

## **Exploring Financial Risk Management for E-Commerce Startups**

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**ABSTRACT:** A decade ago, only two online marketplaces were valued at \$1 billion or more in the United States: eBay and Craigslist (Haigu and Rothman, 2016). During the course of a decade, the popularity and prosperity of e-commerce have evolved. According to the United Nations Conference on Trade and Development, e-commerce sales hit \$25.6 trillion globally in 2018, up 8% from 2017 (UNCTAD (United Nations Commission on Trade and Development), 2020). Thus, during the COVID-19 pandemic, e-commerce became not only a preferred choice of shopping but increasingly more lucrative. However, many do not understand that there are real financial perils in operating in the cyber business space. To that end, this paper will explore some of the financial risks associated with e-commerce startups and the various e-commerce business models. These risks can range from fraud, cybersecurity, payment transaction, taxation, and insurance issues. (Toleuly et. al, 2020). All of which could have varying degrees of impact on the startup. Thus, reviewing these new e-business models and the associated financial risks can make students more knowledgeable and agile in this brave new world of commerce.

**KEYWORDS-** E-commerce, Start-ups, Financial Risks, Risk Management, Agile, Strategies

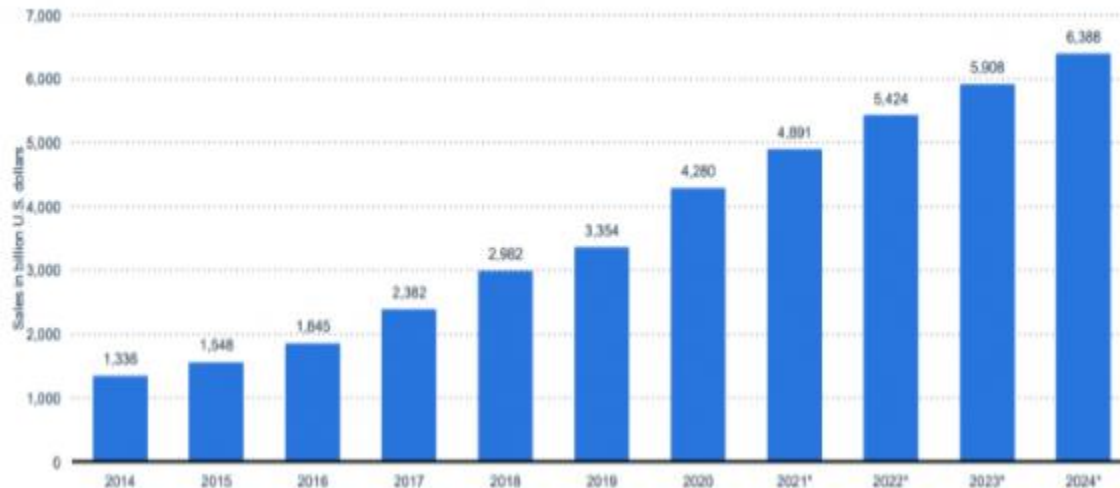
### **I. INTRODUCTION**

Startups are young companies founded to develop a unique product or service, bring it to market and make it irresistible and irreplaceable for customers (Baldrige, 2022). According to U.S. International Trade Administration (ITA), e-commerce has become a term that covers everything a business does online to sell to consumers, both domestically and overseas U.S. Department of Commerce. (2022). It includes the sale through a website, the online advertising that leads to a sale, and the brand building that helps tie it all together as a narrative for consumers (U.S. Department of Commerce, 2022). A digital strategy is the starting point for cross border e-commerce (Behl, Dutta, Lessmann, Dwivedi, & Kar, 2019; Gubela, Lessmann, Haupt, Baumann, Radmer, & Gebert, 2017). E-commerce startups are human driven organizations that create and/or sell pioneering products and services on an online platform and strive to develop sustainable business models under uncertainty with a relatively low success rate because success is driven by the need for an ever increasing customer base and increasing profits to sustain competitiveness (Behl, Dutta, Lessmann, Dwivedi, & Kar, 2019; Gubela, Lessmann, Haupt, Baumann, Radmer, & Gebert, 2017).

#### **Why Startup? E-Commerce Worldwide**

Allowing the consumers to easily access goods and services has proven to be a profitable strategy for business owners. Retail e-commerce sales amounted to approximately 5.2 trillion U.S. dollars worldwide in 2021 and is predicted to grow by 56 percent over the next years, reaching about 8.1 trillion dollars by 2026 (Chevalier, 2022). According to U.S. International Trade Administration, retail B2C e-commerce had an 18% share of the total global retail sales for 2020. It is forecast to achieve a 22% share of the total global retail sales by 2024. The total retail B2C e-commerce will have a total of 378% growth in sales with a steady 8% annual growth rate by 2024. (E-commerce sales and size forecast, n.d.). See Figure 1.

Figure 1.  
Global Retail E-Commerce Sales Worldwide 2014-2024 (in billion USD)



Source: Ecommerce sales and size forecast. (n.d.). International Trade Administration | Trade.gov.  
<https://www.trade.gov/ecommerce-sales-size-forecast>

### COVID-19 drives E-Commerce

During the COVID-19 pandemic more people are purchasing their goods online. E-commerce saw a 30% surge in 2020, and the impact of this shift to online purchasing will be long-lasting. In 2021, there were twenty-four million e-commerce shops, and each business owner hoped to cash in on the rapid evolution and increased Internet utilization (Djordjevic, 2021). The use of the worldwide web has resulted in explosive growth and expansion in e-commerce for businesses of all sizes. Why? E-businesses require minimum costs to access a targeted audience, promote business activities, and build brand recognition. As such, given the sheer market size and very few barriers to entry, the e-commerce marketplace shows no signs of slowing down. Investors are rushing to pour varying amounts of venture capital into e-commerce startups in the hopes of achieving high returns on their investments. As they eagerly enter the cyber realm, many do not necessarily consider the various risks associated with operating an e-commerce business.

## II. PURPOSE

With that stated, the purpose of this paper is multifold. It will explore financial risks and how to manage these risks for start-up internet-based companies. The paper will review start-up businesses in relation to E-Commerce businesses in the United States and worldwide identifying the types of Business Revenue Models. According to the authors, newly created ventures face many challenges, while creating strategies that create and sustain competitive advantage. Newly created ventures face many challenges, of which successfully competing with rivals is a daunting task. (Mishra and Gupta, 2020) To grow, and turn profitable, start-up firms must extensively search for strategies that create and sustain competitive advantage. "Adoption of e-commerce is considered as a very potent strategy to beat competitors and generate profits." (Mishra and Gupta, 2020).

The authors will present a practical E-Commerce model showing classifications and types. The second part of the paper will explore the financial risks associated with developing an e-commerce business and provide information to avoid common mistakes in start-up businesses. Lastly, we describe how the new Association to Advance Collegiate Schools of Business International (AACSB) 2020 business accreditation standards provide the roadmap to operationalize that path, with a particular focus on how AACSB is leading the effort to further elevate business education as a force for good in society. (Leclair, 2018).

## III. LITERATURE REVIEW

### E-Commerce in the U.S.

Online retail sales in recent years show no sign of receding and are projected to reach 8.1 trillion dollars by the year 2026 (Chevalier, 2022). During the COVID-19 pandemic more people are purchasing their goods online.

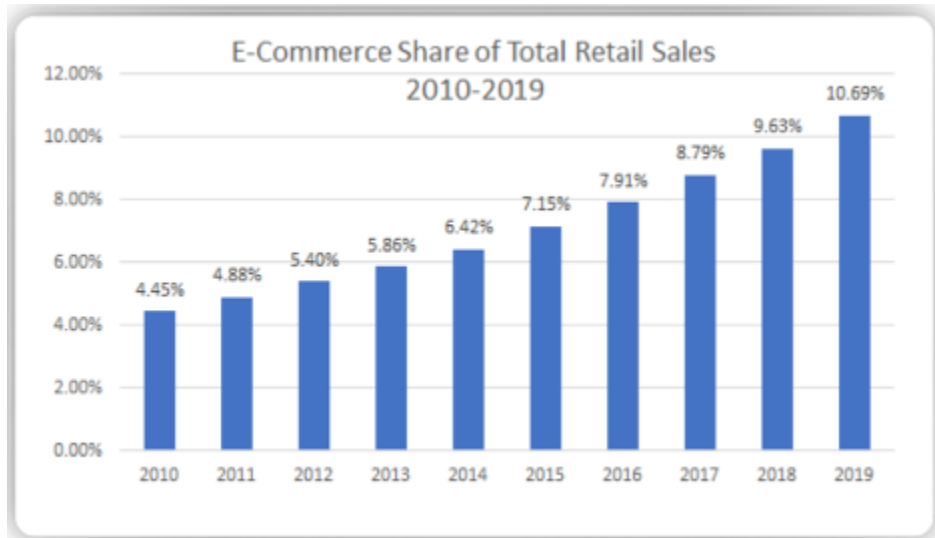
## Exploring Financial Risk Management for E-Commerce Startups

Statistics from Amazon shows that in 2020, small- and medium-sized businesses in the U.S. sold more than 3.4 billion products on Amazon, up from 2.7 billion year-over-year. During the 2020 holiday season—including Black Friday to Cyber Monday—independent businesses selling on Amazon gained over 50% year-over-year growth in worldwide sales (AmazonStaff, 2020). As of June 2021, Amazon was the most visited e-commerce site in the United States, recording approximately 2.45 billion monthly visits to Amazon.com. eBay ranked second, with more than 885 million visits per month, while Walmart came in third, surpassing 410 million (Chevalier, 2021).

From 2010 to 2019, total e-commerce share of total retail sales in U.S. increased from 4.45% to 10.69%. E-commerce sales in 2020 accounted for 13.6 percent of total sales. In 2021, estimated total e-commerce sales in U.S. is \$870.8 billion (about \$2,700 per person in the US), an increase of 14.2 percent from 2020 and accounted for 13.2 percent of total sales. (U.S. Department of Commerce, 2022, February 18). The estimate of U.S. retail e-commerce sales for the third quarter of 2022 was \$265.9 billion (about \$820 per person in the US) (about \$820 per person in the US), an increase of 3 percent from the second quarter of 2022. The third quarter 2022 e-commerce estimate increased 10.8 percent from the third quarter of 2021. E-commerce sales in the third quarter of 2022 accounted for 14.1 percent of total sales (U.S. Department of Commerce, 2022, November 18).

Figure 2.

E-Commerce Share of Total Retail Sales in U.S. 2010-2019



Note. E-commerce share of total retail sales is based on data from “Historical Table 4. Estimated Annual U.S. Retail Trade Sales - Total and E-Commerce 1998-2019 ; in 2019 E-Commerce Multi-sector Data Tables. (2021, July 27). <https://www.census.gov/data/tables/2019/econ/e-stats/2019-e-stats.html>

### IV. NAVIGATING THE E-COMMERCE SPACE AND MODELS

Agility in navigating the e-commerce space, and its many channels of distribution, is imperative as it has become increasingly ubiquitous and a commercially viable alternative channel to provide goods and services to the marketplace. Therefore, organizations, as well as students, should seek to be keenly responsive to external factors such as socio-economic trends, technological developments, and political and legal changes very quickly. In fact, 81% of executives believe their e-business strategy must innovate at a rapid pace to maintain competitive advantage (D’Imporzano et al., 2019). Thus, internet-based companies would do well to innovate from a strong and well-reasoned framework from the inception of the business. To construct such a foundation, aspiring e-business owners today have access to a plethora of educational resources that claim to aid individuals to compete in the cyber medium. These roadmaps provide directions that could assist in determining the best way forward to furnish their various wares to consumers. Reviewing several free access guideposts indicates that there are clear models to emulate.

#### Models Can Impact Revenue Stream

Maslow’s hierarchy of needs proposed that humans have five tiers of needs and developed a pyramid or one of the earlier conceptual models which is used today to create business revenue models.

“On the top level is self-actualization,  
fourth level/esteem,  
third level/love and belonging,

second level/safety needs

and bottom level/physiological needs like food and shelter.” (Kulhar, 2022)

He posits that humans are most motivated to fill the needs on the bottom tier first, then move up as each new level of needs is met which also works for business revenue models (Kulhar, 2022). Using his theory, it is certainly understandable that in our new world view including surviving COVID, we are more interested in finding ways to take care of ourselves without being dependent on others. Thus, individuals moved into the e-commerce space to generate funds.

Freely available business articles and journals suggest that there are many models to lean upon that can help develop revenue streams on the internet. In “Towards a definition of B2C and B2B e-commerce,” the authors determined that there were business to consumer (B2C) and business to business (B2B) models (Jewels and Timbrell, 2001). Jewels and Timbrell (2001) sought to define the terms. The authors the B@B Model as the usage of the internet to purchase, sell, or exchange data between two or more businesses (Jewels and Timbrell, 2001). The B2C Model is defined as an exchange between consumers and producers for monies (Jewels and Timbrell, 2001). Over the past approximately twenty years, the definitions of the models have expanded. In Javed’s 6 Types of E-commerce Business Models, You Need to Know, the author argues that there are not just two types of business models, but rather several business models to include the Business to Consumer, Consumer to Business, Business to Business, Consumer to Consumer, Business to Government, and Consumer to Government (Javed, 2022).

As the first model’s name implies, the business is seeking to sell goods and services to the public. The Business-to-Business model combines Internet technology with the characteristics of different supply chains (Liu, et al., 2022). It is often difficult for SMEs to obtain financing and the B2B model addresses the problem of reducing the risk for commercial banks but as market scale has continued to expand, and with the expansion of the market scale, the associated credit risks have increased for banking institutions responsible for financing these projects (Liu, et al., 2022). For the e-commerce supply chain to run efficiently, credit risk must be minimized as it can not only affect the credit security of commercial banks but also whether the entire e-commerce supply chain based on this model can run smoothly (Liu, et al., 2022). This financial model has emerged to facilitate access to funds and promote the function, operation, and development of e-commerce. Based on the B2B e-commerce platform online transactions between companies include information exchange, integrating logistics, business flow, information flow, and capital flow for data analysis and processing. (Lahkani, Wang, Urbański, and Egorova, 2020). The larger blocks of commerce may be categorized as the business to business, business to consumer, consumer to consumer, consumer to business, and governmental e-commerce with even more models continuing to evolve and emerge (DeMatas, 2022; Taylor 2021).

Exploring the previously discussed business models and others, such as drop shipping and print-on-demand, is instrumental in understanding how organizations can create value (DeMatas, 2022). Once defined, a business can then craft their operational elements and their relationships within the designated business domains and create marketing strategies that target their intended customers. Further, an entrepreneur can also experiment and assess other e-business models to determine if they wish to augment their selected model or switch altogether.

No matter which models the entrepreneur selects, the individual(s) would do well to research specifically the e-commerce business plan to establish some ground rules from which to operate. The business plan should include rigorously researching the business area, intended audience for suggested product solutions, creating as well as continuously monitoring a business plan, creating an e-business presence, and advertise to potential consumers. Additionally, it is important that individuals understand that they will still have to utilize some of the traditional business paradigms and notions to explain how they will compete, especially if the business also possesses a brick-and-mortar storefront (Lockett, 2018). Business owners will also need to maximize customer service relationships to remain competitive. All these efforts, aligned with the chosen e-commerce business model, should accurately track the number of targeted individuals and the conversion rate which lead to business revenue.

## V. CONCEPTUAL FRAMEWORK FOR ANALYSIS

Although there exist various e-commerce revenue models that have been developed, most companies rely on one, or some combination, of the following major revenue models: advertising, subscription, transaction fee, sales, and affiliates (Viu-Roig & Alvarez-Palau, 2020). E-commerce has created new digital markets where prices are more transparent, markets are global, and trading is highly efficient, though not perfect. Growth in e-commerce has brought a new set of challenges in operational policy making. “While the impact of e-commerce on supply chains has been recognized in the literature, there was no effort to systematically review the literature, conceptualize some of the challenges and propose future research directions (Viu-Roig & Alvarez-Palau, 2020). In the study, the authors reviewed 153 publications from 1999 to 2019 classifying the literature based on which supply chain drivers

were investigated and the employed research methodology (Aithal, 2016; Viu-Roig & Alvarez-Palau, 2020). The authors also conducted network and content analysis to uncover the main research themes in many areas but our interest for this paper is in the coordination of e-commerce logistics, last mile options and cost management of ground-breaking technique employments (Aithal, 2016). The three major driving forces behind e-commerce are business development and strategy, technological innovations, and social controversies and impacts (Traver, 2021). Each of these driving forces is represented in every chapter, and together they provide a strong and coherent conceptual framework for understanding e-commerce. Prastyantoro, Putro, Yudoko, and Dirgahayani (2022) state that e-commerce transactions have increased during the pandemic as people living in urban areas turn to buy goods online rather than offline. E-commerce is primarily conducted in a virtual network environment without clear laws, e-commerce certification and many electronic contracts, including online intellectual property rights leading to unclear laws and regulations. Conversely corresponding legal risks to enterprises, and legal rights and interests cannot be effectively contained (Prastyantoro, et al., 2022). The Consumer Rights Protection Law mentions that when it comes to commodities such as automobiles, home appliances, and electronic products, e-commerce operators are responsible to prove that the products they sell or the services they provide are not flawed (Prastyantoro, et al., 2022).

### External Risks

External risks can evolve from the changes in the political, economic, and legal system, from the e-commerce supply chain organizations, or from the e-commerce system where the startups operate. The e-commerce supply chain is the sequence of organizations including their facilities, functions, and activities involved in e-commerce. Supply chain risks, such as fraud from the buyer or supplier, customer disputes, or logistics disruptions, can cause financial problems for e-commerce startups. The security threats such as malware, phishing attacks, hacking and spam mails from the e-commerce platform, or the unstable and crash of the Internet service provider (ISP) server could cause errors and bugs in the online storefront and its payment system.

### Legal Risks

These risks encompass both internal and external risks. In fact, irrespective of the mode of connecting with consumers, e-business owners face a myriad of legal risks which can be financially devastating to a business. These legal risks include, but are not limited to the following:

#### □ Intellectual Property Considerations

In the United States, “Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” (U.S. Const. art. I, §8). From this constitutional language, intellectual property rights were created. Intellectual property is defined as “assets whose value is not based on its material components, but instead is driven by its creative and useful elements.” (Chester, 2021). Therefore, it is essential that business owners understand the rights surrounding these financial assets and seek to protect their own copyrights, patents, trade secrets, and trademarks.

Equally, entrepreneurs should readily recognize not only what each is, but also that trade secrets, trademarks, patents, and copyrights may not be infringed upon without consequences. These ramifications may range from receiving a cease-and-desist letter, to a claim filed against them, to outright litigation. These disputes can be extremely costly and have an impact on the financial strength of the business, if not well insured.

#### □ Online Contracts

Online contracts are like regular contracts. (Johary, 2021). They must have an offer, acceptance, an exchange of value, and mutual agreement between the parties. Digital contracts can present unique issues as to determining if an individual is bound by the terms of the contract with their e-signature. Thus, laws were promulgated to address legal uncertainties. One such law is the Electronic Signatures in Global and National Signatures (“E-Sign Act”) (2000). Subchapter I of the E-Sign Act governs signatures and electronic records that appear in foreign or interstate commerce. The Uniform Electronic Transactions Act (“UETA”) and Uniform Computer Information Transaction Act (“UCITA”) are model laws promulgated by the Uniform Law Commission that seek uniformity across the states and stability for these areas to assist online transactions.

These transactions typically have clickwrap agreements which are found on webpages that allow an individual to consent to the terms and conditions by clicking and are typically enforced. However, browse wraps are not usually enforced as the consumer agrees to terms and conditions simply by moving forward with a hyperlink explaining the same. Simply put, courts require more evidence to bind an individual, because “consumers are frequently left unaware that contractual terms were even offered.” See *Nguyen v. Barnes and Noble Inc.*, 763 F.3d 1171, 1176 (9th Cir. 2014). A contract is enforceable in this context only when: “the website provides reasonably conspicuous notice of the terms to which the consumer will be bound,” and if the consumer clicks a button or checks a box to show unambiguous assent to those terms. See *Meyer v. Uber Techs., Inc.*, 868 F.3d 66 (2d Cir. 2017);



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Nguyen, 763 F.3d at 1173; Berman v. Freedom Fin. Network, 30 F.4th 849 (9th Cir. 2022). These embedded contractual terms and conditions may include a cookie policy, return policy, warranty policy, ownership of content, jurisdictional considerations, dispute resolution, and so on (Kim, 2015; Bhandusavee, 2019). Anticipating disputes with customers is good practice and should be included in a legal which translates into a financial risk management strategy. Determining jurisdiction and placing the same in the terms and conditions of an end user's license agreement may favor the business owner's advantage. However, this may depend on the state in which litigation arises.

Privacy concerns should also be addressed by an e-business owner. Developing plans to handle information security for the substantial amounts of data requested, transferred, and stored would help deal with legal issues and public concerns (Electronic Communications Privacy Act, 1986; Children's Online Privacy Protection Act, 1998). Considering the far sweeping recent European Union's General Data Protection Regulation (2016), a law which broadly protects data of European citizens and imposes obligations, such as fines, on organizations that mishandle their data, business owners should seek to comply with not only this law, but also the numerous federal and state privacy laws (What is GDPR, the EU's new Data Protection Law?, 2022). Data breaches and other forms of improper handling of consumers' data could create real legal, and therefore financial, risks for a business owner.

### **Employees**

Employees may also accept employment via electronically. Once the individual does accept, business owners may utilize this as an opportunity to protect their e-commerce business during onboarding, continuously monitoring, and offboarding. During onboarding, this is an opportunity to interject legal and financial risk management strategies from the onset of the contractual relationship. An example is protecting its intellectual property with contractual language ranging from non-disclosure contractual language to non-compete provisions that comply with prevailing jurisdictional authority. Also, e-commerce companies may wish to monitor their online personnel, but it carries substantial risks as well (Sharton and Neuman, 2017). Also, e-commerce companies face the same issues as brick-and-mortar companies. Recently, an e-commerce juggernaut, Twitter, is facing lawsuits based upon its recent mass layoffs (Duffy, 2022). Thus, companies must remain vigilant to follow various laws that govern all facets of employment as a prudent financial risk management strategy.

### **Other Litigation and Insurance**

Business owners should never ignore potential responsibility for a product placed in the stream of commerce. An organization could face legal action for the harm caused by a product that was ascertained via their e-commerce platform. Also, online entrepreneurs should be alerted that all states have strict liability statutes (Jacobsen, 2022). Product liability is just one of a myriad legal challenge that can be launched against an e-commerce company. For example, Google is facing a class action lawsuit from over 21 million people that alleges that the company engaged in anti-competitive behavior (Scarcella, 2022). To mitigate this risk, insurance becomes squarely in focus to protect

financially a startup e-commerce company from product liability claims. Thus, deciding the proper coverages for not only defective or harmful products, data breaches, personnel disputes, but also online advertising, defamation, unauthorized sales, and other insurable issues is an important consideration and should be top of mind when developing financial risk management strategies for the business (Garcia, n.d.).

### **Taxation**

Sales tax on online is a percentage of the total sale (Yoder, 2022). Properly reporting earnings to tax authorities is critical to the success of the business mission. In the United States, the IRS (Internal Revenue Service) seeks tax revenue from internet-based companies. Multiple states have also stepped up their respective enforcement apparatuses to ensure that they collect the tax revenue that is due to the entity. Failure to do so could result in litigation. In *South Dakota vs. Wayfair*, 504 U.S. 298 (2018), the U.S. Supreme Court ruled that states could impose taxes on businesses that lacked a physical presence in the state.

Online retailers should understand that this digital presence allows for the company to conduct business through their economic and virtual contacts. Id. As such, businesses should review the various thresholds of economic activity, be it annualized sales or the number of transactions, to any state that could trigger taxable events. Id. Online retailers should note that each state is different (Dunn, 2022). E-commerce entrepreneurs are responsible for court rulings that may impact their electronic enterprises. Given the number of legal risks that are ever present, digital entrepreneurs would do well to seek to join industry associations that can keep the business owner abreast of changes in the law to help them avoid legal, which could translate into financial pitfalls.

## **VI. RISK MANAGEMENT STRATEGIES**

To manage the risks, it is necessary to identify the risks, assess their likelihood of occurring and potential impact and then develop strategies for addressing those risks. The following Risk management strategies can be selected:

### **Risk avoidance.**

The e-commerce startups can decide not to deal with suppliers in a certain area. Startups can avoid buyers who default on their payment to prevent payment risks before they happen. Startups should contact and negotiate with the customer to solve a payment problem.

### **Risk reduction.**

The e-commerce startups can replace unreliable suppliers, retreat from those markets where the legal, economic, or political systematic risks are rising, redesign the product line for online marketing to reduce obsolescence. To reduce security risks, startups should update the online platform's operating system regularly, and use a strong SSL (Secure Sockets Layer).

### **Risk sharing.**

The e-commerce startups can have contractual arrangements with supply chain partners to spread the risk.

## **VII. FINANCIAL RISKS, ANALYSIS, AND MITIGATION STRATEGIES FOR STARTUPS**

### **Financial Risk Analysis**

With the rapid development of e-commerce companies, the current financial risk management model of e-commerce companies cannot meet the company's development requirements (Hagiu and Wright, 2013). E-commerce start-ups face significant financial obstacles, which directly affect the normal operation of the company. It is increasingly important to strengthen the financial risk management strategies of e-commerce companies (Faroughian, Kalafatis, Ledden, Samouel, and Tsaogas, 2011). There is limited access to "easy money" for online startups, the success rate for startups is low as 9 out of 10 startups will fail and most importantly e-commerce entrepreneurs must realize that not every startup will be the net eBay or Airbnb (Griffith, 2014). Therefore, it is increasingly important to strengthen the financial risk management of e-commerce companies (Jin-feng, 2011; Wienclaw, 2021).

The value of a network increases as more people join a network; it becomes more useful to everyone who uses it. (Guo, Wei, Sharma, and Rong, 2017). The years from 2010 to 2015 were "...the steroid era of startups...when money was cheap and more plentiful and used as a performance-enhancing drug for company acceleration.... Cash was able to singlehandedly drive scale and growth. The zero-interest-rate environment created a generation of investors desperate for returns, and everyone—from angel investors to LPs— had money to put to work. "The overhang of cash pushed the market pendulum to swing from fear to greed, and with it came unprecedented round sizes, valuations, and total capital raised." ("Quora Question: Why Was Uber So Successful? -Newsweek") This level of venture money had not been seen since the 1999 tech bubble." (Rothman, 2016)

In fact, according to the Harvard Business Review, a decade ago there were only two online marketplaces valued at \$1 billion or more in the United States: eBay and Craigslist (Hagiu and Rothman, 2016). Today, more than a dozen businesses have soared past that milestone, including Airbnb, Etsy, Groupon, GrubHub, Seamless, Lending Club, Lyft, Prosper, Thumbtack, Uber, and Upwork (Hagiu and Rothman, 2016). However, most entrepreneurs do not have access to sufficient cash savings to cover their total startup costs (Jin-feng, 2011). They must seek alternative sources of funding, such as small business loans or peer-to-peer lending platforms like Indiegogo and Kickstarter (Faroughian, et al, 2011; Jin-feng, 2011). Securing funding requires taking on a certain amount of financial risk, even for those who are confident that their startups will eventually prove competitive within their markets (Faroughian, et al, 2011; Jin-feng, 2011; Tshimula, Togashi, and Ayuni, 2018; Wang, Ding, Yu, and Shyao, 2019). For those who do secure financing via traditional personal or small business loans, mitigating financial risks can be more of a challenge since there exists less leeway regarding ongoing funding and debt repayment (Tshimula, Togashi, and Ayuni, 2018; Wang, Ding, Yu, and Shyao, 2019).

### **Risk Mitigation**

A business model is a company's strategy for making earnings and profits (Agostinho et al., 2016, Allee, 2000; Vikas, 2012). The business model must accommodate any business disruption that may occur with the startup; company leaders must prioritize timely payments (Miranda and Swanstrom, 2020). This is especially important for startups that utilize investment capital to get off the ground. A clear business plan will help to instill confidence in investors and encourage them to continue writing checks to support the business as it gets off the ground. For example, of concern for Commerce businesses is taxation (Sicard, 2022). If the company processes shipments across the world, the financial manager must be aware of what sales taxes apply to each location. If there is any season an

entrepreneur cannot make timely loan payments, they should openly discuss the problem with the lender and try to produce an alternative payment plan.

Entrepreneurs overwhelmingly are risk taking innovators by nature, but they must strive to reduce unnecessary risks (short term and long term), manage evolving business requirements as venture grows and matures, and address cultural trends that offer new opportunities for entrepreneurial innovation (Wienclaw, 2021). Only by understanding, identifying, predicting, and avoiding potential financial risks and their causes, as well as effectively planning for unavoidable short term financial distresses (such as business disruptions) can companies preempt long-term financial distress and protect the interests of shareholders and creditors (Jin-Feng, 2011; Wienclaw, 2021).

E-commerce supply financing is specifically divided into three broad categories: advance payment financing (including agency procurement and confirmed warehouse financing), warehouse receipt, cargo rights pledge financing, and accounts receivable financing (Liu, et al., 2022). Financing companies, e-commerce platforms, commercial banks, and planning consider risk factors such as credit, market, and operations, and conduct analysis and research. Business model research is becoming a focus of attention among both academicians and practitioners. (Cearley et al., 2012; Liu, et al., 2022; Zott et al., 2011)

Digital business model (DBM) differs from business model on the basis that it can provide a two-way revenue model for both the customers and the sellers, so e-commerce stakeholders need to lay emphasis on both sides (Bocken et al., 2014). More supply attracts more demand, and more demand attracts more supply, and so on and that is both the challenge and the benefit of two-sided electronic markets (Yin et al., 2018). The challenge is that you need a lot of buyers to attract sellers, and you need a lot of sellers to attract buyers (Guru, Nenvani, Patel, Bhatt, 2020; Liu, et al., 2022). A good digital business model should make sure that the seller as well as the buyer gets benefited (Evans et al., 2009, Yin et al., 2018). Financial difficulties of companies endanger not only their survival but additionally the interests of investors, creditors, employees, and stakeholders. May have impact on country and society as well (Jin-Feng, 2011).

E-commerce stakeholders must keep in mind that traditional financial measures, such as the current ratio and quick ratio, are still crucial (Guru, Nenvani, Patel, Bhatt, 2020; Liu, et al., 2022). To assist financial investors' decision of whether to invest in the e-commerce companies, the potential investors analyze the financial risk evaluation of the Internet-based e-commerce supply chain (Cearley et al., 2012; Liu, et al., 2022; Zott et al., 2011). Managers must conduct risk identification and risk evaluation of the supply chain's financial risk to analyze the factors that affect e-commerce risks, such as legal risks, a range of factors that affect e-commerce security management, as well as any other mitigating factors (Guru, et al., 2020; Liu, et al., 2022).

### **Curriculum Impact**

E-commerce is currently one of the main influences in economic development and an increasing number of customers order products via the Internet because of lower prices, convenience, a wider range of products, etc. (Srinivas, 2017). Customers widely expect items to arrive as timely as expected with the availability of a wide selection of payment options and easy return options which necessitates efficiency in e-commerce supply chain management, most notably lean and agile processes (Kawa and Maryniak, 2018). Effective supply chain management ensures timely and effective movement and storage of all stages of inventory and finished goods from the point-of-origin to the point-of-consumption (Srinivas, 2017).

E-commerce risk and supply chain management facilitates increasing opportunities for post-secondary business students to discuss the challenges involved and business plans to meet the expectations of these different business stakeholders. Instructors must respond by developing innovative programs which increase the value of business education through interdisciplinary work, blending academia and practice, and driving change as opposed to reacting to change. That rapidly evolving world of e-commerce provides academic institutions and students the opportunity to learn and develop agile management practices to adapt quickly and easily to the constantly evolving economy.

## **VIII. CONCLUSION**

E-commerce startups can manage the financial risks through a process of identifying the major financial risks, assessing the probabilities of the risk occurrence, evaluating the alternatives, and then making decisions to select an appropriate strategy. The entrepreneur of the e-commerce startup should screen the external and internal environment of the organization to identify the major source of financial risks, then assess the probabilities of the risk occurrence. The environment may be under complete uncertainty, and we cannot even assess the probabilities for each outcome. Future research can be further study of the risk management process, such as decision making under uncertainty or risks.

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