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Exploring Global Expansion for Crypto Startups: Frameworks for Risk and Challenge Management

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Abstract

This study addresses the risks and challenges faced by crypto startups in the process of global expansion, combining the blockchain ecology and born global theory to construct a systematic research framework. Semi-structured interviews and thematic analysis were used to conduct in-depth interviews with eight industry experts from crypto wallets, exchanges, DeFi project, and gaming project. Here are the research findings:

1. Expansion drivers: rapid user scale acquisition, pursuing international listing opportunities & avoiding unfavorable regulation;
2. Key challenges: fragmented regulatory environment, high customer acquisition costs, security and technology risks, cross-cultural collaboration challenges;
3. Response strategies: compliance arbitrage and trust augmentation by improving operational transparency and auditing, building local communities and partner networks, registering in friendly jurisdictions, and continuously optimizing technology and security systems.

This study suggests that crypto startups build flexible risk management systems based on the regulatory and user characteristics of each target market, and take long-term sustainability into account while pursuing short-term growth; it also calls for future research to incorporate larger samples, quantitative methods, and longitudinal tracking to validate the effectiveness of different strategies.

Keywords: *Crypto startup, Web 3 startup, blockchain, crypto project, global expansion, globalization, crypto industry, risks and challenges, crypto risk, risk management, born global.*

Abbreviations

Abbreviation	Full Meaning
AML	Anti-Money Laundering
BD	Business Development
DeFi	Decentralized Finance
DApp	Decentralized Application
ICO	Initial Coin Offering
KOL	Key Opinion Leader
KYC	Know Your Customer
LP	Limited Partner
NFT	Non-Fungible Token
OTC	Over-The-Counter (Trading)
POW	Proof of Work
TON	Telegram Open Network

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1. Introduction

1.1 Background and Purpose

The crypto industry has emerged as one of the most dynamic and rapidly evolving sectors in the global economy. Since the birth of Bitcoin, blockchain technology has evolved from a payment tool to an underlying infrastructure that supports decentralized applications (Investopedia, 2025). This study focuses on how crypto startups can achieve sustainable user scale and risk management in a volatile global environment. Blockchain technology has enabled the development of a decentralized financial ecosystem, transforming the way people transact (Shukla *et al.*, 2023). Cryptocurrencies have gained significant mainstream attention, with major financial institutions, governments, and investors recognizing their potential. The increasing adoption of digital currencies, coupled with advancements in blockchain technology, has driven exponential industry growth. Notably, the value of Bitcoin has peaked at over \$100,000 USD (Reuters, 2024), reflecting both the increasing trust in blockchain technology and the rising popularity of cryptocurrencies as an alternative financial asset.

Unlike traditional industries, where companies often expand within a domestic market before scaling internationally, crypto startups typically target the global market from their inception. This is due to the inherently borderless nature of blockchain technology, which enables seamless cross-border transactions and decentralized user networks. As a result, crypto startups have unprecedented opportunities to grow their user base globally. However, these opportunities come with significant risks and challenges that require careful strategic planning and execution. While some literature has explored the internationalization paths of traditional startups, there is a lack of systematic research on the unique regulatory and operational challenges of crypto startups that are born globally.

Based on the discussions with several industrial experts and previous experiences working in the crypto industry, the researcher found there are several perceived risks and challenges. One of the most pressing challenges is the fragmented and inconsistent regulatory landscape across different countries. While some nations, such as Switzerland and Singapore, have embraced cryptocurrencies and established clear regulatory frameworks to foster industry growth, others have imposed strict restrictions or outright bans on crypto-related activities. This regulatory uncertainty poses a significant risk for startups seeking to expand into new markets, as they must navigate complex legal requirements while maintaining compliance with local laws.

Beyond regulatory concerns, crypto startups also face operational and cultural challenges when entering new markets. User adoption rates and expectations vary significantly across different regions due to economic, technological, and cultural factors. For instance, in developed markets with well-established financial systems, cryptocurrencies may primarily serve as an investment vehicle. Conversely, in emerging markets, they are often used as a means of financial inclusion, helping individuals access digital payments and protect their wealth against inflation. Adapting to these diverse user needs requires a deep understanding of market-specific factors and the implementation of tailored engagement strategies.

Additionally, scalability and security remain crucial concerns for crypto startups. As their user base expands globally, ensuring the security of digital assets and maintaining operational efficiency become increasingly complex. The industry has witnessed several high-profile security breaches and system failures, which have led to financial losses and a decline in user

trust. Implementing robust risk management measures is essential for startups to sustain growth while safeguarding their reputation.

The research has identified several potential challenges that crypto startups may encounter during their global expansion. However, the study seeks to gain a deeper understanding of how these risks and challenges specifically hinder their international growth and whether there are additional risks and challenges that have been overlooked but play a crucial role in shaping their expansion efforts. By investigating the strategies employed by startups to navigate regulatory, operational, and other barriers, this research is trying to provide valuable insights for emerging crypto startups looking to scale globally.

1.2 Research Question

This study focuses on the central research question:

How do crypto startups manage risks and challenges during global expansion?

To address this question, the study will pursue the following three research objectives:

1. Identify the primary risks and challenges crypto startups face when expanding their user base globally.
2. Explore the strategies these startups adopt to address regulatory, operational, and other possible barriers, as well as other significant but less commonly discussed factors.
3. Provide actionable insights for emerging crypto startups aiming to expand their user globally.

By analyzing multiple factors influencing global expansion efforts, this study seeks to contribute to both academic knowledge and industry practice. It will examine the real-world experiences of crypto startups, drawing on case studies and expert interviews to uncover effective approaches to risk management and market entry.

1.3 Significance of the Study

This research is significant for both academics and industry practitioners. Academically, it contributes to the fields of entrepreneurship and international business by exploring global expansion strategies in an emerging industry with unique challenges. While traditional industries have well-documented internationalization models, crypto startups face additional hurdles due to regulatory uncertainty and decentralized operational structures.

For industry practitioners, including entrepreneurs and investors, this study provides practical insights into risk management strategies. By examining how startups navigate risks and challenges, the findings will offer actionable recommendations to support successful global expansion efforts.

1.4 Disposition of the Study

This thesis is divided into six main sections as follows.

Part	Subject	Description
Chapter 1	Introduction	Introducing the background of the study, formulating research questions, and provide the significance and the disposition of the study.
Chapter 2	Literature Review	Providing a comprehensive literature review of the theory of born global and crypto entrepreneurship, laying the theoretical foundation for this study.
Chapter 3	Methodology	Presenting the qualitative research design, including the development of the interview protocol and the selection of participants.
Chapter 4	Result	Presenting the empirical findings by thematically analyzing the semi-structured interviews to reveal key regulatory, technological, and operational risk areas as well as practitioners' mitigation strategies.
Chapter 5	Analysis and Discussion	Summarizing these insights into theoretical contributions and practical recommendations, discusses limitations, and suggests avenues for further research.
Chapter 6	Conclusion	Summarizing the final conclusions of the entire study.

Table 1 - Disposition of the thesis

2. Literature Review

This chapter begins by defining crypto startups and outlining their core characteristics, followed by a review of internationalization theory through the lens of Uppsala theory and “born global”. The chapter will synthesize existing research to explore the several major risks and challenges faced by crypto startups as they expand globally, and ultimately identify key gaps in the literature that this study will address.

2.1 Definition and Core Characteristics of Crypto Startups

2.1.1 Crypto Startups

According to Giardino et al.(2014), A startup is a small company exploring a new business opportunity, working on a problem where the solution is not well known and the market is highly volatile. Startups have promising ideas, organizational flexibility, a willingness to take risks, and a desire to grow quickly(Weiblen & Chesbrough, 2015). Startups typically rely on founders, angel investors, or venture capitalists for funding in the early stages of operation. New firms are the product of the judgmental transformation of new ideas into profits (Spender, 2014).

There were no any specific definition about crypto startups is widely used, but based on some relevant articles, the crypto startups are new startups built on blockchain technology with decentralized, distributed ledger as the core architecture and cryptocurrencies or tokens as the medium of value exchange(Forbes Tech Council, 2021; Cointelegraph, 2020). The key differences between them and traditional startups are the technology base, organizational

structure, and financing methods. Traditional startups typically rely on centralized servers and databases to store data, and obtain funding through equity or debt financing (Melville, Kraemer, & Gurbaxani, 2004; Gompers & Lerner, 2001). Crypto startups, on the other hand, rely on blockchain technology and use a decentralized architecture where data is stored in a distributed network with no single point of control or failure. In addition, they raise capital through new financing methods such as initial token offerings (ICOs) and decentralized finance (DeFi) platforms, rather than traditional equity financing routes (Tönnissen et al., 2020). These companies are also focusing more on network effects and community-driven value creation in their business models, with token incentives to promote user engagement and ecosystem expansion (Tönnissen et al., 2020).

Traditional startups often operate with limited resources and need to overcome the disadvantages of new and small-scale businesses through Open Innovation (Spender et al., 2017). In contrast, crypto ecosystem startups not only achieve decentralization in their technical architecture, but also realize user incentives and community co-construction through token economy in their business model (Tapscott & Tapscott, 2016), thus demonstrating unique competitive advantages in resource acquisition and market expansion.

The rise of crypto startups stems from the development and evolution of cryptocurrencies and blockchain technology. In 2009, Bitcoin, as a representative of the first-generation blockchain technology, opened a new era of decentralized digital currency. During this period, blockchain technology mainly focused on the development and application of digital currencies, the so-called Blockchain 1.0 era. With the continuous progress of technology, the emergence of Ether in 2014 marked the entry of blockchain technology into the 2.0 era, which not only supports digital currencies, but also introduces the function of smart contracts, which provides a broader space for the development of applications in different industries. Nowadays, blockchain 3.0 is on the rise, and its application scope goes beyond the monetary field to cover a wide range of industries such as finance, healthcare, supply chain, etc., showing more complex and wider application scenarios (Swan, 2015). It is against this backdrop of technological evolution that a number of startups with unique business models have emerged, taking full advantage of blockchain technology to explore new business opportunities and ways of creating value.

2.1.2 Crypto Startups and Web3 Startups

Web3 startups are closely related to crypto startups, but not identical. web3 refers to the next generation of the internet, with an emphasis on decentralization, user ownership, and blockchain integration. Web3 startups are focused on creating decentralized apps (Dapps) and platforms that leverage blockchain technology to give users greater control over their data and digital interactions (Vishwakarma, 2025). Crypto startups, on the other hand, are more focused on crypto-related products and services, such as developing new digital currencies, crypto exchanges, or payment solutions (Startupbos, 2023). While they operate within the broader Web3 ecosystem, their primary focus is on financial applications of blockchain technology. In summary, while all crypto startups can be considered part of the Web3 space because they use blockchain technology, not all Web3 startups focus exclusively on cryptocurrencies. In addition to crypto-related businesses, Web3 covers a broader range of decentralized technologies and applications. This article will also include Web3 startups as one of the key search terms while exploring the risks and challenges that crypto startups may encounter, as both types of startups are based on blockchain technology and have many

similarities. In addition, Web3, as a broader and more well known area of research, could lead to more highly relevant and valuable information for this study.

2.1.3 Crypto Startups and Crypto Projects

There is a close relationship between crypto startups and crypto projects. Notably, a crypto startup may operate several different types of crypto projects at the same time to explore diversified business models and market opportunities. However, the anonymity of crypto projects makes it difficult to verify the proportion of these startups operating multiple projects. In order to minimize research bias, this study will focus on startups that focus on similar crypto projects and try to avoid the impact of data uncertainty due to anonymity on the results of the study.

When it comes to crypto projects, the entire crypto ecosystem needs to be looked at carefully, as it has evolved from a niche market in 2009 to a full-fledged global financial system. Understanding the core components of the crypto ecosystem is an important prerequisite to begin researching crypto projects. According to an article by Archax Academic, the crypto ecosystem consists of key elements such as cryptocurrencies, digital securities, blockchain networks, exchanges, decentralized finance (DeFi), escrow and wallet solutions. Of these cryptocurrencies, cryptocurrencies can be subdivided into many different kinds of cryptocurrency types, each with unique characteristics and uses, varying technologies and goals, a few common types of cryptocurrencies include, payment cryptocurrencies (e.g., Bitcoin), stablecoins, gaming cryptocurrencies, and non-fungible tokens, to name a few (Cryptodose, 2023). These different types of projects rely on each other, complement each other and work together to form a complex crypto ecosystem and contribute to its continuous development.

According to the Binance Academy(2023, 2024), here are some different types or categories of crypto projects based on their primary use cases:

Crypto Project	Definiton
Crypto wallet	A crypto wallet is a tool that allows users to interact with blockchain networks to manage their cryptocurrencies and other digital assets. Crypto wallet keeps track of how much cryptocurrency their users have and lets them send and receive digital assets.
Exchange	An exchange is a platform for buying and selling cryptocurrencies. There are two types of exchanges, centralized exchanges(CEX) and decentralized exchanges(DEX) - a CEX is company-managed, holding users' funds and executing trades off-chain for convenience but with counterparty risk, while a DEX enables peer-to-peer trading on-chain via smart contracts, giving users full control but requiring more technical knowledge.
NFT	An Non-Fungible Token (NFT) is a cryptographic token hosted on a blockchain and it can be used to represent a digital asset. The non-fungibility of NFTs defines them as digital assets that represent ownership of one-of-a-kind items such as artwork, video game items, trading cards, virtual real estate, and other digital goods.
Cryptocurrencies	Cryptocurrencies are digital currencies secured by cryptography. They are powered by blockchain technology, allowing users to send and receive assets via a decentralized, peer-to-peer (P2P) network. Bitcoin, ETH, BNB, USDT, and SOL are some examples of the top cryptocurrencies by market capitalization.
Defi	Decentralized finance(DeFi) refers to financial applications built on blockchain networks that aim to provide open, permissionless, and trustless alternatives to traditional financial services. These projects typically offer features such as lending and borrowing, decentralized exchanges, and yield farming.
Crypto gaming	It is also known as GameFi, it refers to the fusion of cryptocurrency and gaming, where digital assets are incorporated into the game experience. These digital assets can include in-game items, characters, and virtual currencies.

Table 2 - Definitions of different crypto projects

2.2 Major Globalization Theory : Born Global

The internationalization process of firms has been extensively studied by many authors in recent decades, and one of the most important findings is the Uppsala model of internationalization (Johanson & Vahlne, 1977), which conveys, among other concepts, the idea that firms need to progressively internationalize through a series of of different stages of development to achieve internationalization. In recent years, realizing that traditional methods of globalization for technology startups are too time-consuming, costly, and increase stakeholder risk (Bailetti, 2012), more and more startups are opting for and adopting a global market perspective from the start, skipping some of the stages of the traditional internationalization process (Knight and Cavusgil, 2004).

For traditional start-ups, the earlier they globalize, the greater their ability to take advantage of growth opportunities on a global scale (Bailetti, 2012). As it can be seen, global expansion is a beneficial option for traditional startups but a corollary for crypto startups. Because they are based on decentralized blockchain technology, crypto startups are inherently global, which is closely related to the concept of “born global” developed by Oliva et al.(2022). In

their study, they mentioned that the main characteristic of born global companies is that they are able to overcome initial barriers to entering foreign markets without first establishing a strong position in their home market. Most crypto startups apply this strategy to their business, and instead of focusing on one country and then expanding to others, they target the global crypto market from the start and try to gain access to as many users as possible.

2.3 Major Risks and Challenges in Global Expansion

Enterprises face multiple risks in the process of globalization(Oliva, 2022), and these risks may be even more pronounced, especially for start-ups that are born global. First, when expanding internationally, firms need to choose their target markets and entry modes carefully, allocate resources wisely, and develop strategies to adapt to differences in the political, legal, economic, and socio-cultural environments of the new markets. External barriers may include political, legal, governmental, economic, procedural, foreign exchange, and socio-cultural factors, while internal barriers involve information, management, finance, and marketing (Roy et al., 2016).

For born global startups, resource constraints and lack of international experience can have an impact on their internationalization process (Knight & Cavusgil, 2004). In addition, the degree of formal institutional development in a firm's home country affects its internationalization capabilities, and institutional deficiencies and infrastructure bottlenecks may increase operating costs and reduce internationalization incentives (Chen et al., 2018). In terms of managerial capabilities, lack of organizational, human, and financial resources, as well as insufficient managerial skills, may prevent firms from launching or expanding overseas operations (Leonidou, 2000).

These risks are particularly salient when exploring crypto startups. According to an industry research article, interviews with entrepreneurs in the blockchain industry reveal the multiple challenges faced by startups in the sector (Perin, 2024):

Rapidly changing market conditions: The Web3 and blockchain space is growing rapidly, with fast technology iterations and unpredictable market trends. Startups need to adapt to the emergence of new technologies, regulations, and emerging competitors in a short period of time, which puts extreme demands on their resilience and speed of strategic adjustment.

Regulatory uncertainty: Regulatory policies on blockchain and cryptocurrencies vary widely among countries around the world and are in the process of continuous adjustment and improvement. Startups may face policy compliance risks, such as data privacy protection and anti-money laundering regulations.

Uncertainty and complexity of technology development: Blockchain technology is still evolving and improving, with new consensus mechanisms, cryptographic algorithms and extended solutions emerging. Meanwhile, the complexity of blockchain technology puts high demands on development and maintenance teams. Startups face the challenge of technology selection, which may lead to system performance bottlenecks or security vulnerabilities in case of improper selection.

Limited Resources: Startups are usually limited in terms of capital, talent and technical resources. This makes them often feel overwhelmed in the face of intense R&D demands and market expansion.

Market Volatility and User Acceptance: The crypto market is characterized by extremely volatile price fluctuations and is subject to multiple influences from global policies, investor sentiment and macroeconomic factors. This volatility not only affects startups' ability to raise capital, but may also have an impact on their business model and user growth. Meanwhile, Web3 products and services may be more complicated for ordinary users, with high user education costs and uneven market awareness and acceptance of blockchain technology, affecting the promotion and popularization of products.

Security Issues: Security is always a sword hanging over the head of blockchain enterprises, hacker attacks, loophole exploitation and other security incidents are frequent, and once they occur, they may bring devastating blows to enterprises.

Competitive pressure and talent shortage: Competition in the field of Web3 is fierce, not only the layout of large technology companies, but also the influx of many startups. Meanwhile, blockchain development talents are in short supply, and recruiting and retaining key talents has become a key challenge for business development.

Inadequate infrastructure and business model sustainability: The current blockchain infrastructure is still deficient in scalability, interoperability and performance, making it more difficult for enterprises to integrate resources and build ecosystems. Meanwhile, many Web3 startups rely on speculative income or short-term market opportunities at the initial stage and lack a sustainable business model. As the market matures and competition intensifies, it is difficult for this model to support the long-term development of enterprises.

In addition to this, an article in CoinsBench (2024) mentions energy consumption, intellectual property issues and access to finance as challenges that Web3 startups may encounter. Another article on the sector mentions community engagement, with the author noting that building and maintaining a strong and active community around a decentralized product is key to its success or failure. That's because Web3 startups need to understand how to attract new users, but also how to keep them interested and then stay and remain engaged (Medium, 2024). More other studies mention product scalability issues and interoperability challenges (Top software companies, 2023; Kaleido, 2023).

Crypto startups face multiple risks such as regulatory policy uncertainty, market volatility, and technological challenges as they expand globally. Regulatory policies on cryptocurrencies vary from country to country, and this uncertainty may expose businesses to legal risks and even affect normal operations. At the same time, the complexity of blockchain and cryptocurrency technologies requires startups to devote significant resources to understanding and implementing them, which can be a huge challenge for companies with limited resources. Therefore, a deep understanding of and proactive response to these risks is critical to the globalization success of crypto startups.

2.4 Empirical Review

Empirical research on crypto startups remains scarce, which poses a challenge to understanding how these companies manage risks and challenges during global expansion. This study therefore draws on the most relevant studies on Web3 startups and digital globalization, which, although broader in scope, provide valuable insights into similar technological and operational challenges faced by crypto startups. Previous research on digital globalization and blockchain-based businesses has primarily used qualitative methods (e.g., semi-structured interviews and case studies) to explore how organizations are coping with complex, rapidly changing environments (Nambisan & Luo, 2022).

These studies consistently show that startups operating in decentralized environments often rely on iterative decision-making processes and decentralized governance models to adapt to regulatory uncertainty and market volatility. For example, empirical evidence suggests that Web3 startups actively participate in continuous risk management through flexible strategic planning, although this approach sometimes leads to inefficiencies in long-term planning (Périn, 2024). These findings emphasize the importance of institutional adaptability and proactive regulatory foresight, especially in the context of heightened digital and cross-border risks.

However, a key limitation of the existing literature is their insufficient focus on crypto startups. Many studies categorize Web3 startups more broadly without distinguishing the unique challenges associated with token-based funding models, heightened financial compliance issues, and increased scrutiny by global regulators specific to the crypto ecosystem. This gap is significant because crypto startups not only have to deal with the standard challenges of digital globalization, but also face additional financial volatility and legal uncertainty.

To bridge these gaps, this study employs a qualitative methodology and conducts semi-structured interviews with ten industry professionals with direct experience in crypto startups. Through these interviews, this study aims to gain rich contextual insights into how crypto startups manage risk during international expansion. Specifically, this study will examine strategies related to regulatory adaptation, financial risk mitigation, and resilient operational frameworks developed in response to market instability. By comparing these findings to those of the broader Web3 study, this research will highlight commonalities and notable differences in risk management practices between Web3 startups in general and crypto startups.

Ultimately, this empirical study not only synthesizes existing evidence in related fields, but also lays the groundwork for understanding the unique challenges faced by crypto startups as they globalize. The qualitative insights from this study will contribute to the limited empirical research in the field and point the way for future research.

3. Methodology

3.1 Research Design

This study utilizes a qualitative research design to explore how crypto startups manage risks and challenges as they expand their global user base. Qualitative research is a method of exploring complex social phenomena through the collection and analysis of non-numerical data (e.g., interviews, observations, and textual materials). Unlike quantitative research, which focuses on measuring variables and identifying statistical relationships, qualitative research seeks to understand participants' experiences, perspectives, and contextual factors that influence particular phenomena (Creswell & Poth, 2018). A qualitative approach was chosen because it provides insights into context-specific challenges, strategic decisions, and industry dynamics that cannot be easily quantified through surveys or numerical data. Qualitative research is also highly context-dependent, allowing for a deeper exploration of how external factors such as culture affect individuals and organizations (Merriam & Tisdell, 2016). The global expansion of crypto startups also receives a variety of different external factors, making the use of this research method particularly appropriate for this study.

Quantitative research methods are appropriate when the problem is known, clear and unambiguous (Hammarberg, Kirkman, & de Lacey, 2016). However, the present research question is quite new and unclear, and it may be influenced by a lot of uncertain factors.

In contrast, qualitative methods are used to answer questions about experiences, meanings, and perspectives, usually from the participant's point of view (Hammarberg, Kirkman, & de Lacey, 2016). Therefore, the qualitative method will be the more appropriate research method for the current study.

This study employs an inductive approach, which means that rather than testing pre-defined hypotheses, it seeks to distill research findings from raw data (Thomas, 2003). Given the complexity of the regulatory framework, operational strategies, and risks of market expansion in the crypto space, qualitative research provides a flexible and iterative way to explore these issues.

This study also utilized a semi-structured interview methodology to strike a balance between structure and flexibility. A pre-produced interview guide ensured that key themes were covered while allowing interviewees the freedom to articulate their unique perspectives and experiences. This approach is particularly suited to exploratory research in emerging industries where perspectives and strategies are diverse and constantly evolving and changing.

3.2 Data Collection

3.2.1 Semi-structured Interviews

The research will adopt the semi structured interview as the primary approach to gather data.

Semi-structured interviews are one of the few most common methods of data collection in qualitative research. While other data collection methods certainly have their proper place in qualitative research, the main advantage of semi-structured interviews is that they allow the interviews to be focused while still giving the investigator the autonomy to explore relevant ideas that may have emerged during the course of the interviews, which can further enhance the understanding of the problems that crypto startups may encounter in their global expansion (Adeoye-Olatunde & Olenik, 2021). According to Bell, Harley and Bryman (2022), the semi structured interview also provides the flexibility and depth to delve deeper into individual perspectives while maintaining a consistent structure to gain valuable insights.

In order to gain a comprehensive understanding of how crypto startups are managing risks and challenges as they expand globally, this study utilizes a purposive sampling methodology (Campbell et al., 2020). This method was chosen to identify individuals with first-hand experience in dealing with the complexities of international market entry, regulatory compliance, and user acquisition. Due to the highly dynamic and fragmented nature of the crypto industry, gathering insights from key decision makers and industry experts was critical to understanding the research questions.

3.2.2 Selection of Participants

In selecting potential respondents, the researcher purposely sought out professionals from different types of crypto projects in order to gain a more comprehensive understanding of the industry. Attendees come from four main categories, each offering unique perspective insights into different aspects of global expansion.

The first group includes executives such as CEOs, COOs, and co-founders providing holistic perspectives on strategic decision-making and long-term growth planning. Their insights are critical to understanding how startups assess market opportunities, mitigate risk, and structure operations to accommodate global expansion.

The second group consisted of marketing and growth experts, including chief marketing officers and a marketing specialist. These professionals provide detailed knowledge about user acquisition strategies, branding, and community engagement, all of which are key to building a strong presence in new markets.

The third category includes business development and an investment manager, who assess the scalability and financial viability of crypto startups. Their perspectives are valuable in understanding how startups secure strategic partnerships, negotiate exchange listings, and attract funding from investors who prioritize companies with strong international growth potential.

Finally, the study also features one industry researcher who provides a broader, macro view of the crypto ecosystem. As individuals who closely follow market trends, regulatory developments, and emerging technologies, the researcher provides background information on how external factors affect startup success. His insights also emphasize the role of media exposure and reputation management in shaping public perception.

The diversity of participants allows us to gain a multi-dimensional understanding of how startups in the space are coping with uncertainty and capitalizing on opportunities for international expansion. The following table summarizes the list of interviewees.

Number	Type of Service	Interviewer's Position	Interview Duration	Business Profile	Type of Interview
1	Crypto Wallet	CEO	25 min	Provide three kinds of wallets	Online
2	//	Marketing and growth specialist	40 min	A freelancer to provide marketing and growth strategy	Online
3	GameFi	BD manager	35 min	A chain-wide game that uses a virtualized POW mechanism to distribute assets	Online
4	DeFi	Researcher	25 min	DeFi researcher and writer	Online
5	Gaming	Cofounder	50 min	Provide games and user data analysis service	Online
6	Media company	Risk Assessment & Investment Manager	55 min	Assessing project risks and development potential within the media company	Online
7	Mange asset	COO	35 min	Managing assets with stablecoins	Online
8	Crypto Wallet	CMO	25 min	Self-custodial wallet	Online

Table 3 : List of the interviewers

3.2.3 Rationale for the Sampling Strategy

The purposive sampling method was chosen because it allows for the selection of informative cases that can provide insights into the research questions. Unlike random sampling, which

aims at representativeness, purposive sampling ensures that each participant has directly relevant expertise and experience.

In addition, the study utilizes snowball sampling techniques, whereby initial respondents recommend other potential participants. This is particularly useful for reaching top executives and industry experts who may not be readily accessible through traditional means. Two of the interviewees in this study were contacted and offered interviews in this way.

The rationale for choosing a mix of executives, strategists and market researchers was to ensure a comprehensive understanding of how startups are addressing global expansion challenges from multiple perspectives:

- Strategic Decision Making (CEO, COO, Co-Founder) - How startups plan their global market entry and risk management strategies.
- Marketing and User Growth (CMOs, Marketing Specialists) - How startups acquire and retain users in different markets.
- Business Partnerships (BD manager, Industry Researchers) - How startups deal with legal complexities and get funding for expansion.

It is worth noting that during the course of this study, the researcher himself attempted to interview policymakers in the countries in question, as they are the people most familiar with the policymaking process and the impact of policy, but was unsuccessful. This influenced this study to explore more thoroughly the risks and challenges brought about by crypto startups in the process of international expansion.

3.2.4 Interview Process and Etiquette

Several interviewees come from the researcher's connection in the work field as I worked in the crypto industry for several months. The rest of them come from LinkedIn, the researcher sent out around 100 interview invitations and finally landed 4 interviews from this channel. I also tried to email several companies but didn't get any reply.

All interviews were conducted remotely via Google Meet, ensuring that the interviews could be conducted regardless of the participants' location. However, this was also due to the fact that crypto industry workers are spread across the globe, making face-to-face interviews a very challenging task. Each interview lasted between 35 and 60 minutes, allowing enough time for in-depth discussion of key issues while maintaining efficiency.

This study used a semi-structured interview format that balanced a structured guide with an open-ended exploration of insights. Random follow-up questions corresponding to the respondent's answers during the interview will also be used to obtain more in-depth and valuable responses. The interview guide (see Appendix 1) included the four key topic areas: global expansion strategies, regulatory and compliance challenges, market-specific risks and startup response strategies.

To ensure the accuracy and integrity of the data, all interviews were audio-recorded and transcribed into text for later thematic analysis. In addition, the majority of the interviews were conducted in English to minimize potential bias in the translation process. However, a small number of interviews (4) were completed in Chinese during this process, as interviewees indicated that they were more comfortable speaking in their native language. The researcher also tried to avoid any possible inaccuracies in the translation of information through multiple confirmations during the process of translating from Chinese to English. In

addition, all interviews were kept anonymous to encourage in-depth discussions and to protect the privacy of the interviewees.

In addition, follow-up questions were asked as necessary to clarify answers or explore emerging themes. This flexible approach enabled participants to provide rich, detailed accounts of their experiences.

3.3 Data Analysis

Data analysis in qualitative research is a key process that involves the systematic examination of interview data to identify patterns, relationships and key insights. Unlike quantitative research that relies on numerical data and statistical tests, qualitative research focuses on interpreting meanings, narratives, and contextual factors to gain insights into a given phenomenon. Since this study aims to understand how crypto startups manage risks and challenges during the expansion of users globally, a structured approach is required to analyze participant responses to ensure the reliability and consistency of the findings.

Given the exploratory nature of this study and the semi-structured interview format, the analysis process required a methodology that captured the richness and complexity of participants' perspectives. Thematic analysis was chosen as the primary method of data analysis as it allowed for the identification of recurring themes and the categorization of qualitative data in a systematic manner. This approach ensured that key insights surfaced directly from the data rather than being constrained by preconceived theoretical frameworks.

3.3.1 Thematic Analysis

Thematic analysis is a widely used qualitative research methodology for identifying, analyzing and reporting patterns (or themes) in data (Clarke & Braun, 2017). TA is characterized by its flexibility - not just theoretical flexibility, but also flexibility in terms of research questions, sample size and composition, data collection methods, and meaning-generation methods. TA can be used to identify patterns within and across data related to participants' lived experiences, perspectives and viewpoints, and behaviors and practices (Clarke & Braun, 2017). It provides a flexible and structured way of organizing and interpreting qualitative data, which is particularly useful for studies such as this one, where the different perspectives of industry experts need to be synthesized into meaningful insights.

This study follows Braun and Clarke's (2006) six-step framework for thematic analysis, ensuring a rigorous and transparent approach to data interpretation.

The first step of thematic analysis was to familiarize oneself with the data, which included transcribing, reading and rereading the interview transcripts to fully understand the responses. At this stage, initial observations were recorded to capture emerging ideas and patterns.

The second step was to generate initial codes in which specific words, phrases, or ideas from the transcripts were systematically labeled to create structured data sets. These codes are assigned to text segments containing meaningful insights related to key research themes, such as regulatory adaptation, user acquisition strategies, and market entry risks.

The third step was to search for themes and categorize similar codes into broader categories to form initial themes. This process helps organize the data into meaningful clusters that reflect the core challenges faced by crypto startups.

The fourth step was to review the themes, refine the initial themes and assess their coherence. At this stage, the themes are checked against the original transcripts to ensure they accurately capture the experiences and perspectives of the participants. Any redundant or overlapping themes are merged, while sub-themes are created to provide more detailed insights where necessary.

The fifth step was to identify and name themes, clearly defining each theme to ensure consistency of interpretation. At this stage, illustrative quotes from participants were selected to support each theme and to help contextualize the findings with real-world examples.

Finally, the sixth step is to create a report that synthesizes the themes into a coherent narrative that addresses the research questions. This step involves linking the research findings to existing literature and drawing meaningful conclusions about how crypto startups can address the risks and challenges of global expansion.

Through the use of thematic analysis, this study ensures a structured yet flexible approach to data interpretation, allowing for depth and breadth of understanding of how startups in the cryptocurrency space are coping with the complexities of international growth. The following figure presents the whole process to conduct a thematic analysis.

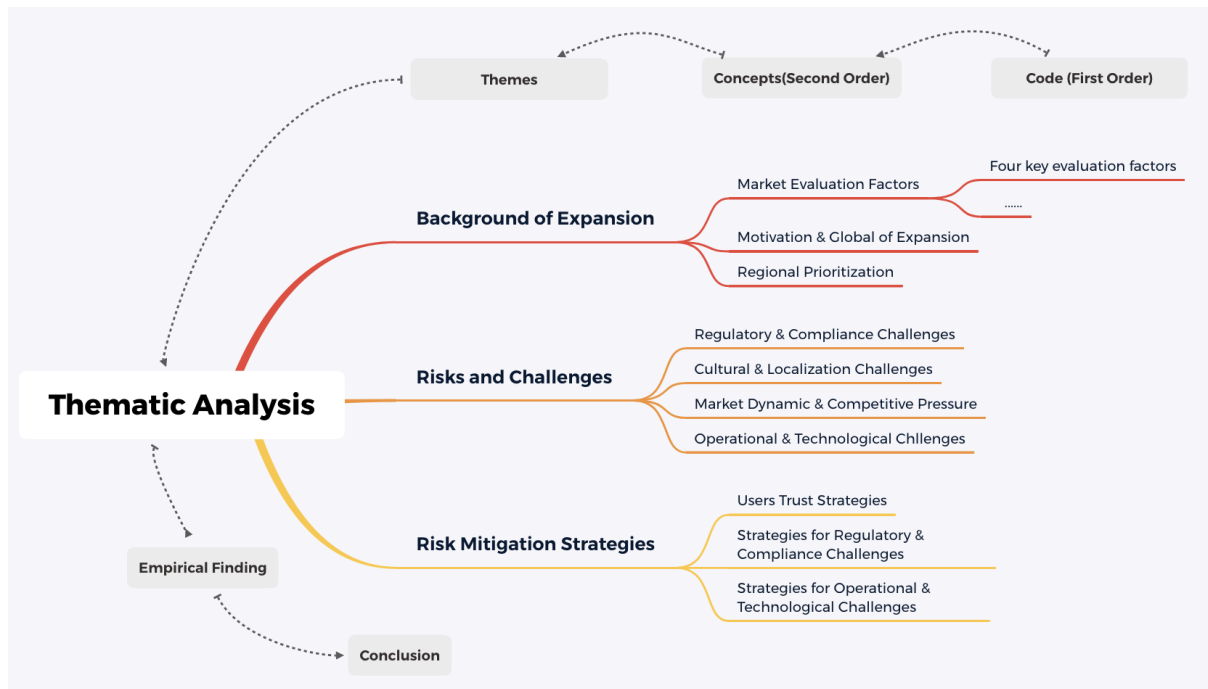


Figure 1 - The Process of Thematic Analysis

3.4 Limitations

Although this study provided valuable insights, it had several limitations. The sample size was small, with only 8 participants, and while diverse, may not be fully representative of the broader crypto startup ecosystem. The reliance on self-reported data also introduces potential bias, as responses reflect individual experiences and perspectives. Given the competitive and regulatory challenges of the industry, some participants may also be wary of disclosing sensitive information, which may affect the comprehensiveness of the data.

In addition, the study is limited by the dynamic and evolving nature of cryptocurrency regulations and market conditions. The results of the study reflect the specific challenges

startups face and strategies they employ when it comes to data collection, but some of the insights may become less relevant over time given the rapid pace of regulatory changes and technological advances in the industry. As a qualitative study, the results prioritize depth over generalizability, limiting statistical applicability. Future research with larger samples or quantitative methods could further validate and extend these findings.

3.5 Ethical Considerations

This study followed strict ethical guidelines to protect the privacy of participants and ensure data integrity. Prior to each interview, participants were informed of the purpose of the study and consent was obtained to ensure voluntary participation. Given the regulatory sensitivities of the crypto industry, all personal and company identifiers were anonymized and answers will be kept strictly confidential.

Interview transcripts have been licensed and securely stored so that only the researcher can access them. To ensure data security, all transcripts will be deleted upon completion of the study. Efforts were also made to minimize researcher bias by constructing questions neutrally and ensuring an objective process of thematic analysis. This study was conducted solely for academic purposes without any financial incentive or external influence on participants' responses.

4. Result

4.1 The Background of Crypto Startups to Expand Globally

Crypto startups expand globally for a variety of strategic reasons. This section explores the key motivations and goals behind global expansion, the factors that influence market selection, and how startups prioritize different regions when expanding their user base.

4.1.1 Motivations and Objectives

Crypto startups pursue global expansion to achieve a variety of strategic goals, from increasing market capitalization to taking advantage of a favorable regulatory environment. The interview data reveal three main motivations that drive startups to expand beyond their domestic markets.

First, capturing a larger market share and increasing user adoption are key objectives for participants. Given the inherently global nature of blockchain technology, startups see expansion as a logical way to tap into new user bases, especially in emerging markets where demand for digital assets is growing. Furthermore, as crypto industry users are scattered across the globe, targeting only certain specific markets can significantly limit the number of potential users and thus hinder project growth.

“If we limit ourselves to one region, the user base would be small.”

Second, seeking a listing on an exchange also plays a key role in expansion decisions. Most startups and core operations aim to list and launch their tokens on major exchanges. And the number of users is a key factor for exchanges to judge whether a project can be listed. Global expansion is crucial in order to achieve rapid user scale expansion.

“Many Web3 startups focus on getting listed on major exchanges, which evaluate projects based on two key factors: community engagement, including community size and social

media influence, and on-chain activity, such as transaction volume and active users. Both require a strong user base to achieve. Both require a strong user base to achieve.”

Finally, dealing with regulatory constraints and seeking favorable jurisdictions is another important driver. Several interviewees mentioned that regulatory uncertainty in their home countries prompted them to explore markets that are more friendly to cryptocurrencies. For example, one entrepreneur originally from China relocated the main body of his company to Malaysia addressed:

“Now it’s illegal to run a crypto based company in China, so we have to find another place for our product and as well as for our core employees.”

4.1.2 Market Evaluation

When choosing which international markets to enter, multiple interviewees mentioned that countries and specific geographic regions are not the main reference factors for choosing new markets. Because the crypto industry was born global in nature and crypto users are spread across the globe, the boundaries between countries are broken down. The analysis of the interviews identified several key aspects that influence the choice of market: the regulatory environment, user demand and quality, and the cost of acquiring users. This section will synthesize the responses of the interviewees to provide a relatively complete answer on this topic.

“... user characteristics become an important consideration when choosing a target market instead of country or geographic factors”.

Given the fragmented nature of crypto regulation globally, startups conduct extensive legal assessments before entering new markets. Based on interviews, crypto wallets and exchanges are the most sensitive to regulatory rules, with many requiring KYC as well as obtaining a license to operate. This leads both types of projects to pay particular attention to updates and changes in the local regulatory system. Interviewees emphasized that some startups will bypass heavily regulated regions in an attempt to operate in more loosely regulated areas.

“Many exchanges, before obtaining a U.S. license, focus on countries with more relaxed regulations, such as Turkey, Russia, and South American nations.”

In addition to regulatory considerations, startups evaluate the potential size and quality of their user base. Several interviewees agreed that the number of potential users is a decisive factor in choosing a market, as in their opinion, the larger market means higher potential profits. Startups are willing to invest more in potentially large markets because the overall user lifecycle value is higher in these regions. Web3 users in these larger markets are mainly located in the United States and some major European countries.

Moreover, indicators such as the economic level of local users, interest in and knowledge of digital assets can influence expansion decisions. Because of the high cost of educating people about blockchain, crypto startups are favoring native Web3 users who are themselves already knowledgeable about the crypto industry, rather than attempting to attract brand new users who have no knowledge of the industry. One interviewee emphasized that a large demographic alone is not enough; entrepreneurs also have to look at user engagement and cryptocurrency adoption rates. Whether or not you aim for the right target market significantly affects the long-term growth of a crypto startup.

“Markets like the US, Europe, and China have significantly higher money flow compared to other countries. Targeting these geographical locations gives advantages in money flow, fundraising opportunities, recognition, and user growth, which ultimately increases revenue or profits.”

Furthermore, the choice of target market varies depending on the product itself and the stage of development. In the crypto industry, there are many different types of startups, each offering different products and services, and naturally the customers they are trying to acquire will have a different focus. A few specific examples from the interviews can help us understand this, for example, crypto wallet products tend to develop the number of affluent or high-net-worth users, who are easier to find in regions with a higher level of economic development, while gaming products are more focused on the overall number of users and user activity, so companies focus on regions with a larger base of gaming users.

Finally, the goals that startups want to achieve will be different at different stages of development, but according to the interview, most startups use the number of users as a core indicator of development. This is related to another important consideration when choosing a market: the cost of user acquisition. Startups with limited resources will prioritize markets with lower user acquisition costs, with Europe and the US having high user value but higher individual user acquisition costs, and Southeast Asia having lower user value but lower overall acquisition costs. The choice of target markets depends on the current goals of the organization and their operational plans.

4.1.3 Regional Prioritization

Based on our interviews, when planning global expansion, crypto startups prioritize regions based on a variety of factors, with each target region having its own unique characteristics that may influence market entry strategies. In this section we will reveal the user profiles, market preferences, and cultural and operational dynamics of each region to more fully understand the true logic hidden behind crypto startups' choice of target markets.

4.1.3.1 North America and Europe

These regions are attractive due to their large and sophisticated user bases and mature financial ecosystems. Since traditional finance has been developed in Europe for a long time, European users have more knowledge about the financial system, which has driven Defi-type projects to flourish in Europe. In North America, particularly the United States, high-value users and large amounts of liquidity drive the market's attractiveness, despite the high cost of compliance and regulation. Moreover, the growing presence of blockchain in the U.S. has allowed this market to gather a large number of investors, thus making it a hotbed for incubating crypto startups. Similarly, European markets such as Switzerland and the United Kingdom are favored for their sophisticated financial infrastructure and strong investor networks. However, the high cost of client acquisition and stringent regulatory requirements in these regions require significant resources and strict compliance measures.

“Over the last decade, the crypto industry has established which markets have potential and are highly valued, such as North America as a dominant market with the largest user base and high-net-worth investors.”

4.1.3.2 Asia Pacific

The Asia-Pacific region is characterized by rapid growth and active user engagement. In South Korea, for example, the market is known for its highly engaged and tech-savvy users, making it ideal for programs focused on trading and DeFi, where user activity is critical. In addition, the fact that South Korean users are known for their enthusiasm for contract trading has also facilitated the establishment of exchanges there, as they can generate more fee income from contract trading. Southeast Asia is particularly important for gaming projects as the region is home to a large number of talented developers and a large number of active users (Vietnam). Additionally due to the large user base and low acquisition costs in these regions, it makes them a preferred target market for game-based projects. Countries such as Indonesia and Vietnam are prominent examples, where relatively low labor costs and strong community networks allow for rapid expansion of the user base. In addition, Japan and South Korea are known for their concentration of GameFi game developers. India is also a market with potential, and local cryptocurrency taxes could be a major challenge hindering its growth.

“For new emerging markets, India is big on Web3 but faces issues with crypto taxes.”

4.1.3.3 Emerging Markets

Emerging markets such as Latin America and Africa are receiving increasing attention for their untapped potential. For example, regions such as Nigeria and South Africa are seeing growing interest in meme currencies and alternative financial solutions. While these markets may present challenges (e.g., lower levels of financial literacy and higher levels of volatility), they offer a unique opportunity for projects to appeal to an emerging audience that is not yet saturated.

“Regions like Turkey have huge Web3 demand. Brazil is coming up massively, and France is proactive in crypto.”

4.1.3.4 Other Markets

Russian users are well known for congregating on Telegram, as the TON ecosystem has been predominantly taken over by Russians. The TON ecosystem was created based on the well-known social software Telegram, and Telegrama is a key channel for crypto industry practitioners and practitioners to communicate with each other. So for those startups whose main product is based on Telegram, they go ahead and prepare localized content in Russian to attract more users.

All in all, the regional prioritization of crypto startups is a multifaceted decision. Companies strategically target North America and Europe for their quality and liquidity, Asia-Pacific is chosen for its growth potential and cost-effectiveness of user acquisition, and emerging markets for their untapped user base. The specific characteristics of each region play a crucial role in determining where and how startups expand globally.

4.2 The Risks and Challenges of Crypto Startups to Expand Globally

Acquiring global users in the crypto industry is fraught with various risks and challenges. These risks are not set in stone; they can vary greatly depending on the target market, the specific operational actions taken by the startup, and even the timing of entry. Our analysis of interview data reveals several broad categories of challenges that startups must address:

regulatory and compliance, operations and technology, market dynamics and competitive pressures, and cultural and localization challenges. It is worth noting that while this section is intended to cover the most common and prevalent risks and challenges faced by the industry as a whole, actual risks can vary significantly across regions and time periods. Startups may encounter unique regulatory hurdles in one country while enjoying relatively lax rules in another. Similarly, operational challenges such as user acquisition costs and cybersecurity threats can fluctuate depending on market maturity and economic conditions. This discussion is therefore intended to summarize the broad challenges that are widely observed, even though the experiences of individual startups may differ from these common patterns.

4.2.1 Regulatory and Compliance Challenges

Regulatory and compliance challenges are a common obstacle to the cryptocurrency industry's access to global users. Our analysis of interview data suggests that while some startups may downplay regulation, the reality is that navigating a diverse and evolving legal framework remains a key, ongoing challenge.

To better understand the global regulatory environment that crypto startups must deal with as they expand, the table below provides a comprehensive comparison of cryptocurrency regulation in major jurisdictions. The table synthesizes the regulatory environments cited by interviewees and illustrates the challenges posed to globally oriented cryptocurrency businesses by the vast differences in regulatory approaches (Investopedia, 2024).

Country/Region	Legal Status	Key Regulatory Features	Regulatory Strictness (1-5)
United States	Regulated Framework	Joint regulation by SEC and CFTC Regulation through lawsuits against crypto businesses Bitcoin and Ethereum Spot ETFs approved in 2024 Regulatory environment still evolving	3 (Moderate)
China	Completely Banned	Bitcoin mining banned in May 2021 Cryptocurrencies completely banned in September 2021 Crypto enterprises prohibited from operating	1 (Very strict)
India	Unclear	Neither fully legalized nor penalized Pending bill to prohibit private cryptocurrencies Virtual digital assets defined as property	2 (Strict)
South Korea	Conditionally Legal	Exchanges must register with financial intelligence unit Privacy coins banned in 2021 Act on Protection of Virtual Asset Users designates regulatory authority Service provider obligations for user protection	2 (Strict)
United Kingdom	Regulated Financial Instrument	Crypto assets subject to existing financial regulations Strict KYC, AML, and CFT requirements Crypto derivatives trading banned	3 (Moderate)
European Union	Legal in most member states	Implementation of Anti-Money Laundering Directives Markets in Crypto-Assets Regulation (MiCA) framework Officially in effect July 2023 Service providers require operating licenses	3 (Moderate)
Canada	Not legal tender but proactively regulated	First country to approve Bitcoin ETF Trading platforms must register with provincial regulators Crypto investment firms classified as money service businesses	4 (Relatively lenient)
Brazil	Legal Payment Method	Regulatory framework passed in 2022 Formally became law in June 2023 Brazilian Central Bank responsible for regulation, authorization and supervision	4 (Relatively lenient)
Singapore	Property but not legal tender	Exchanges licensed and regulated under Payment Services Act Stablecoin issuers require MAS approval Restrictions on advertising digital payment token services to public	5 (Lenient)

Table 4 : List of regulation in major jurisdictions

As shown in Table 4, regulatory approaches range from a blanket ban in China (Level 1 strictness) to a relatively lax framework in Singapore (Level 5 strictness). This regulatory fragmentation creates significant operational complexity for crypto startups. When expanding internationally, companies must adapt to different legal statuses as well as different compliance requirements.

Several interviewees emphasized this challenge, with one pointing out that regulation is a major issue for all startups in this industry and that changing regulatory standards require

constant attention, regardless of a startup's primary focus. The data in Table 4 provides context for understanding the specific regulatory environments that respondents have experienced as they expand globally.

With regard to regulatory and compliance challenges, the consensus among multiple interviewees was that the U.S., Switzerland, and China are currently the most heavily regulated countries for the crypto industry, and that each region in turn will have its own unique regulatory rules. For example, if one wants to promote crypto services in the UK, they will definitely need to meet the appropriate regulations. This suggests that even if regulation is not a major concern, specific jurisdictions will impose strict compliance requirements that may directly impact marketing and operational strategies, and thus the future development of a product.

“The most prominent example now is the UK in which they said that in order to promote crypto services, you need to meet a And it doesn't matter if you're a financial institution or a publisher or content creator, as long as you're promoting crypto services, then you need to meet this compliance regime.”

Even though regulation and compliance are a major challenge, they don't affect different types of crypto startups to the same degree. To be more specific, regulation and compliance affect exchanges, crypto wallets, and DeFi types of projects to the greatest extent, whereas they affect gaming types to a lesser extent. This is mainly because exchanges, crypto-wallets and DeFi projects are directly involved in financial activities such as money flows, asset management, lending and borrowing, and have a high degree of financial attributes and systemic risk. Exchanges are the core channel for users to exchange fiat currencies with cryptocurrencies, which involves key issues such as anti-money laundering (AML) and security of fund custody. Crypto wallets, as asset storage tools, may be used for illegal transactions or to evade regulation if they lack compliance (e.g., privacy features of non-custodial wallets.) DeFi's functions of lending and borrowing, derivatives trading, and other functions are highly overlapping with the traditional financial market, but the lack of credit endorsement by a centralized institution is prone to market manipulation, liquidity risk, and other issues. These three types of projects are prone to various types of financial risks because of the large amount of capital involved and the more complex transaction process, and are therefore important areas of monitoring for regulation and supervision. As one industry said that with big money involved, regulation is inevitable whether people (who work in this industry) like it or not. In contrast, blockchain games focus more on the entertainment attribute of virtual assets, with lower capital scale and risk transmissibility, and are usually regarded as “*non-financial applications*” by regulators, so there is less policy pressure. Generally speaking, crypto projects that do not require KYC are not subject to many regulatory and compliance constraints, and these startups operate with less regulatory focus.

We observe that while some regions offer more favorable regulatory environments, others, particularly the U.S. and parts of Europe, place a heavier compliance burden on crypto startups. The cost of meeting these regulatory standards can be quite high. Startups often face high costs associated with KYC/AML compliance, legal documentation, and adapting product features to comply with local laws. In markets with strict rules, these costs can delay market entry and strain resources, making it harder for startups to focus on user acquisition.

In addition, the unpredictable legal frameworks of emerging markets exacerbate regulatory challenges. As one interviewee noted, “*regulation is a major issue for all startups in this industry,*” noting that changing regulatory standards require constant attention regardless of a

startup's primary focus. This inevitable increase in regulation is forcing companies to invest in legal expertise and adjust their strategies over time to balance rapidly growing demand with compliance requirements.

“Markets with stricter regulations present more challenges, such as China, Japan, and South Korea. We need to be extra. Since regulatory frameworks evolve quickly, we need to frequently update our knowledge regarding the latest regulations in target markets. Since regulatory frameworks evolve quickly, we need to frequently update our knowledge regarding the latest regulations in target markets.”

To mitigate these challenges, many startups are engaging in regulatory arbitrage by targeting less regulated jurisdictions. By registering in crypto-friendly jurisdictions such as the Cayman Islands or Dubai, they can ease the compliance burden while still gaining access to a global user base. However, this strategy does not come without a price; while it can reduce operational costs, it can also limit market exposure and complicate cross-border service delivery.

In sum, regulatory and compliance challenges are multifaceted, affecting everything from marketing strategies to product development and operational costs. Startups must carefully weigh the benefits of entering highly regulated markets against the potential costs and complexities of compliance, and continually adapt their strategies as the legal framework evolves.

4.2.2 Operational & Technological Challenges

Global user acquisition in the crypto industry is hindered not only by external regulatory pressures and market dynamics, but also by significant internal operational and technical challenges. Our analysis reveals several recurring issues that crypto startups must address, which can be broadly categorized as follows.

4.2.2.1 Difficulty in Acquiring New Users and High Acquisition Costs

Startups consistently report that the cost of acquiring new users is a major challenge to global expansion. Depending on the type of project, crypto startups' individual user acquisition costs can range from a few dollars to tens of dollars. This imbalance between high acquisition costs and relatively low lifetime value of users is a core issue that hinders sustainable growth.

In addition, the difficulty of acquiring new users has become a consensus among crypto startups. Unlike traditional Web2 businesses that can acquire new users by utilizing paid Google or Facebook ads, there is currently no similar credible promotion platform in the Web3 industry. Due to the proliferation of scams in this industry, users can potentially lose all the assets in their crypto wallets just by clicking on a link, which can also make them very wary of any marketing advertisements. Limited advertising channels further increase the difficulty for crypto startups to gain users, a problem for which there is no effective solution so far.

Not only that, some once effective user acquisition strategies are also becoming ineffective. For example, airdrops are a common user growth marketing strategy used by crypto companies today, which refers to the act of distributing free tokens or cryptocurrencies to users, which are sent directly to the wallet addresses of users who meet certain criteria, with the aim of promoting the project, incentivizing the community, or achieving a certain

technical goal. However, the airdrop model is often exploited by bots and airdrop hunters, resulting in companies failing to acquire effective customers even though they have invested in marketing expenses.

“Another issue is ineffective users, such as Airdrop Hunters (reward-sensitive users) or bots. These bots resulted in us spending a lot of money without getting real, valid customers, only duplicate IP addresses, which didn't make sense to us.”

4.2.2.2 Cybersecurity Risks and Technology Vulnerabilities

Crypto startups operate in an environment rife with the constant and evolving threat of cyberattacks. Unlike traditional financial institutions, many crypto projects must build their security frameworks from the ground up. These projects can face security breaches at every stage of their operations - from initial development and deployment, to day-to-day operations and expansion. The rapid pace of innovation, coupled with the high value of digital assets, makes the industry an attractive target in the eyes of hackers. Cybersecurity is therefore widely recognized as the most prevalent and critical operational challenge in the crypto space. Security is not only central to the protection of digital assets, but also key to maintaining user trust and ensuring market stability. As one industry insider put it, *“regardless of the type of project, security is the main concern of users.”* The entire ecosystem shares this view, and every new technology development or financial product must be designed with robust cyber threat protection in mind.

Cyberattacks can be devastating to a business. Incidents such as the Bybit hack, which resulted in huge losses, highlight how security breaches can irreparably damage a company's reputation and market stability. In addition, possible technical vulnerabilities in wallet technology and smart contracts, especially in the NFT program, pose a constant threat.

“... . the cybersecurity risks are immense in space. This is the start of every project, the middle of every project, and the end of every project.”

4.2.2.3 Remote Operations and Talent Management

Many crypto startups have lean teams and are often forced to rely on remote work - a shift that is intensifying in the post-bout era. This operating model presents unique challenges in terms of talent acquisition and management. Due to the industry's high knowledge threshold, startups often struggle to find professionals with the requisite skills and expertise that are critical to establishing efficient operational processes, managing cybersecurity, and optimizing products. In addition, a former startup founder once mentioned the problem of too much turnover in the crypto industry. It is very common in the crypto industry (especially in Asia) to work in a team for about a year or even less and then jump to another company. This is partly due to the fact that the industry changes very drastically, with many projects failing or succeeding in a short period of time, and partly due to the fact that the right talent is hard to find and is often poached by other companies. As a founder, how to retain talent and maintain a stable and efficient team has also become an important issue.

“Before the pandemic, we had an office; post-pandemic, we don't anymore as people got used to working from home. Our major challenge even today is managing and building a strong team in a remote working culture, which I believe all teams in the industry face. today is managing and building a strong team in a remote working culture, which I believe all teams in the industry face.”

Another noteworthy feature is that startup crypto teams often consist of people with different cultural backgrounds and nationalities, making leading a multicultural team to operate efficiently a key challenge for founders. These challenges are further exacerbated by the resource constraints and operational complexities associated with remote work, leaving companies vulnerable to inefficiencies that can hinder rapid market expansion.

4.2.2.4 Additional Operational Complexities

In addition to the inherent costs of user acquisition and the technical challenges of product go-live, our interview data revealed other levels of operational complexity that are putting a lot of pressure on crypto startups as they expand globally. These challenges stem primarily from the exchange coin-up process, OTC trade management, and the need to coordinate effectively with market makers.

Securing a place on a mainstream exchange can be costly and competitive. This shows how the competitive environment and high standards of exchanges not only push up the cost of going live, but also force projects to significantly differentiate their products. Startups must invest significant resources to meet these requirements, and timing is critical - even the best efforts at product differentiation can come to naught if coin-up is late.

“One client created a stablecoin and started discussions with Binance, but they were already late because Binance had listed USDC. Binance won't list an exact copy, so you need to explain your differences.”

Another layer of complexity arises from the management of over-the-counter (OTC) transactions. Startups often sell tokens off-exchange at a discount as a strategy to hedge against the risk of large-scale token unlocking. For example, some deals will sell tokens at a 30 percent discount with a mandatory nine-month lock-in-a practice that can result in discounts as high as 80 percent in extreme cases. Such strategies are designed to prevent a massive sell-off by venture capital firms or key opinion leaders on the first day of listing, but they also pose the risk of sell-side pressure if market dynamics change unexpectedly. As emphasized in the interview, if VCs and key opinion leaders' tokens were to be sold immediately after the IPO, this could result in hundreds of millions of dollars of selling pressure, which could severely depress the token price and thus the operations of these crypto businesses.

In addition, proper coordination with market makers is critical to stabilize the price of tokens after listing. Without effective coordination, excessive token sales could overwhelm the market and cause prices to plummet. This risk is particularly acute in markets where liquidity is already a concern, putting enormous pressure on startups to work with reliable market makers and ensure they can withstand fluctuations in trading volume.

“After the tokens are sold, they need to negotiate with the market makers how much they can sell. Otherwise, the opening price could be cut in half or drop significantly”.

Overall, these additional operational complexities - the high cost of exchange uploads, the complexity of over-the-counter trading, and the need for strategic market maker coordination - exacerbate the technological and user-acquisition challenges faced by crypto startups. Effectively managing these issues is critical to preserving the value of a project's tokens and ensuring a stable user base over time.

4.2.2.5 Fundraising Challenges

Financing is one of the very key challenges that crypto startups face during their growth phase. According to our data, many crypto projects must go through multiple rounds of funding to successfully issue tokens. Crypto startups need to do several rounds of financing before they can survive until it finally releases the coin. One participant emphasized that the process is very similar to traditional Web2 companies. However, in the harsh environment of a bear market, obtaining the necessary funding becomes even more daunting. Overall market sentiment is low and investor interest declines during bear market periods, which makes the funding process very difficult.

The poor performance of secondary and tertiary funds further exacerbated the financing challenge for crypto startups. As one interviewee noted, *"Looking at performance of tier 2 and tier 3 funds in this industry, they're all losing money, some down 70%."* This underperformance suggests that not only is it difficult to raise capital, but also that existing funds are incurring large losses, which could impair the ability of startups to sustain operations and invest in growth. Additionally, venture capitalists (VCs) are often empowered to invest due to the capital provided by their limited partners (LPs).

"When it comes to web3 startups, VCs are mandated to throw money behind something because they've got capital from their LPs"

This means that while investments do happen, these investors are many times pressured or influenced by the funding provider to invest in the project with the ability to make profits in a short time. Due to the changing environment of the crypto industry, investors always lack patience compared to investors in other industries.

To summarize, the risks of financing in the crypto space are mainly due to factors such as the need for multiple rounds of funding, the harshness of the bear market, and the underperformance of funds. These challenges can significantly delay product launches and put pressure on operational capacity.

4.2.3 Market Dynamics & Competitive Pressures

Global user acquisition in the crypto industry occurs in a highly dynamic and competitive market. Startups face multiple challenges from external market forces and internal strategic constraints. These challenges stem from a limited number of new users, high education and entry costs, and the difficulty of product differentiation in an environment where numerous projects all share a similar narrative.

4.2.3.1 Crowded Market with Stagnant Growth

The crypto market is exceptionally competitive, with numerous projects vying for the limited cryptic user base. Despite strong demand in certain segments, overall user growth has tended to stagnate. High customer acquisition costs exacerbate the problem, forcing startups to invest heavily in education just to build basic awareness. One participant emphasized that the scarcity of new users exacerbates these challenges; most existing users already have some level of knowledge about cryptocurrencies, so there is little room to expand the new customer base almost any further.

“What is happening is that you have crypto fans that know what crypto is, know what a crypto wallet is, why they need one. They know what Uniswap is, and they know the ecosystem, but there are not a lot of newcomers.”

In addition, many crypto projects tend to offer identical products and user experiences, making it difficult for startups to stand out in a competitive market. This homogenization forces companies to prioritize speed to market over developing a highly differentiated product experience. As a result, instead of focusing on long-term product quality or unique operational details, many programs are focusing on short-term speculative tactics such as airdrops and KOL promotions, which can have a serious negative impact on the industry as a whole.

4.2.3.2 Ineffective Advertising Channels and High Education Cost

The lack of effective advertising channels for the Web3 program is also one of the prominent challenges to global user acquisition. As one interviewee explained, *“Google and Facebook ads don’t work well because many users don’t understand how to use wallets.”* This statement summarizes the core problem: traditional advertising platforms work well in the Web2 environment but struggle to resonate in the crypto space, in large part because users are less familiar with the necessary steps to get started, such as setting up a crypto wallet. Additionally, users are more wary of traditional advertising links due to the frequency of scams in this industry and the risk of losing their entire digital assets by clicking on a random link. These kinds of scams are very common in the crypto industry.

To mitigate this, some startups have attempted to bridge the gap by adapting their offerings to be more Web 2.0 friendly. This includes the introduction of hosted wallets and Web 2.0 login options designed to lower the barrier for new users. However, despite these adjustments, pinpointing and acquiring true Web 3.0 users remains challenging. As one interviewee put it, even with these product tweaks, *“pinpointing Web3.0 users is still difficult”*.

Regulatory policies in many markets also add to the complexity. In some jurisdictions such as the U.K., crypto advertising is severely restricted or even banned outright, further limiting the available channels to reach potential users. As a result, startups not only struggle to educate a largely inexperienced audience, but also face rising customer acquisition costs due to inefficiencies in existing advertising channels.

These factors combine to create an ineffective advertising channel that severely hampers user acquisition. Startups are forced to look for alternative methods, often at a higher cost, to build brand awareness and trust among potential users. This challenge, coupled with the high cost of educating new users to the crypto ecosystem, is a huge operational hurdle that many companies must overcome as they expand globally.

4.2.4 Cultural & Localization Challenges

The cultural and localization challenges faced by crypto startups in their global expansion can be reduced to two core contradictions: the localization complexity of strategy execution and the balance between technology universality and local culture. This section develops the discussion in conjunction with the thematic analysis:

4.2.4.1 Localization Complexity of Strategy Execution

Enterprises have to deal with multiple obstacles in localization practices, from team competence to legal compliance. Crypto startups, although mostly cross-cultural, often lack understanding of the local ecosystem due to a lack of members based in the target market.

“For example, when expanding into South Korea or Brazil, we find it challenging to serve new markets without full-time team members working there who understand the local ecosystem and major players completely”.

In response, some companies compensate for the information gap by setting up localized customer service teams to communicate in their native language, but the high cost of small markets, such as Sweden and some Nordic countries, forces companies to give up deep localization, as one of the interviewee explained, *“we will not create an advertisement campaign for the Swedish market because it's too small”.*

4.2.4.2 Balancing Technology Universality with Local Culture

Although the underlying values of blockchain technology, such as decentralization and transparency, have global acceptance. However, the regional heterogeneity of the user experience still requires flexible adaptation. For example, in Islamic countries, companies need to adapt some of the text of their campaigns to avoid religious and cultural conflicts, while in India, marketing campaigns need to incorporate local festivals and slang to enhance user empathy. However, over-localization may sacrifice efficiency, such as adopting the EST time zone to ensure fairness of the game, but may ignore the actual needs of regional users.

This contradiction reflects the core tension between globalization and localization: companies need to find a balance between technological universality and cultural adaptation. Differences in user acquisition processes between South Africa and India, for example, suggest that a standardized strategy is difficult to apply to all markets. Therefore, startups tend to adopt the strategy of *“core functionality first, incremental adaptation as a supplement”*, and gradually optimize the regional user experience based on ensuring technological accessibility.

The globalization path of crypto startups is a dynamic game of resource allocation and demand response. Strategy execution is limited by team capacity, legal compliance and cost constraints, while user demand requires companies to flexibly weigh technology universality and cultural heterogeneity. The interaction between the two ultimately shapes the localization logic of prioritizing efficiency and supplementing adaptation.

4.3 Strategies for Risk Mitigation

4.3.1 User Trust Strategies

For crypto startups facing the uncertainty inherent in global expansion, building and maintaining trust is critical. Our analysis suggests that trust can be built through a combination of transparency, solid partnerships, and proactive communication, which together can help alleviate user concerns and regulatory concerns.

4.3.1.1 Transparency and Audit Practices

A core strategy for building user trust is to ensure operational transparency. Startups actively share their internal operations and achievements with users and institutional clients.

"We have strong team backing, share some team information publicly, and ensure all smart contracts are audited and publish the audit reports."

This practice not only validates the technical integrity of the program, but also provides potential users with concrete evidence of the company's performance record. Additionally, transparency is maintained through regular performance reporting - daily account access and monthly results reports allow users to monitor investments, reinforcing the idea that the only way to create trust is to deliver what the company promises or over-deliver. This continuous disclosure establishes a verifiable track record, which is critical to fostering long-term user and investor confidence in the reliability of the program.

4.3.1.2 Community Engagement and Local Partnerships

Another key strategy is to build a strong community that serves as an informal but powerful network of trust. Crypto startups utilize deep community engagement and partnerships with key opinion leaders (KOLs) to enhance credibility.

"Community engagement and partnerships with KOLs also play a significant role in establishing credibility."

By developing local partnerships, startups not only gain access to an established network of users, but also benefit from the trust already established by existing reputable organizations. This *"trust transfer"* minimizes the skepticism that often comes with new market entrants, especially in areas where consumers are unfamiliar with emerging brands. Effective community management, including customized content and localized language support, helps build a sense of belonging among users, which is critical for both acquisition and retention.

4.3.1.3 Reputation, Track Record and Performance

Reputation has always been recognized as the most critical factor in building trust. Startups recognize that having well-known investors, a good track record, and a history of successful operations can significantly enhance the credibility of a project. As one interviewee put it, "Strong track records and a long market presence ultimately win customer trust." This focus on reputation is particularly important for attracting institutional clients, who value historical performance over technological innovation. In addition, trust is further strengthened as companies continue to meet or exceed user expectations. Over time, as these startups continue to achieve verifiable results, the gradual buildup of positive experiences mitigates initial feelings of distrust - even if factors such as the team's background may initially raise concerns. These measures are not static; they require ongoing commitment over time since.

"... it takes time to build trust and prove you're serious about delivering on your promises."

This insight underscores the importance of gradual trust-building and the need for continuous engagement.

4.3.1.4 Risk Mitigation Synthesis and Insights

These strategies - transparency through audits and regular reporting, active participation in the community through local partnerships and collaboration with key opinion leaders, and a consistent commitment to building a strong track record - together form a comprehensive framework for mitigating the trust-related risks associated with global user access. By building a foundation of trust, crypto startups can better cope with market uncertainty and

create a platform for sustainable growth. This multi-layered approach not only meets market and regulatory expectations, but also helps companies retain existing users while attracting new ones.

4.3.2 Strategies for Regulatory and Compliance Challenges

Crypto startups employ a variety of sophisticated strategies to deal with an increasingly complex global regulatory environment. Many establish distributed corporate structures in their target markets, effectively creating separate legal entities for different regions. This approach deftly spreads risk and ensures that regulatory challenges in one jurisdiction do not jeopardize global operations.

"Their solution was creating a distributed corporate structure. They registered separate entities in each target market - a small entity in China specifically for that market, another in India, and so on. This approach compartmentalized risk, so if they faced legal issues in one country, it wouldn't affect the global product, only that specific branch."

Obtaining the right license has become a cornerstone strategy, especially as the industry continues to mature. Forward-thinking firms are actively pursuing authorization in crypto-friendly jurisdictions. One asset management firm describes their systematic approach, *"For our crypto-related operations, we're getting licenses from Malta, Cayman Islands, Dubai, Hong Kong, and UAE to cover regions where most crypto activities happen."* This regulatory groundwork, while costly and time-consuming, builds vital credibility for users and institutional partners. Additionally this respondent also stated that after obtaining the stringent Swiss Financial Market Supervisory Authority (FINMA) license, they feel empowered to deal with any regulatory environment and use it as a basis for expansion into other regions. This suggests that the ability to cope with regulation can be leveraged on an ongoing basis once it has been developed within the firm within the organization.

Market selection decisions are heavily influenced by regulatory factors. Companies often begin their globalization journey in countries with favorable regulatory environments before moving into more heavily regulated markets.

"Markets with stricter regulations present more challenges, such as China, Japan, and South Korea. We need to be extra cautious when serving users there."

"Many exchanges, before obtaining a U.S. license, focus on countries with more relaxed regulations, such as Turkey, Russia, and South American nations."

For jurisdictions that face severe restrictions on operations, companies enforce geographic restrictions through explicit terms of service and technical barriers. One way to do this, explained one founder, is to directly mark their products as not supporting users from certain countries, for example, some companies state from the outset that they do not support Chinese users and block Chinese IPs outright. But users in Chinese regions often use VPNs to bypass these IP restrictions to continue to use the products and services in question. Centralized service providers usually go a step further and establish a cooperation framework with the relevant authorities.

"Centralized exchanges like Binance will directly cooperate with local law enforcement, setting up a system for local police to fill out process forms to block accounts or suspend trades."

As the industry grows, legal expertise related to dealing with regulation in the crypto industry becomes increasingly valuable. One industry consultant emphasized that the need for legal professionals is increasing. This reflects the industry's move toward greater legitimacy and institutional integration.

“I think if you have enough funds, there are many crypto legal funds that have existed for a long time that you can consult before doing anything, especially in the US. China also has crypto lawyers, this is a growing demand.”

4.3.3 Strategies for Operational & Technological Challenges

4.3.3.1 High User Acquisition Costs

The high cost of user acquisition is a huge hurdle for crypto startups. To combat this, many companies are utilizing community building as a more cost-effective alternative to traditional marketing. One entrepreneur believes that community strength is crucial. On top of that, great content marketing can be one of the low-cost but highly fruitful marketing strategies. One marketing expert in the industry shared an example of a game program that attracted new users because of interesting and relevant Twitter-based posts. She also emphasized that market conditions are always more important than the marketing itself, and that marketing in a bull market can be more effective than in a bear market, so choosing the right timing can also have a big impact on the success of a marketing strategy.

“Community strength is crucial - it's what makes Web3 unique. A strong community largely determines a project's success, which is very different from Web2. ”

Strategic user targeting becomes more complex, with companies looking for areas where acquisition costs are manageable. As one company will implement a multi-stage acquisition strategy, starting with a broad rollout in low-cost regions and then refining its focus.

“We start with broad promotion, then observe actual user distribution. Game audiences are relatively fixed, and after promotion, we find that most users come from specific markets (like Russia, Southeast Asia, or Japan). Then we adjust our strategy based on the situation and decide which regions to focus on developing.”

Many projects strategically use token incentives and airdrops to acquire users, but they are increasingly wary of this approach due to its limitations.

“One way of getting user acquisition is airdrops - giving money to users to spread the project through word of mouth and rewarding them with an IOU. But this model isn't effective anymore because airdrops are being farmed. The biggest risk with airdrops is they're being farmed by bots.”

Major companies are trying to lower the barrier to entry by simplifying technical complexity. One founder shared their strategy, to lower the entry barrier, they introduced custodial wallets and Web2 login options. Gaming programs are similarly working to smooth initial user engagement by setting up free trial games and offering some special incentives for new users during the initial stages of user acquisition, thus lowering the cost of entry for new users. Reducing the cost of using an encryption program also becomes an effective strategy to overcome user acquisition challenges.

4.3.3.2 Cybersecurity Risks and Vulnerabilities

Cybersecurity remains a major concern across the industry. Companies address this issue by assembling specialized technical teams, as one interviewee noted below.

“For NFT projects, there is also a major need for professionals with the appropriate skills to ensure that the project is not hacked.”

These security teams implement comprehensive threat monitoring systems, conduct regular penetration tests, and keep abreast of emerging vulnerabilities in the blockchain ecosystem.

Transparency in security measures also builds trust: *“We have strong team support, share some team information publicly, and ensure that all smart contracts are audited and audit reports are published.”* More and more companies are prioritizing third-party security audits from reputable companies and making these reports public to ensure that users are safe with their assets.

Advanced security technologies are being increasingly adopted in order to minimize risk. One wallet provider describes their innovative approach to do it.

“It simulates the functioning of private keys through a technique called multi party computing. This technique uses a cryptographic function called a threshold signature, where the signature is not done by the private key, but by two different shares that together meet a specific threshold and emulate the signature.”

Many projects impose multiple signature requirements on high-value transactions, establish cold storage protocols for most assets, and create layered access controls within their organizations. Since social engineering attacks often use employees as potential entry points, it has become standard practice to conduct regular security training for all team members.

4.3.3.3 Remote Operations and Talent Management

For remote operations and talent management, successful companies invest in local teams with cultural understanding. One founder emphasized this approach, *“Having team members who speak the local language and understand the local culture helps our decision-making process.”* Another founder explained the need for local knowledge, and that even with a highly internationalized team, it is still challenging to provide services in new markets such as South Korea or Brazil without a full-time team member who fully understands the local ecosystem and key players.

Companies will establish regional centers with dedicated teams tasked with adapting global strategies to local conditions. These teams typically include community managers, business development specialists, and customer support representatives who understand the local language, culture, and business practices.

“We actively communicate with the community and have dedicated local customer service representatives who communicate in the user's native language and provide quick feedback on issues. These measures help build user trust.”

The outbreak has accelerated the shift to a telecommuting model, which presents challenges and opportunities for global operations.

“Before the epidemic, we had offices; after the epidemic, they were gone as people got used to working from home. Even today, the main challenge we face is how to manage and build a strong team in a telecommuting culture, and I'm sure all teams in the industry face the same challenges.”

To enhance the cohesiveness of their distributed teams, the company implements structured communication protocols, hosts regular virtual team-building events, and holds occasional face-to-face gatherings at important industry events. They utilize collaboration tools specifically designed for telecommuting and establish clear documentation norms to ensure knowledge sharing across time zones. Some companies utilize a flexible hybrid model where small regional offices serve as an optional gathering place for local team members while primarily supporting remote operations.

4.3.3.4 Fundraising Management

Obtaining adequate funding, especially during market downturns, mostly in bear markets, is a huge challenge for operations. And many crypto startups failed because they didn't get funding on time. Sometimes the crypto startups have to do something under the table to fulfill the expectations of investors to get money.

“There was a time when we couldn't get funding, which made many operational strategies impossible to implement. The whole company was in a kind of standstill. The solution was for the founder to frantically visit investment organizations, followed by the entire team frantically working on user data and acquiring users through campaigns.”

Companies improve resilience by maintaining lean operations, setting clear KPIs for different market environments, and building relationships with investors who understand the cyclical nature of the cryptocurrency market.

5. Analysis and Discussion

This study examines how crypto startups manage the risks and challenges of global user expansion. Based on the research question “How do crypto startups manage the risks and challenges of global expansion?” This chapter will analyze the research findings through the lens of existing literature and explore how these startups deal with multiple challenges such as regulatory uncertainty, user acquisition difficulties, cybersecurity threats, and cultural barriers. By combining the research findings with born-globalization theory, risk management frameworks, and blockchain adoption literature, this chapter aims to provide a comprehensive understanding of the dynamics of crypto startups' global expansion.

5.1 Regulatory and Compliance Challenges

As shown in Table 4 in Section 4.2.1, the global regulatory environment for cryptocurrencies exhibits significant fragmentation, ranging from a blanket ban in China (Strictness 1) to a relatively lax policy in Singapore (Strictness 5). These empirical findings directly support the view in the literature that regulatory fragmentation is a major obstacle to the development of cryptocurrency business (Périn, 2024). The regulatory differences shown in Table 4 not only confirm the theoretical view, but also provide the context for the regulatory adaptation strategies described by the participants in this study.

The literature on this section highlights regulatory fragmentation as a major obstacle to the growth of crypto businesses (Périn, 2024). Fragmentation exacerbates legal ambiguity and uncertainty, increases compliance costs, and may prevent firms from entering certain key markets. In addition, research on cross-border financial regulation (Périn, 2024) emphasizes the need for international coordination mechanisms to ensure consistency in digital asset rules, but such mechanisms remain largely aspirational.

Our interviews revealed findings that regulatory policy is one of the key impediments to startup development. Due to their inherently global nature, crypto startups aim for the global market at the time of their creation, but the differentiation of regulatory policies across locations prevents them from successfully conducting business globally. Startups translate these theoretical scenarios into a multi-tiered compliance structure. Rather than a single offshore domicile, many firms set up regional subsidiaries—each responsible for monitoring local rule changes and maintaining independent audit systems. Compliance budgets are not static: companies regularly reallocate resources for legal and compliance responses in response to new regulatory announcements. Additionally, rather than relying solely on outside counsel, some firms have established in-house policy teams that liaise directly with regulators to expedite license approvals and clarify ambiguities before enforcement actions begin.

In addition, the interviews revealed that different types of crypto startups have different sensitivities to regulatory policy, which is overlooked in the theory. Several interviewees made it clear that because types of businesses such as exchanges and crypto wallets need to work closely with local financial institutions, they must comply with local regulatory policies. These requirements cause them to spend more time and effort responding to the policies, and the formation of compliance teams is very common within these businesses. Other types of firms will not be as affected by regulatory policies due to their decentralized nature, but they will inevitably be directly affected by local regulations when it comes to marketing channels such as product promotion.

The theory suggests that both imperfect regulation and registering in friendlier jurisdictions may help or hurt crypto startups, but they usually discuss the two strategies separately rather than together. In practice, startups use a mix of these approaches: initial offshore registration speeds time to market, while regional subsidiaries and in-house policy offices allow firms to re-enter regulated jurisdictions with greater compliance. This hybrid model confirms and extends the arguments Périn (2024) calls for countries to work together to develop a uniform set of crypto rules, our findings suggest that firms can fill this gap themselves - by establishing a central policy team to track and interpret each market's requirements, firms can maximize confusion even in the absence of any formal global agreement. It is also important to note in practice that different types of crypto startups will have different levels of attention and commitment to regulatory response. Overall, it is important to choose the right regulatory response policy for the startup's current situation and goals so that regulation does not become a significant challenge that hinders global expansion.

5.2 Operational Challenges in Digital Environment

The operational and technological challenges faced by crypto startups as they expand globally both confirm and extend existing literature on digital marketing, cybersecurity, and telecommuting. Our study finds that high user acquisition costs and inefficient advertising channels differ significantly from traditional digital marketing assumptions. While traditional digital marketing often assumes that the likes of Google and Facebook are very commonly

used promotional platforms, our findings suggest that these channels are largely ineffective for crypto startups due to crypto-industry users' wariness of scams. The ineffectiveness of traditional digital marketing channels has given rise to innovative community-based user acquisition strategies, which is consistent with the community-driven value creation in token ecosystems described by OSL Academy(2025). However, our findings emphasize the evolution of token incentives and airdrops as user acquisition tools. Interviewees noted that these once effective strategies are becoming less viable due to the utilization of bots and “airdrop hunters”. This suggests that crypto startups are facing an ever-changing operating environment and need to continue to innovate their user acquisition methods.

The cybersecurity challenges identified in the study are consistent with security issues highlighted in industry reports (Perin, 2024; CoinsBench, 2024), but our findings provide more insight into how companies are addressing these challenges. The emphasis on specialized security teams, third-party audits, and advanced security technologies such as multi-party computing suggests a level of security that far exceeds that of early-stage startups. This suggests that the high-risk nature of digital assets is forcing crypto startups to develop higher security capabilities with limited resources, an operational challenge that traditional startups don't face or are less prominent.

The financing challenges mentioned in the study provide insights into how crypto startups can cope with access to capital in a volatile market environment. It is also something that has been missing from theoretical studies, demonstrating the lack of attention that previous research has paid to the financing challenges of crypto startups. The finding that “many crypto projects must go through multiple rounds of funding to successfully issue tokens” suggests that token-based businesses have a similar process to that of a regular corporate financing and IPO. Respondents pointed to the overall underperformance of crypto funds as an indication that the financing ecosystem for crypto startups is still maturing, creating additional challenges for their global expansion that traditional startups with access to more sophisticated financing mechanisms do not face. It is also important to note the particularities of how crypto startups are financed; unlike traditional startups that rely primarily on equity or debt financing (Gompers & Lerner, 2001), crypto startups have adopted innovative financing methods including Initial Token Offerings (ICOs) and decentralized financial platforms (Tönnissen et al., 2020). This has also brought more diverse participation and challenges to financing in the crypto industry. Unfortunately, however, this was not shared in depth by any of the interviewees in the interviews based on this point, and therefore detracts from further in-depth exploration of the impact that financing methods have had on the global expansion of crypto startups.

Findings on remote operations and talent management reveal particular challenges facing the crypto industry. The shift to remote working in the post-epidemic era described by respondents is consistent with broader business trends, but the crypto industry's globally distributed talent pool poses unique challenges. The integration of team members from different cultural backgrounds represents an innovative strategy for maintaining the efficiency of remote operations while gaining an understanding of the local market. As one of the founders explained, 'having team members who speak the local language and understand the local culture helps our decision-making process'. This approach allows crypto startups to effectively serve the global market without establishing a traditional physical office, while still adapting to the specific needs of the local market.

5.3 Market Dynamics and Competitive Pressures

Interviewees consistently emphasized the highly crowded market and the tendency for user growth to stagnate, which is directly related to crypto startups' global expansion strategies. However, in our interviews we learned that the industry is currently experiencing a low number of new user entrants. This finding is consistent with Perin's (2024) observations about the rapidly evolving and unpredictable market trends in the Web3 and blockchain space, but the study goes deeper to reveal how this market dynamic specifically affects user acquisition strategies.

The findings also suggest that crypto startups face market challenges beyond those described by Knight and Cavusgil (2004) for traditional “born-global” startups. While Knight and Cavusgil emphasize resource constraints as the main barriers to startup internationalization, the study finds that homogeneous products and limited room for differentiation pose market challenges specific to crypto startups. Many projects offer nearly identical products and user experiences, forcing companies to prioritize speed to market launch over developing highly differentiated product experiences. This market homogenization echoes the product scalability issues and interoperability challenges observed by CoinsBench (2024), but our research further reveals how these challenges drive companies to adopt short-term speculative strategies, such as airdrops and KOL promotions, rather than long-term product quality improvements.

Cyclical fluctuations in the crypto market add additional complexity to user acquisition strategies. Several interviewees emphasized that the bear market environment significantly affects crypto startups' expansion plans. One respondent explained, *“The biggest risk is the market environment. We started in a bear market and there were a couple of blow-ups in the second half of '21, which led to an overall decline in subscribers and made it difficult to find subscribers.”* This fits with the theoretical part of Perin's mid-2024, suggesting that market cycles not only affect token values, but also profoundly impact a startup's ability to operate and expand. Our interview also delves into the specific impact of market volatility and user acceptance on business expansion, supplementing the missing detail section of the theory in question.

The imbalance between user acquisition costs and lifecycle value constitutes a major barrier to market expansion. One interviewee bluntly stated, *“Acquiring new customers is too expensive... There is an imbalance between acquisition cost and lifecycle value that makes sustainable acquisition growth very difficult to achieve.”* This insight directly correlates with the “finite resources” challenge mentioned in the theory section, suggesting that crypto startups face more financial pressure on user acquisition than traditional startups.

These market dynamics challenges are directly related to our research questions, revealing how crypto startups can address these challenges through strategic user targeting and innovative marketing approaches. Successful firms employ community-centric acquisition strategies and strategically select cost-effective markets to maximize user growth with limited resources.

5.4 Building Trust in An Industry That Lacks It

The study's findings on crypto startups' trust-building strategies reinforce our understanding of how important trust is in the crypto industry. Transparency is a core strategy for building user trust. Crypto startups enhance transparency by sharing information about internal operations, team backgrounds, and publishing smart contract audit reports.

Community engagement and local partnerships are also key ways to build trust. Interviewees noted that strong communities are informal but powerful networks of trust. By developing relationships with local partners and KOLs, crypto startups can not only reach out to an established network of users, but also benefit from the trust that has been built by these entities. This “trust transfer” minimizes the skepticism that new market entrants often face, especially in areas where consumers are unfamiliar with emerging brands. Effective community management measures, such as customized content and localized language support, help foster a sense of belonging among users, which is critical for both acquisition and retention.

The study also found that users from different regions and cultures respond differently to trust-building. Some Asian teams have faced barriers to trust based on geographic bias in their initial forays into Western markets, but these can often be overcome through consistent performance and time.

Together, these combined strategies—transparency through auditing and regular reporting, community engagement through local partners and opinion leaders, and an ongoing commitment to building a strong track record—form a complete framework for mitigating the trust risks associated with global user access. By building a foundation of trust, crypto startups are better able to cope with market uncertainty and create a platform for sustainable growth.

Theoretically, we did not find articles on the keyword trust, but based on interviews, we understand that trust is an important building block for crypto startups to be able to expand steadily. The discussion of trust in our study is a significant finding of this research and can provide an important theoretical basis for similar related studies in the future.

Overall, this analysis shows that while the existing literature provides a useful basis for understanding the risks of global expansion (particularly in terms of regulatory uncertainty, operational constraints, and market fragmentation), crypto startups are not passive recipients of these challenges. Instead, they demonstrate strategic autonomy by developing flexible responses based on real-world conditions.

The data confirms that regulatory arbitrage is widely used, but often in combination with active local engagement and long-term compliance planning—which extends the scope of current internationalization theory. Similarly, while operational theories point to challenges such as talent shortages and technological vulnerabilities, crypto startups have responded to these challenges by maintaining flexible teamwork models and investing heavily in building security teams. In the context of market competition and localization, startups demonstrate a keen awareness of community dynamics and cultural differences, suggesting that the “born global” model of the crypto space must take into account both technological standardization and regional differentiation.

Taken together, these findings suggest that crypto startups adopt a multilayered and flexible approach to risk management that is influenced by both internal capabilities and external pressures. Based on literature and real-world evidence, this study contributes to a more comprehensive understanding of how crypto startups pursue international scale, provides practical insights for practitioners, and offers new ideas for future research on the crypto industry.

6. Conclusion

6.1 Summary of Key Findings

This study explores how crypto startups manage risks and challenges during global expansion and answers the core research question, “How do crypto startups manage risks and challenges during global expansion?” Through qualitative research with in-depth interviews with industry professionals, the study yielded several key findings that provide valuable insights into the complexities faced by these unique businesses.

The study shows that crypto startups are born global, targeting international markets from the beginning due to the borderless nature of blockchain technology. Unlike traditional companies that expand internationally in a gradual manner, crypto startups view global presence as a necessity rather than a strategic choice. This born global orientation stems from three main motivations: grabbing a larger market share, seeking to list on an exchange, and circumventing regulatory restrictions.

There are four broad categories of challenges that crypto startups must deal with as they expand globally. Firstly, regulatory and compliance challenges have a significant impact on expansion strategies, but to varying degrees for different types of projects. Exchange, wallet, and DeFi projects face the most intense regulatory scrutiny due to their direct involvement in financial activities, while gaming projects face less regulatory pressure. Research shows that crypto startups employ complex strategies to address these challenges, including establishing distributed corporate structures, applying for licenses in crypto-friendly jurisdictions, and making strategic market choices based on the regulatory environment.

Secondly, operational and technological challenges serve as key internal barriers to expansion. These challenges include high user acquisition costs, ineffective advertising channels, cybersecurity risks, difficulties managing remote teams, and financing challenges. The imbalance between acquisition costs and user lifecycle value is a particular impediment to sustainable growth, and the prevalence of fraud in the industry has made users skeptical of traditional marketing methods. In response, some startups are adopting community-based user acquisition strategies, investing in specialized security teams, building localized teams for different markets, and maintaining lean operations.

Besides that, market dynamics and competitive pressures pose external challenges, such as crowded markets, stagnant user growth, and product homogenization. The scarcity of new users entering the crypto space limits expansion opportunities, and product sameness makes differentiation difficult. These factors drive startups to prioritize speed to market over developing highly differentiated products, sometimes leading to short-term strategies rather than long-term quality improvements.

Fourth, in a skeptical industry, building trust has become a fundamental requirement for successful expansion. It may not be the most significant challenge of the business but play an important role to build the long term reputation. Startups build trust through operational transparency, third-party audits, community engagement, local partnerships, and consistent performance over time. The study emphasizes that the combination of these trust-building methods constitutes a comprehensive framework for mitigating trust-related risks.

Finally, cultural and localization challenges require startups to strike a balance between technological ubiquity and cultural adaptation. While the underlying value of blockchain is recognized globally, regional variations in user experience require flexible adaptation. The

study found that startups usually adopt the strategy of prioritizing efficiency and supplementing adaptation to gradually optimize the regional user experience while maintaining technological accessibility.

In summary, part of the risks and challenges are being addressed very well by various risk mitigation strategies, but there are still some of them that require more effective approaches to dealing with or waiting to be solved. The solutions mentioned above may not be “perfect”, while they are just temporary alternatives. For example, community building can be an innovative way to attract new users, but a more universal marketing channel could help most of the startups to build a user base without any threshold, such as a paid advertising platform that has gained widespread recognition among crypto users. All in all, the crypto industry is still in its early stage, so people who work in this area need to view these risks and challenges from a dynamic perspective and continuously seek better ways to address them.

6.2 Theoretical Implications

This study contributes to a number of theoretical areas, including born-global, crypto industry research, and emerging technology applications. Firstly, it extends the theory of born global by highlighting how crypto startups represent the purest manifestation of global orientation from the outset. Unlike traditional born-global companies, which may focus on specific international markets, crypto startups aim to achieve truly global reach while adapting to regional user preferences and regulatory environments.

Besides that, the study contributes to institutional theory by showing how crypto startups respond to regulatory fragmentation. The distributed corporate structure proposed in the study's findings represents an innovation for firms to cope with institutional complexity. This suggests that digital firms may develop novel institutional adaptations that are not captured by traditional models. While prior research has typically viewed regulatory arbitrage and compliance strategies separately, our findings suggest that successful crypto startups use a hybrid approach-combining initial offshore incorporation to accelerate market entry with regional subsidiaries and compliance capabilities to maintain long-term market access.

Moreover, our findings on trust-building strategies contribute to the literature related to trust in emerging technologies by highlighting the paradoxical relationship between decentralization and trust. While blockchain technology theoretically eliminates the need for trusted intermediaries, our research shows that startups continue to rely on traditional trust signals while developing blockchain-specific trust mechanisms. This suggests that the relationship between technological trust and social trust is more complex than commonly recognized in the existing literature.

In addition, this study extends the digital entrepreneurship literature by revealing how the crypto environment creates unique operational needs. The inefficiencies of traditional digital marketing channels and the complex security requirements faced by crypto startups suggest that digital ventures face uneven operational challenges and that the crypto environment is particularly challenging. Findings related to remote operations further suggest innovative models for managing globally distributed teams while maintaining market understanding.

Finally, an important contribution of this study is that it clarifies the importance of balancing technological ubiquity with cultural adaptation in digital technologies. The findings suggest that even inherently global technology platforms must cope with cultural differences, which challenges assumptions about the standardization of digital products.

6.3 Practical Implications

For entrepreneurs and managers in the crypto industry, this study provides some practical recommendations. Firstly, regulatory strategies should be considered from the outset, with a multi-layered regulatory approach that includes initial registration in crypto-friendly jurisdictions and the establishment of subsidiaries in specific regions to comply with local regulations. Startups should invest in legal expertise and build relationships with regulators to anticipate compliance requirements rather than reactively responding to enforcement actions.

Secondly, crypto startups should prioritize community building over traditional marketing channels as they expand globally. Given the ineffectiveness of traditional digital advertising and the high cost of user acquisition, building strong community engagement through localized content, partnerships with key opinion leaders, and region-specific customer support is a more cost-effective way to grow.

Third, cybersecurity should be considered a foundational priority. Investing in specialized security teams, third-party audits, and advanced security technologies from the start can prevent catastrophic breaches that undermine financial resources and user trust. Making security measures transparent through public audit reports can further enhance the trust of potential users.

Fourth, crypto startups should develop a structured approach to remote team management that incorporates a cultural understanding of the target market. Instead of choosing between fully globalized or fully localized operations, it is better to build a distributed team where team members understand the local ecosystem while working remotely. This provides market insights without the need for a physical office in each region.

Fifth, the funding strategy should take into account the cyclical nature of the market, and startups should maintain lean operations and build relationships with investors who understand the uniqueness of the crypto market. Preparing for multiple rounds of funding prior to a token launch and setting clear metrics for different market conditions can increase a company's resilience in a bear market.

Finally, trust building should be approached as a comprehensive strategy that combines transparency, community engagement, and sustained performance. Startups should recognize that building trust takes time and requires sustained commitment, especially for teams facing geographic bias or entering markets with limited knowledge of blockchain technology.

6.4 Limitations and Future Research Directions

Despite the contributions of this study, there are some limitations. The sample size was relatively small (8 participants), which may limit the generalizability of the findings. Reliance on self-reported data also introduces potential bias, as responses reflect individual experiences and perspectives. Additionally, given the competitive and regulatory challenges of the industry, some participants may be hesitant to disclose sensitive information, compromising the comprehensiveness of the data.

The study is further limited by the dynamics of crypto regulations and market conditions. The findings reflect specific challenges and strategies when it comes to data collection, but some insights may become less relevant as regulations change and technology advances.

Future research could overcome these limitations with larger quantitative studies to validate the findings in a broader sample. Longitudinal studies that track how risk management strategies evolve over time would provide valuable insights into the adaptation process. Additionally, comparative studies examining the differences between different types of crypto projects (e.g., exchanges versus gaming) could further refine our understanding of how business models influence risk management approaches.

A more in-depth exploration of the financing journeys of crypto startups, particularly comparing traditional equity financing with token-based financing models, would help to fill a significant gap identified in this study. Finally, examining the effectiveness of different trust-building mechanisms in different markets could provide more targeted insights for entrepreneurs seeking to expand globally.

In summary, this study contributes to both academic understanding and industry practice by illuminating how crypto startups are addressing the complex risks and challenges of global expansion. These startups demonstrate strategic innovation beyond traditional internationalization frameworks by developing flexible, multi-layered approaches to regulatory, operational, market, and trust-related challenges. As the crypto industry continues to evolve, these insights set the stage for theoretical advances and practical guidance in this dynamic field.

References

- Investopedia. (2025, March 24). Blockchain Facts: What is it, How it works and how it can be used? https://www.investopedia.com/terms/b/blockchain.asp?utm_source=chatgpt.com
- Investopedia. (2024, September 20). Cryptocurrency Regulations Around the World. <https://www.investopedia.com/cryptocurrency-regulations-around-the-world-5202122>
- Shukla, P., Dhote, T., Obaid, A. J., Oudah, A. Y., Muthmainnah, Apriani, E., La'biran, R., Kristiawan, M., & Arrang, J. R. T. (2023). Blockchain-based decentralized finance: Revamping the traditional financial ecosystem. *AIP Conference Proceedings*, 2736(1). <https://doi.org/10.1063/5.0171535>
- Reuters. (2024, December 5). Bitcoin tops \$100,000 on optimism over Trump crypto plans. <https://www.reuters.com/technology/bitcoin-tops-100000-optimism-over-trump-crypto-plans-2024-12-05/>
- Blank, S. (2010), "Why startups are agile and opportunistic – pivoting the business model", available at: www.steveblank.com (accessed 1 November 2015).
- Giardino, C., Unterkalmsteiner, M., Paternoster, N., Gorschek, T., & Abrahamsson, P. (2014). VOICE OF EVIDENCE What Do We Know about Software Development in Startups? *IEEE Software*, 31(5), 28–32. <https://doi.org/10.1109/MS.2014.129>
- Spender, J.C. (2014), *Business Strategy: Managing Uncertainty, Opportunity, and Enterprise*, Oxford University Press, Oxford.
- Weiblen, T., & Chesbrough, H. W. (2015). Engaging with Startups to Enhance Corporate Innovation. *California Management Review*, 57(2), 66-90. <https://doi.org/10.1525/cmr.2015.57.2.66> (Original work published 2015)
- Spender, J.C., Corvello, V., Grimaldi, M. and Rippla, P. (2017), "Startups and open innovation: a review of the literature", *European Journal of Innovation Management*, Vol. 20 No. 1, pp. 4-30.
- Forbes Tech Council. (2021). *How blockchain technology is changing startups*. Forbes. Retrieved from <https://www.forbes.com/sites/forbestechcouncil/2021/03/15/how-blockchain-technology-is-changing-startups/?sh=2e4a5b3579b1>
- Cointelegraph. (2020). *How crypto startups are revolutionizing digital finance*. Cointelegraph. Retrieved from <https://cointelegraph.com/news/how-crypto-startups-are-revolutionizing-digital-finance>
- Gompers, P., & Lerner, J. (2001). The venture capital revolution. *Journal of Economic Perspectives*, 15(2), 145–168. <https://doi.org/10.1257/jep.15.2.145>
- Melville, N., Kraemer, K., & Gurbaxani, V. (2004). Information technology and organizational performance: An integrative model of IT business value. *MIS Quarterly*, 28(2), 283–322. <https://doi.org/10.2307/25148680>
- Tapscott, D., & Tapscott, A. (2016). *Blockchain revolution: How the technology behind bitcoin is changing money, business, and the world*. Penguin.

Vishwakarma, V. (2025). *Web3 vs blockchain development*. LinkedIn. Retrieved [March 22nd, 2025], from <https://www.linkedin.com/pulse/web3-vs-blockchain-development-vinod-vishwakarma-pioaf/>

StartupBos. (2023). *Navigating the Boston Web3 startup scene: Who to know, where to go*. Retrieved [March 22nd, 2025], from <https://www.startupbos.org/post/navigating-the-boston-web3-startup-scene-who-to-know-where-to-go>

Amarasinghe, N., Boyen, X., & McKague, M. (2021). The complex shape of anonymity in cryptocurrencies: Case studies from a systematic approach. In N. Borisov & C. Diaz (Eds.), *Financial cryptography and data security: 25th international conference, FC 2021, virtual event, March 1–5, 2021, revised selected papers, part I* (pp. 205–225). Springer. https://doi.org/10.1007/978-3-662-64322-8_10

Archax Academy. Overview of the Crypto Ecosystem. Retrieved [March 22nd, 2025], from <https://archax.com/academy/overview-of-the-crypto-ecosystem>

Cryptodose. (2023). *What Is Cryptocurrency and How Does It Work?* Retrieved [March 21st, 2025], from <https://cryptodose.net/learn/what-is-cryptocurrency/>

Binance Academy. (2023, 2024). Retrieved [March 21st, 2025], from <https://academy.binance.com/en>

Coinbench. (2024). Retrieved [March 23rd, 2025], from <https://coinsbench.com/challenges-faced-by-web3-startups-in-scaling-and-acquiring-users-858a5071f482>

Medium. (2024). Retrieved [March 23rd, 2025], from <https://medium.com/quantum-economics/top-10-challenges-for-web3-entrepreneurs-and-how-to-overcome-them-c0f12e7b4681>

Top Software Companies. (2023). Retrieved [March 23rd, 2025], from <https://topsoftwarecompanies.co/web-development/why-are-web3-startups-failing-top-risks-and-challenges>

Kaleido. (2023). Retrieved [March 23rd, 2025], from <https://www.kaleido.io/blockchain-blog/barriers-to-scale-for-web3-startups>

Johanson, J., & VAHLNE, J. E. (1977). THE INTERNATIONALIZATION PROCESS OF THE FIRM - A MODEL OF KNOWLEDGE DEVELOPMENT AND INCREASING FOREIGN MARKET COMMITMENTS. *Journal of International Business Studies*, 8(1), 23-32.

Nambisan, S., & Luo, Y. (2022). Managing Risks in Digital Globalization. *Management and Business Review*, 2(4), 7-16.

- Tönnissen, S., Beinke, J. H., & Teuteberg, F. (2020). Understanding token-based ecosystems—a taxonomy of blockchain-based business models of start-ups. *Electronic Markets*, 30, 307-323.
- Swan, M. (2015). *Blockchain: Blueprint for a new economy*. " O'Reilly Media, Inc."
- Bailetti, T. (2012). What technology startups must get right to globalize early and rapidly. *Technology Innovation Management Review*, 2(10).
- Oliva, F. L., Teberga, P. M. F., Testi, L. I. O., Kotabe, M., Giudice, M. D., Kelle, P., & Cunha, M. P. (2022). Risks and critical success factors in the internationalization of born global startups of industry 4.0: A social, environmental, economic, and institutional analysis. *Technological Forecasting & Social Change*, 175, 121346. <https://doi.org/10.1016/j.techfore.2021.121346>
- Perin, D. F. (2024). *How do start-ups in the Web3. 0 and blockchain field engage with the future?* (Doctoral dissertation, Technische Hochschule Ingolstadt).
- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of international business studies*, 35, 124-141.
- Roy, A., Sekhar, C., & Vyas, V. (2016). Barriers to internationalization: A study of small and medium enterprises in India. *Journal of International Entrepreneurship*, 14(4), 513-538.
- Chen, J., Saarenketo, S., & Puumalainen, K. (2018). Home country institutions, social value orientation, and the internationalization of ventures. *International Business Review*, 27(2), 443–454. <https://doi.org/10.1016/j.ibusrev.2017.09.011>
- Leonidou, L. C. (2000). Barriers to export management: an organizational and internationalization analysis. *Journal of International Management*, 6(2), 121-148.
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., ... & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of research in Nursing*, 25(8), 652-661.
- Bell, E., Harley, B., & Bryman, A. (2022). *Business Research Methods* (3rd ed.). Oxford University Press.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Hammarberg, K., Kirkman, M., & de Lacey, S. (2016). Qualitative research methods: When to use them and how to judge them. *Human Reproduction*, 31(3), 498–501.
- Thomas, D. R. (2003). A general inductive approach for qualitative data analysis.

Adeoye-Olatunde, O. A., & Olenik, N. L. (2021). Research and scholarly methods: Semi-structured interviews. *Journal of the American College of Clinical Pharmacy*, 4(10), 1358-1367.

Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, 12(3), 297-298.

OSL Academy. (2025, February 7). Understanding Web3 Business Models and Tokenomics. <https://osl.com/academy/article/understanding-web3-business-models-and-tokenomics>

Appendix

Appendix 1

Interview Guide: How Do Crypto Startups Manage Risks and Challenges During Global Expansion

Duration: Approximately 30 minutes

Objective: To investigate the risks and challenges faced by crypto startups when expanding their global user base and the strategies employed to address them.

1. Introduction (2 minutes)

1. Purpose and Scope

Briefly introduce the purpose of the interview: "We aim to understand the risks and challenges crypto startups encounter while expanding their global user base and the strategies they use to manage these.

Emphasize confidentiality and that the information will be used for academic research only.

Interviewee Background

Could you briefly introduce your company and your role within it?

2. Understanding Global Expansion (5 minutes)

1. Motivations and Goals

- What were the primary reasons for your company's decision to expand its user base globally?

2. Initial Considerations

- What factors did you evaluate before entering new markets? (e.g., regulatory environment, user demand, technical readiness)
- Do you think that different kinds of companies will prioritize specific regions or user demographics when they enter the new market?

3. Risks and Challenges (8 minutes)

1. Key Challenges and Risks

- What are the main challenges and risks your company has faced in acquiring users globally? (e.g., compliance, cultural differences, competition, infrastructure)
 - Are there particular markets where these challenges and risks have been more pronounced?
- #### 2. Examples and Lessons
- Can you share a specific example of a challenge or risk your company faced and how you addressed it? - follow up questions

4. Strategies for Risk and Challenge Management (5 minutes)

- Risk Mitigation Approaches
 - How does your company manage the risks related to global user acquisition?

- User Trust and Engagement
 - How do you ensure user trust in new markets?
- Operational Adjustments
 - Did your company make any significant operational changes (e.g., product localization, regulatory adaptation) to facilitate global user expansion?

5. Closing (2 minutes)

1. Insights and Recommendations
 - Is there anything else you'd like to share that could help us better understand this topic?
 - Are there any specific strategies or lessons learned that you believe are critical for success in this area?
2. Follow-Up and Thanks
 - Thank the interviewee for their time and insights.
 - Ask if they would be open to follow-up questions in the future if needed.