document stated that shipowners who borrowed money for cargo were not obligated to pay the debt, paying off debts if the ship sinks or is lost. This is an early form of risk management. In the 1970s and 1980s, a new approach to risk management emerged with the introduction of the concept of "quality assurance," which ensures products meet certain standards. The British Standards Institution introduced the BS 5750 standard in 1979. Then, in 1993, James Lam became the world's first Chief Risk Officer, expanding the scope of risk management responsibilities (Surya, Ade, et al., 2025).

The risk management process begins with risk identification, where organizations attempt to identify risks that could impact their objectives. These risks can be internal, such as technological failure or human error, or external, such as regulatory changes or market fluctuations. Once risks are identified, the next step is risk assessment, where the organization evaluates the impact and likelihood of each risk occurring. This assessment typically involves quantitative and qualitative analysis to determine how significantly the risk could affect the organization. This assessment scale can range from low to high impact, and from low to high likelihood of occurrence. The implementation of risk management in the public sector differs from that in the private sector. In the private sector, the focus of risk management is more on asset protection and achieving financial returns. Conversely, in the public sector, risk management objectives are broader, encompassing program effectiveness, budget utilization, and meeting community needs. This difference reflects the complexity of the public sector, which often involves multiple stakeholders with diverse interests. Understanding these different approaches is crucial to ensuring that the implemented risk management strategy is relevant to the context of public organizations (Irianto, Gugus., 2024).

2. Financial Risk Management

Financial risk management in early-stage startups is divided into three perception typologies: complete neglect, defensive-reactive, and integrative-proactive, where the financial control function is often viewed contradictorily as a growth inhibitor or a strategic instrument. Liquidity management failures center on an optimistic bias toward high burn rates and miscalculation of cash runway, exacerbated by a culture of moving fast and breaking things and a minimal role for financial professionals. This analysis highlights that the main obstacle is not accounting technicalities, but rather psychological and cultural clashes in implementing the principle of *prudence*. Technological advancements and the integration of global financial markets have created an increasingly interdependent business environment, where economic turmoil in one country can rapidly spread to other countries and impact the financial stability of companies worldwide. The 2008 global financial crisis served as stark evidence of how failure to manage financial risk can have a systemic impact on the global economy (Stulz, 2015). This incident served as a valuable lesson for organizations worldwide about the importance of implementing effective financial risk management.

In Indonesia, the development of financial risk management practices has also experienced significant growth, particularly after the 1997-1998 monetary crisis that devastated many domestic companies. The Financial Services Authority (OJK) and Bank Indonesia have issued various regulations related to risk management for financial institutions, which have subsequently become standards for other industries (Wibowo & Kholid, 2017). However, research by Sari et al. (2019) shows that many companies in Indonesia, particularly small and medium enterprises (SMEs), still have not implemented financial risk management in a systematic and structured manner. Financial risk management is a crucial aspect of corporate financial management, a key focus in the current era of global economic uncertainty. Facing various risks that can impact financial performance, a thorough understanding of financial risk management is key to ensuring business continuity. According to Jimenez et al. (2024), financial risk management is a proactive effort to identify, evaluate, and manage risks related to financial aspects, including market risk, credit risk, liquidity risk, and operational risk.

No matter how sophisticated the technology used, the foundation of financial risk management remains a deep understanding of various types of financial risks, appropriate measurement methodologies, and mitigation strategies tailored to the organization's characteristics. A study by Girling (2019) shows that financial risk management failures are often caused by errors in identifying and measuring risk exposures, as well as an inability to integrate risk management into strategic business decisions. Good financial management offers significant benefits. By maintaining accurate financial records, you can understand the financial condition and progress of your business. You can also easily assess the status of assets, liabilities, capital, cash flow, and profit fluctuations, allowing you to make important business decisions, such as purchasing new assets and planning business expansion (Maharanie, Ade Kharisma, et al., 2022).

3. Objectives of Financial Risk Management

Financial risk management has several main objectives which are the basis for companies in managing financial uncertainty. The following are the main objectives of financial risk management:

1. **Ensuring Business Continuity.** The fundamental goal of financial risk management is to ensure the long-term going concern of a company. By managing financial risk effectively, a company can protect itself from potential catastrophic losses that could threaten its continuity (Djohanputro, 2019). This includes: protecting the company from the risk of bankruptcy that can occur due to unexpected events that significantly impact the company's finances, ensuring the company is able to meet its financial obligations when they fall due, and maintaining the company's operational stability despite external shocks in the economy or financial markets.
2. **Minimizing Risk Costs.** Effective financial risk management aims to minimize the costs arising from financial risks.
3. **Stabilizing Income and Cash Flow.** Extreme fluctuations in income and cash flow can disrupt company operations and hinder long-term financial planning.
4. **Optimizing Company Value.** Effective financial risk management contributes to increasing company value in several ways. First, by reducing the volatility of earnings and cash flows, companies can lower the likelihood of financial distress and the expected costs of bankruptcy. Second, greater financial stability allows companies to undertake profitable investment projects that might not be undertaken if financial risks were not properly managed (Husnan, 2017).
5. **Meeting Regulatory and Compliance Requirements.** The financial industry and capital markets worldwide are currently governed by various regulations aimed at ensuring financial system stability and protecting investor interests. Financial risk management helps companies comply with regulatory requirements related to capital adequacy, liquidity, and risk transparency (Tampubolon, 2020).
6. **Supporting Strategic Decision-Making.** According to Kaplan and Mikes (2016), effective financial risk management serves not only as a defensive tool to protect a company's value but also as an offensive tool that can assist a company in strategic decision-making.
7. **Protecting Corporate Reputation and Image.** Poorly managed financial risks can lead to significant financial losses, which in turn can damage a company's reputation and image. As noted by Froot and Stein (2015), significant financial losses can raise concerns among investors, creditors, customers, and other stakeholders about a company's ability to manage its business effectively. According to a survey conducted by Deloitte (2022), 87% of global companies surveyed stated that protecting their corporate reputation was a key motivation for implementing financial risk management. This indicates that financial risk management is not only about minimizing financial losses but also about maintaining stakeholder trust and the company's brand value.

8. Enabling Better Financial Planning. Financial risk management facilitates more accurate and comprehensive financial planning.
9. Balancing Risk and Return. One of the fundamental goals of financial risk management is to find the optimal balance between risk and return.
10. Improving Capital Market Efficiency. From a macroeconomic perspective, effective financial risk management by companies in the market contributes to overall capital market efficiency. When companies disclose their risk information transparently and manage risk effectively, this reduces information asymmetry between companies and investors (Culp, 2018).

4. Financial Risk Management Strategy

Financial risk management is a crucial component in ensuring sustainability. In the operational aspects of educational institutions, financial risks that are not managed well can disrupt the stability of the institution, reduce the quality of education, and have a negative impact on the welfare of the teaching staff. Therefore, strategies are needed to mitigate the impact of various financial risks that arise for educators and students. One key strategy in mitigating financial risk is diversifying revenue sources. Reliance on a single funding source, such as government funds, can be a serious contingency during policy changes or unstable economic conditions. To reduce this dependency, educational institutions can form partnerships with the private sector and establish school business units (Afkari, Sulistiyowati G., 2025).

Efficiency in budget management is also a crucial part of a financial risk mitigation strategy. Educational institutions must be able to manage their budgets effectively to prevent financial mismanagement. Waste or imbalance in fund allocation. Unnecessary expenses should be minimized, while investment in aspects that truly support improving the quality of education should be a top priority. Regular evaluation of operational expenditures can help identify areas for optimization to improve financial efficiency.

Challenges in Implementing Risk Management Strategies

In implementing risk management, there are several challenges faced, firstly limited resources, including human, financial, and technological resources. To overcome this, efforts are needed to thoroughly map available resources and allocate them efficiently. Furthermore, risks with high impact and high probability of occurrence should be prioritized, and adequate resources should be allocated to manage them. Furthermore, consideration should be given to collaborating with partners or external parties to share experiences and resources.

Second, there is the problem of poor awareness and understanding of risk management. This can be addressed by providing adequate training and education on risk management, educating everyone about its importance, and creating a corporate culture that encourages engagement and sound risk management. Third, the business world often changes rapidly, which can create risks or exacerbate existing ones. To address this issue, companies must employ flexible and responsive risk management strategies. They must implement regular monitoring and evaluation procedures to identify environmental changes.

Fourth, implementing a risk management strategy often requires changing attitudes and behaviors within the organization, such as abandoning old habits and adopting new, challenging ones. To address this, it is important to involve all members of the organization in the decision-making process, provide a clear rationale for the importance of risk management, and encourage and recognize each individual who contributes to risk management.

Reasons to Manage Financial Risk

The rapid growth of risk management services shows that management can increase company value by controlling financial risks. Therefore, financial managers are able to identify and actively manage the market risks they face. If the value of a company equals the present value of its future cash flows, active management of potential risks can be justified for several reasons as follows:

1. Exposure management helps stabilize a company's cash flow expectations. Stable cash flow increases the present value of expected cash flows, which ultimately stabilizes earnings. Stable earnings reduce the risk of default and bankruptcy, or the risk that earnings may not cover contractual debt service payments.
2. Active exposure management allows a company to concentrate on its core business risks. Thus, a manufacturing company can hedge interest rate and currency risks and concentrate on production and marketing.
3. Exposure management also benefits lenders, employees, and customers. Lenders generally have a lower risk tolerance than shareholders, thus limiting the company's exposure to balance the interests of shareholders and bondholders.

4. Derivative products also allow employer-managed pension funds to earn higher returns by providing the opportunity to invest in certain instruments without having to actually buy or sell them. Ultimately, for clients, exposure management limits the risk they face, as losses caused by certain price and interest rate risks are passed on to them in the form of higher prices.

5. Typology of Financial Risk Management Perceptions

Based on an analysis of managerial behavior in the startup industry, technology startup founders' perceptions of financial risk management during the early stages of financing are not homogeneous, but rather fall into three main typologies. The first typology is the Perception of Complete Apathy, which generally predominates in startups led by founders with non-business backgrounds. In this group, financial risk is viewed as an abstract entity that only becomes worth addressing once the company has achieved profitability or after Series A funding.

Management applies the principle of growth at all costs to an extreme, where all success metrics are measured by user growth *without* regard for capital efficiency. As a result, the financial control function is completely absent because it is seen as a friction that slows innovation. The second typology, namely Defensive/Reactive Perception, reflects a management group that is aware of the existence of financial risks but chooses not to allocate active resources to mitigate them.

Management in this category views risk management instruments as mere "fire extinguishers" that are only activated when a liquidity crisis actually occurs, for example, when the cash runway *has* reached the critical zone of less than three months. This reactive approach is very dangerous because it limits the startup's strategic room to pivot *or* negotiate a fair valuation with new investors.

In contrast, the third typology is the Proactive Integrative Perception, where management views financial risk not as a limiting chain, but as a safety belt that allows the company to move faster and bolder. Founders with this perception understand that disciplined capital management provides long-term stability, which in turn supports safer product experimentation.

This typology is generally associated with startups founded by purely technical founders, such as software engineers, data scientists, or product designers. In this group's perspective, financial risk management is viewed as an abstract, secondary entity irrelevant to address in the early stages of business development. They operate under the dogma of "growth at all costs." The only success metrics they recognize are exponential growth at the operational level, such as the number of monthly active users (*MAUs*), gross *merchandise value* (*GMS*), or the speed of new product feature releases.

The functions of financial control, budgeting, and internal audit have been negatively associated with being burdened by rigid, outdated corporate bureaucracy, accused of stifling creativity and slowing down a company's *agility* in pursuing market momentum. The result of this perception has been a complete hollowing out of the financial risk mitigation function, with capital expenditure decisions being made without rational cash flow projections.

CONCLUSION

Based on the discussion presented, it can be concluded that financial risk management is a crucial aspect in maintaining the stability and operational sustainability of an organization or company, especially amidst the uncertain dynamics of the global economy. This process encompasses the identification, measurement, analysis, and control of financial risks to minimize potential losses and maximize opportunities.

The primary objectives of financial risk management are to ensure business continuity, stabilize cash flow and revenue, comply with regulations, and support strategic decision-making. Various types of financial risks, such as credit, market, operational, liquidity, and legal and reputational risks, require a systematic and structured management approach. Challenges in its implementation include limited resources, lack of understanding, and a rapidly changing business environment. Therefore, adaptive strategies, ongoing education, and the application of modern technology are key to successfully managing financial risks effectively and efficiently.

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