Kaunas University of Technology
School of Economics and Business

International Business Growth of Women Entrepreneurs via Digital Products in Lithuania and Georgia

Master's Final Degree Project

Keso Gagoshidze
Project Author

Assoc. Prof. dr. Rita Jucevičienė
Supervisor

Kaunas, 2026

Kaunas University of Technology
School of Economics and Business

International Business Growth of Women Entrepreneurs via Digital Products in Lithuania and Georgia

Master's Final Degree Project
International Business (6211LX029)

Keso Gagoshidze
Project Author

Assoc. Prof. dr. Rita Jucevičienė
Supervisor

Assoc. prof. dr. Vytautė Dlugoborskytė
Reviewer

Kaunas, 2026

Kaunas University of Technology

School of Economics and Business

Keso Gagoshidze

International Business Growth of Women Entrepreneurs via Digital Products in Lithuania and Georgia

Declaration of Academic Integrity

I confirm the following:

1. I have prepared the final degree project independently and honestly without any violations of the copyrights or other rights of others, following the provisions of the Law on Copyrights and Related Rights of the Republic of Lithuania, the Regulations on the Management and Transfer of Intellectual Property of Kaunas University of Technology (hereinafter – University) and the ethical requirements stipulated by the Code of Academic Ethics of the University;

2. All the data and research results provided in the final degree project are correct and obtained legally; none of the parts of this project are plagiarised from any printed or electronic sources; all the quotations and references provided in the text of the final degree project are indicated in the list of references;

3. I have not paid anyone any monetary funds for the final degree project or the parts thereof unless required by the law;
4. I understand that in the case of any discovery of the fact of dishonesty or violation of any rights of others, the academic penalties will be imposed on me under the procedure applied at the University; I will be expelled from the University and my final degree project can be submitted to the Office of the Ombudsperson for Academic Ethics and Procedures in the examination of a possible violation of academic ethics.

Keso Gagoshidze

Confirmed electronically

Gagoshidze, Keso. International Business Growth of Women Entrepreneurs via Digital Products in Lithuania and Georgia. Master's Final Degree Project/supervisor Assoc. Prof. Dr Rita Jucevičienė; School of Economics and Business, Kaunas University of Technology.

Study field and area (study field group): Business, Business and Public Management

Keywords: *women's entrepreneurship, digital entrepreneurship, artificial intelligence, internationalisation, institutional theory, digital bricolage, post-Soviet transition economies, Lithuania, Georgia*

Kaunas, 2026. 104 p.

Summary

This thesis explores how women entrepreneurs in Lithuania and Georgia use digital and AI-enabled products to overcome institutional and cultural barriers and to develop innovative, internationally oriented business practices. Based on 27 semi-structured interviews analysed using qualitative thematic analysis in MAXQDA 24, the findings show that digital and AI tools function as everyday adaptive infrastructure rather than innovation projects, solving concrete problems of cost, time, expertise, visibility, and legitimacy under conditions where formal institutional support is fragmented or inaccessible. Participants combined digital platforms, AI systems, personal networks, and improvisational strategies into layered adaptive ecosystems, with Lithuanian participants more often using these tools for optimisation and structured growth and Georgian participants using them as survival-oriented resource compensation under unstable conditions. The thesis develops three connected theoretical concepts grounded in the data - *Adaptive Digital Compensation*, *AI-Enabled Entrepreneurial Bricolage*, and *Internationalisation-as-Escape* - which together integrate institutional theory, digital entrepreneurship, dynamic capabilities, and bricolage into a unified analytical framework. The central argument is that the main challenge facing women entrepreneurs in these contexts is not access to digital technologies but how to use them meaningfully under different institutional conditions, and that the women interviewed are already doing this work pragmatically, creatively, and often without adequate institutional support.

Gagoshidze, Keso. Moterų verslininkių tarptautinio verslo augimo sprendimai, pasitelkiant skaitmeninius produktus, Lietuvoje ir Sakartvele. Magistro baigiamasis projektas vadovė Doc. dr. Rita Jucevičienė; Kauno technologijos universitetas, Ekonomikos ir verslo fakultetas.

Studijų kryptis ir sritis (studijų krypčių grupė): Verslas, Verslas ir viešoji vadyba.

Reikšminiai žodžiai: *moterų verslumas, skaitmeninis verslumas, dirbtinis intelektas, internacionalizacija, institucinė teorija, skaitmeninis pasitelkimas (bricolage), posovietinės pereinamosios ekonomikos, Lietuva, Sakartvelas.*

Kaunas, 2026. 104 p.

Santrauka

Šiame magistro darbe tiriama, kaip moterys verslininkės Lietuvoje ir Sakartvele naudoja skaitmeninius bei dirbtiniu intelektu grindžiamus produktus, siekdamos įveikti institucinius ir kultūrinius barjerus bei plėtoti inovatyvią, į tarptautinę rinką orientuotą verslo praktiką. Remiantis 27 pusiau struktūruotais interviu, kurie buvo analizuojami taikant kokybinę teminę analizę programine įranga MAXQDA 24, tyrimo rezultatai rodo, kad skaitmeninės ir dirbtinio intelekto priemonės veikia kaip kasdienė adaptyvi infrastruktūra, o ne kaip atskiri inovacijų projektai - jos sprendžia konkrečias kaštų, laiko, kompetencijos, matomumo ir legitimumo problemas tose situacijose, kuriose formali institucinė parama yra fragmentuota arba neprieinama. Tyrimo dalyvės derino skaitmenines platformas, dirbtinio intelekto sistemas, asmeninius tinklus ir improvizacines strategijas, kurdamos daugiasluoksnes adaptyvias ekosistemas: Lietuvos dalyvės šias priemones dažniau naudojo veiklos optimizavimui ir struktūruotam augimui, o Sakartvelo dalyvės - kaip į išlikimą orientuotą išteklių kompensavimo būdą nestabiliomis sąlygomis. Darbe suformuluojamos trys tarpusavyje susijusios, duomenimis pagrįstos teorinės sąvokos - *adaptyvi skaitmeninė kompensacija* (Adaptive Digital Compensation), *dirbtiniu intelektu grindžiamas verslumo pasitelkimas* (AI-Enabled Entrepreneurial Bricolage) ir *internacionalizacija kaip pabėgimo strategija* (Internationalisation-as-Escape) - kurios kartu integruoja institucinę teoriją, skaitmeninį verslumą, dinaminių gebėjimų teoriją ir bricolage koncepciją į vieningą analitinį karkasą. Pagrindinis darbo argumentas yra tas, kad esminis iššūkis šiose situacijose veikiančioms moterims verslininkėms yra ne prieiga prie skaitmeninių technologijų, o gebėjimas jas prasmingai panaudoti skirtingomis institucinėmis sąlygomis, ir kad tyrime dalyvavusios moterys šį darbą jau atlieka - pragmatiškai, kūrybiškai ir dažnai be pakankamos institucinės paramos.

Table of contents

List of figures

List of tables

List of abbreviations and terms

Abbreviations:

Assoc. prof. – associate professor;

Lect. – lecturer;

Prof. – professor.

AI. - artificial intelligence

SaaS - Software-as-a-service

Terms:

Adaptive digital compensation - the strategic use of digital and AI-enabled systems by entrepreneurs to compensate for institutional, financial, and capability-related limitations. Concept developed in this thesis**.**

AI-enabled entrepreneurial bricolage - the combination of digital tools, AI systems, personal networks, and improvised strategies to overcome resource constraints in entrepreneurial activity. Concept developed in this thesis.

Institutional theory - a framework explaining how formal rules and informal norms shape legitimate and acceptable behaviour within society (North, 1990)**.**

Internationalisation - the expansion of business activities into foreign markets.

Internationalisation-as-escape - expansion into international digital markets motivated partly by attempts to bypass domestic institutional and structural constraints. Concept developed in this thesis.

Legitimacy - the perception of an entrepreneur or business as credible, appropriate, and trustworthy within a given context.

Sociotechnical systems - systems in which technological, social, and institutional elements interact and shape outcomes.

Women's entrepreneurship - entrepreneurial activity led or co-founded by women, examined in relation to gendered patterns of opportunity, access, and business development.

Introduction

Women's entrepreneurship has expanded considerably across transition economies in recent years, yet the firms women build tend to remain smaller, less innovative, and less internationally engaged than those led by men (Ng & Fu, 2025; Sorgner et al., 2024). This gap is difficult to explain through individual motivation or capability alone; it points instead to the cultural expectations and institutional conditions that continue to shape women's entrepreneurial trajectories - conditions in which structural inequality remains as participation grows (Chitac et al., 2025).

From an international business perspective, entrepreneurship does not happen in isolation - decisions related to it are shaped by the institutional environment, including cultural contexts, laws, regulations, support systems, and informal norms that define acceptable economic behaviour (Ashraf et al., 2025). In transition economies, where institutions are still developing or remain unstable, these factors strongly influence who becomes an entrepreneur and how businesses grow (Sorgner et al., 2024). Women entrepreneurs are often more affected by these conditions because they tend to have weaker access to financial capital, business networks, and innovation ecosystems.

Digital products and AI-enabled tools are often described as solutions that can lower barriers to entrepreneurship. They allow flexible working, remote access to markets, and faster testing and experimentation with new business ideas. In international business research, digitalisation is also linked to innovation and early internationalisation, especially for small firms (Alon et al., 2025). However, existing studies show that digitalisation alone does not remove gender-based inequalities. Women's ability to benefit from digital tools depends on broader sociotechnical systems, cultural expectations, and institutional support (Huang et al., 2025).

Although research on digital entrepreneurship and women's entrepreneurship is growing, there is still a limited understanding of how women entrepreneurs themselves experience and use digital and AI-enabled products. Specifically, qualitative insight is missing on how women in different post-Soviet contexts - including in stable and transition economies - interpret digital tools and use them as pathways to overcome institutional and cultural barriers, while also developing innovative and internationally oriented business practices. Addressing this gap is important both for academic research in international business and for the design of more effective support policies for women entrepreneurs.

In this context, Lithuania and Georgia serve as comparative cases representing distinct post-Soviet institutional environments. Lithuania operates within a relatively stable institutional environment as a member of the European Union - it has developed digital infrastructure and access to international markets. However, gender gaps remain visible in innovation-driven sectors and in access to growth-oriented entrepreneurial support (Gadomska-Lila & Ścibior-Butrym, 2025; Alon et al., 2025). On the other hand, Georgia is a non-EU transition economy in which institutional arrangements are less stable, and informal norms continue to strongly influence women's entrepreneurial opportunities and strategic choices (Işık et al., 2025). Studying these two contexts together enables a better understanding of how women entrepreneurs use digital and AI-enabled tools across different institutional conditions, and how these conditions shape their innovation and internationalisation efforts.

Research Problem and Question: Despite the growing use of digital technologies, there is still limited understanding of how women entrepreneurs in Lithuania and Georgia actually use digital

and AI-enabled products to deal with cultural and institutional barriers and to support innovation and internationalisation. For this reason, this study focuses on the following research question: *How do women entrepreneurs in Lithuania and Georgia use digital and AI-enabled products to adapt to cultural and institutional constraints and to develop innovative, internationally oriented business practices?*

Accordingly, the subject matter of this research is how women entrepreneurs in Lithuania and Georgia use digital and AI-enabled products across different institutional contexts, with a focus on how these tools are interpreted, adopted, and applied.

The aim of this thesis is to examine how digital and AI-enabled products support women entrepreneurs' business growth and internationalisation in Lithuania and Georgia, and to propose managerial solutions for overcoming related institutional and cultural barriers.

Research objectives:

1. To analyse the problem of international business growth among women entrepreneurs using digital products in Lithuania and Georgia.
2. To theoretically substantiate the role of digital and AI-enabled products as enabling mechanisms that help women entrepreneurs overcome institutional and cultural constraints and access international markets.
3. To justify the qualitative research methodology used to explore women entrepreneurs' experiences with digital and AI-enabled products in the two country contexts.
4. To propose managerial solutions and strategic recommendations for using digital and AI-enabled products to support women entrepreneurs' growth and internationalisation in Lithuania and Georgia.

Together, these four objectives shape the structure of the thesis: they frame the problem, build the theoretical foundation, justify the methodological approach, and lead into the managerial solutions presented at the end.

Methods of the research: This research uses qualitative research methods in order to analyse how women entrepreneurs in Lithuania and Georgia use digital and AI-enabled products under different institutional conditions to grow and internationalize their ventures. The theoretical part of the study is based on a systematic and comparative analysis of academic literature related to women's entrepreneurship, institutional theory, digital entrepreneurship, internationalisation, dynamic capabilities, digital bricolage, and AI-enabled innovation. Scientific articles, policy reports, international business research, and comparative studies from EU, non-EU, and post-Soviet contexts were analysed in order to identify the main barriers and enabling mechanisms shaping women entrepreneurs' activities. The empirical part of the research is based on a qualitative research design, using semi-structured interviews. Overall, 27 women entrepreneurs from Lithuania and Georgia were interviewed in order to explore their experiences with digital and AI-enabled tools, institutional barriers, internationalisation processes, and capability development. The collected data were analysed using qualitative thematic analysis in MAXQDA 24. Coding and categorisation were conducted by identifying and categorising recurring themes, patterns, similarities, and differences between the Lithuanian and Georgian contexts. The study uses an interpretivist approach to examine how women entrepreneurs themselves understand, interpret, and strategically use digital and AI-enabled products in their entrepreneurial activities.

Structure of the thesis. The thesis is structured as follows: Problem analysis (Chapter 1) presents the problem analysis, (Chapter 2) develops the theoretical framework by separating clear groups of

barriers and their corresponding enablers, (Chapter 3) explains the research methodology - including the systematic use of MAXQDA for data analysis - and the final chapter 4 presents and discusses the empirical findings.

1. Problem analysis: challenges for women entrepreneurs in Lithuania and Georgia

The first chapter looks at how women's entrepreneurship in Lithuania and Georgia is shaped not so much by personal choice, but by a mix of institutional, cultural, and digital barriers. While more women are starting businesses, those businesses tend to stay small, focused on local markets, and largely disconnected from innovation and international growth. Institutional conditions - both the formal rules and the unwritten norms - affect who gets access to funding, useful networks, and innovation ecosystems, and these dynamics hit especially hard in post-Soviet and transition settings. Digital tools are everywhere and women entrepreneurs do use them, but mostly for the basics like communication and marketing, rather than for building scalable digital or AI-driven products. Comparing Lithuania and Georgia shows that a more stable institutional environment doesn't automatically translate into better innovation outcomes for women, while weaker contexts make growth-oriented strategies even harder to pursue. What this points to, and what this thesis sets out to explore, is that the real gap isn't access to digital technologies - but the understanding of how women entrepreneurs are able to actually put them to use under very different institutional conditions to drive innovation and reach international markets.

1.1 Women’s Entrepreneurship in International Business Research

Women’s entrepreneurship has attracted attention in international business research, particularly as scholars seek to understand how gender interacts with innovation, digitalisation, and internationalisation processes. In 2025, women’s participation in entrepreneurial activity has increased across regions, although the structure and outcomes of women-owned businesses still differ significantly from those of businesses owned by men (Ng & Fu, 2025; Chitac et al., 2025). These differences are visible not only in firm size and sectoral distribution, but also in innovation, international market engagement, and long-term growth trajectories as well as perspectives (Sorgner et al., 2024; Chávez-Rivera et al., 2023).

Due to this, international business research emphasises that firms operate within complex institutional and competitive environments that shape strategic choices. From this perspective, entrepreneurship cannot be analysed only as an individual-level phenomenon, but it must be understood as part of broader systems of regulation, norms, and resource allocation (Chitac et al., 2025). Consequently, women entrepreneurs often face unequal and asymmetric access to these systems, which also affects their ability to turn entrepreneurial ideas into scalable, internationally competitive ventures.

Female entrepreneurship follows an inverted U-shaped relationship with economic development (Ng & Fu, 2025). At lower levels of development, women’s participation is limited, mainly due to institutional barriers and restricted labour market access. In middle-income and transition economies, women’s entrepreneurial activity increases as entrepreneurship becomes a viable alternative to wage employment. In high-income economies, participation may decline again as stable employment opportunities expand. However, this pattern hides qualitative differences: women’s businesses are more likely to remain necessity-driven and locally oriented even in contexts where participation rates are high (Sorgner et al., 2024). This distinction is critical, especially from an international business perspective, because innovation and internationalisation are key mechanisms that support entrepreneurship to contribute to economic development.

Research by Alon et al. (2025) additionally shows that innovation increases firms' ability to internationalise, while international exposure increases learning, experimentation, and capability development. Nevertheless, women-owned firms often struggle to access the financial resources, innovation ecosystems, and international networks required to engage in these processes (Sorgner et al., 2024). The analysis of the challenges female entrepreneurs face during internationalisation suggests that there are gendered differences in entrepreneurship that are structurally produced rather than individually chosen, which raises questions about how women entrepreneurs adapt to these conditions.

1.2 Institutional Frameworks and Gendered Entrepreneurial Behaviour

Analysis of institutional theory provided us with a central framework for understanding gendered entrepreneurial behaviour. Institutions consist of formal rules, such as laws and regulations, and informal norms, such as cultural expectations and social values. Together, these institutions shape what types of entrepreneurial behaviour are considered legitimate, feasible, and desirable (Chitac et al., 2025). Additionally, institutional quality is a strong predictor of women's entrepreneurial outcomes - strong institutions in the country reduce uncertainty, support contract enforcement, and facilitate access to finance, which are essential for innovation and internationalisation (Ashraf et al., 2025). On the other hand, weak or unstable institutions increase reliance on informal arrangements and personal networks, which often disadvantage women entrepreneurs (Sorgner et al., 2024).

Gendered institutions, as defined as "institutional arrangements that **treat men and women asymmetrically across regulative, normative, and cognitive dimensions"** (Wu & Si, 2019), influence entrepreneurial behaviour, by affecting perceptions of risk, leadership, and technological competence - here, those who are female and owning their own businesses often face higher legitimacy thresholds, meaning they must demonstrate greater competence or credibility to receive the same level of support as male entrepreneurs (Huang et al., 2025). These legitimacy challenges actively affect access to finance, partnerships, and innovation ecosystems. Additionally, comparative research performed by Sogner and the colleagues in 2024 shows that institutions also influence whether women engage in opportunity-based or necessity-based entrepreneurship. It shows that in weaker institutions and the environments shaped by them, female business owners are more likely to be driven by necessity and focused on survival rather than growth (Sorgner et al., 2024). This creates conditions in which investment in innovation and international expansion becomes more difficult, even when digital technologies are available.

1.3. Digital Entrepreneurial Ecosystems and Gender

Digital entrepreneurial ecosystems consist of interconnected actors – institutions, technologies, and support mechanisms – that shape entrepreneurial activity. Recent research shows that digital ecosystems can support women's entrepreneurship only when specific configurations of institutional, social, and technological factors are present (Huang et al., 2025). Based on the same research, access to digital infrastructure alone is insufficient - women benefit from digital ecosystems when they are combined with supportive norms, education, mentorship, and policy frameworks that address gender-specific barriers (Huang et al., 2025). Without them, digital tools may even further support existing inequalities rather than promote inclusive entrepreneurship (Salamzadeh et al., 2024) .

The comparative study by Huang et al. (2025) shows that women are more likely than men to use digital technology not for innovation or automation but for communication, marketing, or customer service (Huang et al., 2025). This limits the extent to which digital ecosystems which are available will be used for innovation and internationalization in women-led companies.

1.4 Innovation and Internationalisation in Female-Owned Businesses

Building on the previous sections, the subchapter focuses specifically on innovation and internationalisation as outcomes shaped by institutional and digital conditions. Alon et al.'s research in international business from 2025 shows that these two processes are closely interconnected, specifically for small and female-owned firms, as women-owned businesses are more likely to innovate and engage in international markets when specific combinations of digital capabilities, institutional support, and strategic orientation are present (Pergelova et al., 2019; Alon et al., 2025). Thus, digital products and services can lower transaction costs and open access to international markets with relatively low initial investment. However, women entrepreneurs often face barriers related to financing, strategic knowledge, and access to international networks, which limit their ability to fully benefit from the opportunities (Floris & Palmas, 2024). At the same time, recent evidence from Hellmann et al. (2025) from equity crowdfunding markets shows that gender gaps still persist to this day even in seemingly democratising digital finance channels, but as the research suggests specific fundraising strategies can narrow the gap (Hellmann et al., 2025).

Institutional context plays a crucial role in shaping how innovation and internationalisation develop. In European Union contexts such as Lithuania, an institutional environment, characterized as relatively stable, supports international expansion, yet gender gaps are still present in innovation-driven and high-growth sectors (Skica et al., 2025). In non-EU and crisis-affected contexts, institutional instability further constrains long-term innovation strategies, even when digital tools are available (Ashraf et al., 2025).

Overall, these findings suggest that innovation and internationalisation in women-led businesses cannot be understood without considering institutional constraints and the conditions under which entrepreneurial capabilities are developed.

1.5 Post-Soviet Legacies and Transition Economies

While more than 30 years have passed since the dissolution of the Soviet Union, there are factors to consider that make the post-Soviet and transition economies share institutional and cultural legacies that continue to shape entrepreneurial behaviour. Central planning systems restricted private enterprise and shaped gendered labour divisions, which placed women primarily within wage employment and care roles. Informal norms and institutional gaps remain deeply prevalent, even though the formal restraints have been removed and initiatives towards equality have been evident in these economies (Chitac et al., 2025). Entrepreneurship often emerges as a response to labour market instability rather than as a strategic choice oriented toward innovation or internationalisation (Ng & Fu, 2025) - women entrepreneurs in post-Soviet contexts often act under prolonged conditions of uncertainty, limited finances, and weak institutional support, as these institutional characteristics have remained present throughout the post-1991 transition period and continue to shape entrepreneurial behaviour more than 30 years after independence (Sorgner et al., 2024; Chitac et al., 2025).

These historical legacies explain the persistence of small-scale, more local entrepreneurship among women, rather than internationalized ones. Even when digital tools and international markets are accessible, women entrepreneurs may hesitate to pursue aggressive growth strategies due to perceived risk and limited institutional protection (Floris & Palmas, 2025). Thus, post-Soviet economies often show more women starting businesses (entry-level is high), but there are low rates of innovation and internationalisation led by them.

Lithuania and Georgia were chosen for this research because they share a common post-Soviet historical background, but their institutional development after independence has followed different paths. Both countries inherited centrally planned economic systems, where private entrepreneurship was limited and gender roles in the labour market were strongly shaped by the state, with women more often positioned in wage employment and care-related roles rather than as independent business owners (Aidis et al., 2007; Kataeva et al., 2023). Although more than 30 years have passed since the collapse of the Soviet Union, research shows that these historical arrangements continue to influence entrepreneurial behaviour through informal norms, expectations, and institutional gaps that remain present in many post-Soviet and transition economies (Aidis et al., 2007; Kataeva et al., 2023).

Lithuania represents a post-Soviet country that has experienced deeper and longer institutional transformation through European Union membership. Since joining the EU in 2004, Lithuania has been operating within EU regulatory, competition, and equality frameworks, which have contributed to more stable formal institutions and easier access to international markets (Gadomska-Lila & Ścibior-Butrym, 2025; Chitac et al., 2025; Aidis et al., 2007; Kataeva et al., 2023). The literature generally associates longer exposure to stable institutional environments with lower uncertainty for entrepreneurs and more predictable conditions for business development, including innovation and internationalisation (Ashraf et al., 2025; Sorgner et al., 2024). However, recent studies also point out that even in EU contexts, gendered barriers do not disappear, and women entrepreneurs often remain underrepresented in high-growth and innovation-oriented ecosystems despite formal equality policies (Gadomska-Lila & Ścibior-Butrym, 2025; Alon et al., 2025).

Georgia, on the other hand, is a non-EU transition economy in which institutional reforms have been introduced slowly and in which informal practices still play a stronger role. Even though Georgia has implemented legal and regulatory changes aimed at improving the business environment, research indicates that enforcement remains uneven and that women entrepreneurs continue to rely heavily on informal networks and personal resources (Işık et al., 2025; Keshelava et al., 2024). Studies also show that recurring political, economic, and geopolitical instability has shaped entrepreneurial activity in Georgia toward short-term adaptation and survival rather than long-term growth and innovation strategies (Sorgner et al., 2024; Ng & Fu, 2025).

From this perspective, comparing Lithuania and Georgia (Figure 1) makes it possible to evaluate how women entrepreneurs use digital and AI-enabled products under two different post-Soviet institutional conditions. Both contexts are shaped by similar historical legacies, but they differ in institutional stability, policy enforcement, and ecosystem maturity - comparative research from 2025 suggests that such contrasts help explain how institutional environments influence entrepreneurial strategies and the ways digital tools are interpreted and used in practice (Chitac et al., 2025; Huang et al., 2025). Keeping the post-Soviet background constant and varying the level of

institutional development, this study can better explore how women entrepreneurs adapt to institutional constraints and attempt to pursue innovation and internationalisation through digital pathways (Sorgner et al., 2024; Aparicio et al., 2025).

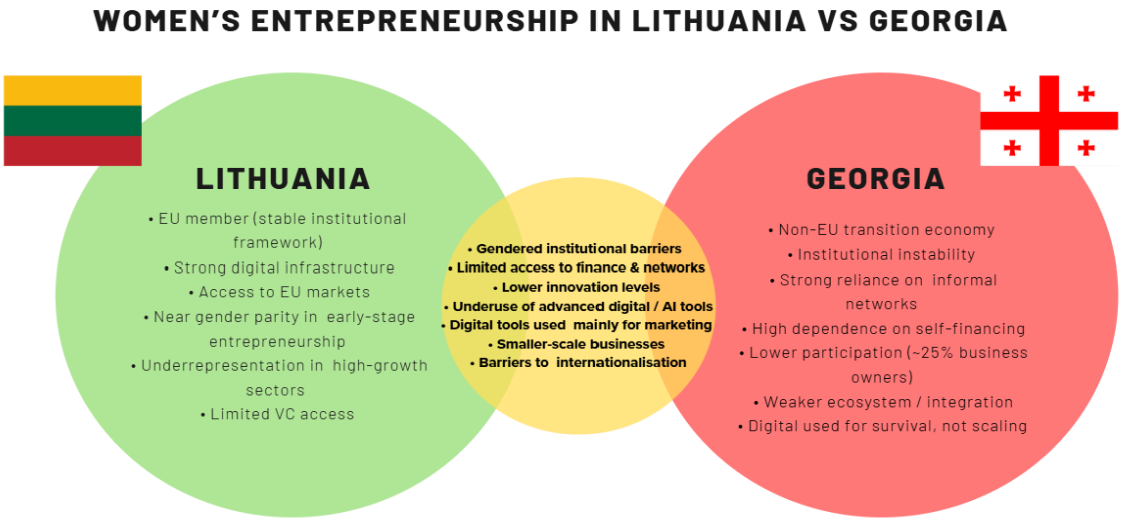

Fig. 1. Women's Entrepreneurship in Lithuania vs Georgia

Comparative Perspective: Lithuania vs Georgia

Even though Lithuania and Georgia share a post-Soviet background, women entrepreneurs experience different institutional conditions in each country. Lithuania operates within a more stable EU environment with stronger digital infrastructure, wider market access, and more developed innovation ecosystems. In contrast, Georgia is characterised by weaker institutional support, stronger reliance on informal networks, and higher economic uncertainty (Gadomska-Lila & Ścibior-Butrym, 2025; St-Onge & Stevenson, 2023).

In Lithuania, digital and AI-enabled products are more often used for optimisation, visibility, and gradual international growth. However, women still remain underrepresented in innovation-driven and high-growth sectors (Mačiukaitė-Žvinienė & Skliaustas, 2025). In Georgia, digital tools function more as adaptive and survival-oriented mechanisms that help women compensate for limited financial access and institutional instability (Keshelava et al., 2024; St-Onge & Stevenson, 2023).

Aside from differences there are several **shared enabling mechanisms that emerged** across both contexts. Women entrepreneurs in both countries used digital and AI-enabled products to reduce dependence on traditional institutional barriers, strengthen visibility, experiment with business models, and gradually build entrepreneurial confidence (Huang et al., 2025; Aparicio et al., 2025). Across both institutional environments, digital tools supported interconnected adaptive processes, including institutional navigation, digital adaptation, and psychological empowerment. These shared mechanisms contributed to innovation, legitimacy development, and internationalisation, although the intensity and purpose of digital engagement differed between the two countries (Huang et al., 2025; Aparicio et al., 2025).

Women's entrepreneurship in Lithuania

Lithuania, as a post-Soviet economy that has undergone significant institutional transformation through European Union integration, has strengthened regulatory frameworks, improved access to international markets, and expanded digital infrastructure (Gadomska-Lila & Ścibior-Butrym, 2025). However, these institutional improvements have not translated equally into entrepreneurial outcomes for women - according to the Global Entrepreneurship Monitor Lithuania National Report 2024/2025, early-stage entrepreneurial activity in Lithuania shows near gender parity, with 11.7% of women and 11.6% of men involved in starting or running new businesses (Mačiukaitė-Žvinienė & Skliaustas, 2025). Despite this relatively balanced entry level, women's participation declines at later stages of business development, especially among established firms and innovation-driven sectors (Mačiukaitė-Žvinienė & Skliaustas, 2025).

Empirical evidence from Gadomska-Lila & Ścibior-Butrym's research (2025) further suggests that women entrepreneurs in Lithuania are less likely to scale their businesses or engage in rapid internationalisation, women founders are underrepresented in high-growth and technology-oriented sectors, and are also less likely to receive venture capital or participate in accelerator programmes compared to male-led firms (Gadomska-Lila & Ścibior-Butrym, 2025; Alon et al., 2025). Within the Lithuanian startup ecosystem, around 38% of startups have at least one female co-founder, but only about 15% of startup teams are composed mainly of women, and a notable share of startups operate without any female founders at all (Mačiukaitė-Žvinienė & Skliaustas, 2025).

These patterns suggest that, even though formal institutions in Lithuania support women's entry into entrepreneurship, important informal barriers within innovation y with a similar post-Soviet background, have implemented several reforms to improve its business environment, but the outcomes remain uneven for women entrepreneurs.

Women's entrepreneurship in Georgia

Georgia, as a non-EU transition economeyond domestic institutional limitations, which thereby supports innovation and early internationalisation under limited conditions (Alon et al., 2025; Huang et al., 2025). However, digital transformation does not operate as a neutral or universally supportive process, as its outcomes depend on how digital tools are rooted and embedded within sociotechnical systems shaped by institutional arrangements, cultural expectations, and access to skills and support (Huang et al., 2025). Analysing digitalisation through this lens supports an analytical shift away from treating technology as a background condition and instead allows for an examination of how women entrepreneurs use digital products in relation to institutional and cultural limits across different national and cultural contexts.

Access to finance is one of the strongest structural barriers. National survey evidence indicates that 74% of women entrepreneurs identify high interest rates as a major obstacle, 51% report excessive collateral requirements, 38% are required to provide personal guarantees, and 37% need a co-signer when applying for business loans, even though women are generally considered low-risk borrowers (St-Onge & Stevenson, 2023). As a result, many women rely on personal savings or family support rather than formal financial instruments. In terms of digitalisation, women entrepreneurs are not excluded from basic technology use, as around 76% use digital devices in their businesses; however, more advanced digital engagement remains limited. Only 32% report having an online

presence, 23% sell products online, and just 6% use websites for sales, which limits opportunities for scaling and international expansion (St-Onge & Stevenson, 2023).

Women entrepreneurs in Georgia are also weakly integrated into formal entrepreneurial ecosystems. Evidence shows that only 4% are members of business associations, and around 2% participate in women-focused business associations, which restricts access to networks, mentorship, and policy dialogue (St-Onge & Stevenson, 2023). Overall, these findings suggest that while Georgia has improved formal institutions and basic digital access, deeper informal constraints related to finance, ownership norms, and ecosystem participation continue to shape women's entrepreneurship, pushing many women toward small-scale, locally oriented, and risk-averse business activities rather than innovation-driven or internationally scalable ventures. Recent research assessing the impact of the Law of Georgia on Entrepreneurs shows that women continue to be underrepresented in business ownership and creation. In 2022, only about 25% of newly registered businesses were founded by women, while close to 60% were founded by men, which indicates a persistent gender gap in entrepreneurial entry (Keshelava et al., 2024). The same study also shows that women own only around one-third (approximately 33%) of economically active enterprises, and most women-led firms remain micro or small in size, with limited growth potential (Keshelava et al., 2024; St-Onge & Stevenson, 2023).

1.6. Digital transformation and sociotechnical systems

From the perspective of this master's thesis, digital transformation is analytically significant because it reshapes how women entrepreneurs engage with institutional and cultural limits, rather than simply adapting to them (Huang et al., 2025). Digitalisation, and, specifically, the development and scaling of digital and AI-enabled products, changes the conditions under which entrepreneurial activity becomes viable - which reduces dependence on local markets, informal networks, and traditional institutional gatekeepers that are often structured by gendered norms (Aparicio et al., 2025).

In the Lithuanian and Georgian contexts, digital products are discussed in the literature as enabling women entrepreneurs to experiment with business models, access international customers, and construct legitimacy becosystems remain. Cross-national evidence from Huang et al., (2025) shows that none of the formal or digital ecosystem elements such as government policies, financial capital, infrastructure, or the digital economy alone is sufficient to explain high levels of female entrepreneurial activity, as all individual effects fall below the established necessity threshold ($d < 0.10$) (Huang et al., 2025). Instead, women's entrepreneurship tends to develop through specific combinations of conditions, with supportive social norms consistently playing a central role. This suggests that in highly digitalised and institutionally supportive contexts like Lithuania, gendered norms, network exclusion, and implicit bias within investment and innovation communities may continue to limit women's access to growth-oriented resources, which leads many women entrepreneurs to prioritise stability over scalability even though they operate in a sufficient regulatory and digital environment (Huang et al., 2025).

1.7. Research gap and problem formulation

Even with the rising interest in research about women and entrepreneurship, digitalization, and international business, there are several important gaps that still exist. There is a lack of comparative research studies performed under the EU, non-EU, and crisis-post-Soviet context - various studies focus on individual countries or issues, there is a lack of research combining institutional theory, digital transformation, international business research within one framework (Ashraf et al., 2025; Yusupova, 2024). Third, digitalisation is conceptualised primarily as a background condition, and not as an actively pursued pathway via which women entrepreneurs can aim to reach their goals. The extent to which women entrepreneurs interpret and utilise these tools to deal with different barriers is also not well understood.

Overall, these gaps point to a lack of understanding of how women entrepreneurs actively interpret and use digital and AI-enabled tools across different institutional contexts. These gaps justify qualitative research on women entrepreneurs in Lithuania and Georgia, focusing on their reliance on these technologies to overcome institutional limitations while also designing innovative, globally focused business practices.

1.8. Digital engagement under institutional constraints: concluding synthesis of the problem

The analysis in this chapter shows that women entrepreneurs in both Georgia and Lithuania actively use digital tools, but mainly in limited and context-specific ways. In Georgia women who own businesses often depend on informal networks and family support to keep their businesses running, which is visible in the survey from 2023: over 60% of women entrepreneurs in Georgia rely primarily on personal savings or family resources for business financing, while fewer than 20% report access to formal external finance (St-Onge & Stevenson, 2023). Digital platforms for them are mainly used for marketing, visibility, and communication, although the use of more advanced digital or AI-enabled tools still remains low. While around 76% of women entrepreneurs report using digital devices for business purposes, only 32% have an online presence, 23% sell products online, and just 6% use websites for sales, which suggests limited engagement with advanced digitalisation (St-Onge & Stevenson, 2023; Huang et al., 2025). This type of digital engagement helps maintain local business activity but restricts innovation and reduces opportunities for international expansion as women-led firms in transition economies are significantly less likely to introduce product or process innovations or to operate in foreign markets compared to male-led firms (Sorgner et al., 2024; Işık et al., 2025).

In Lithuania, institutional conditions and digital infrastructure are more developed, and women entrepreneurs have better access to formal support mechanisms, but similar limits can still be observed. Digital tools are widely used, though they are more often applied to day-to-day business activities rather than to the development of scalable digital or AI-enabled products that support innovation and international growth. Although early-stage entrepreneurial activity shows near gender parity, women account for a substantially smaller share of innovation-driven and high-growth ventures, and only around 15% of startup teams are predominantly female, despite broader digital readiness and policy support (Mačiukaitė-Žvinienė & Skliaustas, 2025; Huang et al., 2025; Aparicio et al., 2025). As a result, women remain underrepresented in innovation-driven and high-growth entrepreneurial activity, even in a more supportive institutional environment.

These findings highlight a key problem addressed in this thesis. The availability of digital technologies does not automatically lead to innovation or internationalisation for women entrepreneurs; instead, how digital tools are used is strongly shaped by institutional conditions, access to resources, and gendered expectations that influence confidence, risk-taking, and perceptions of legitimacy. Cross-national configurational evidence shows that no single digital or institutional factor is sufficient to produce high levels of female entrepreneurial innovation, as all individual effects fall below the necessity threshold ($d < 0.10$) (Huang et al., 2025; Aparicio et al., 2025). In weaker institutional contexts, digital tools mainly support business survival and local orientation, but in more stable contexts they do not necessarily lead to growth-oriented or internationally scalable business models.

Therefore, the central issue in this thesis is not whether women entrepreneurs adopt digital technologies, but how they use them under different institutional conditions. Limited engagement with advanced digital and AI-enabled tools remains visible across contexts, with women entrepreneurs significantly less likely to develop scalable digital products or innovation-intensive business models, which helps explain why women-owned businesses in both Georgia and Lithuania continue to face barriers to innovation and internationalisation (Sorgner et al., 2024; Huang et al., 2025; Aparicio et al., 2025). This synthesis of the problem gap directly connects the problem analysis to the core focus of the thesis, which focuses on exploring digital products as possible pathways through which women entrepreneurs can deal with, bypass, or partially overcome cultural and institutional limits in different national contexts, using the example of Lithuania and Georgia as the focus of the analysis of this issue.

2. Theoretical Solutions

This theoretical chapter discusses major academic theories from analyzed researches which explain women entrepreneurs' adaptation to the limitations imposed on them and innovation in international business. The theoretical barriers of structural, sociocultural, and psychological constraints shaping women entrepreneurs' capacity for innovation, scaling, and internationalisation are identified and structured together with theoretical managerial solutions. As a result, the chapter ends with proposing a conceptual framework (which will be tested in this research) on the analyzed problem and how digital products or AI-enabled tools influence outcomes for women entrepreneurship - proposing a conceptual framework (to be tested in this research) that explains the analysed problem and how digital products or AI-enabled tools influence outcomes in women's entrepreneurship.

This chapter is structured to move from explaining constraints to explaining solutions and adaptive responses. First, institutional and gender-focused theories are used to clarify why women entrepreneurs face unequal opportunity structures. Second, digital and capability-based theories explain how women adapt to these constraints in practice. Third, internationalisation theories are used to explain how digital and AI-enabled products allow women entrepreneurs to partially move beyond restrictive domestic environments. Taken together- these perspectives form the basis for the conceptual model developed at the end of this chapter, which directly informs and shapes the empirical design and interview themes of the study.

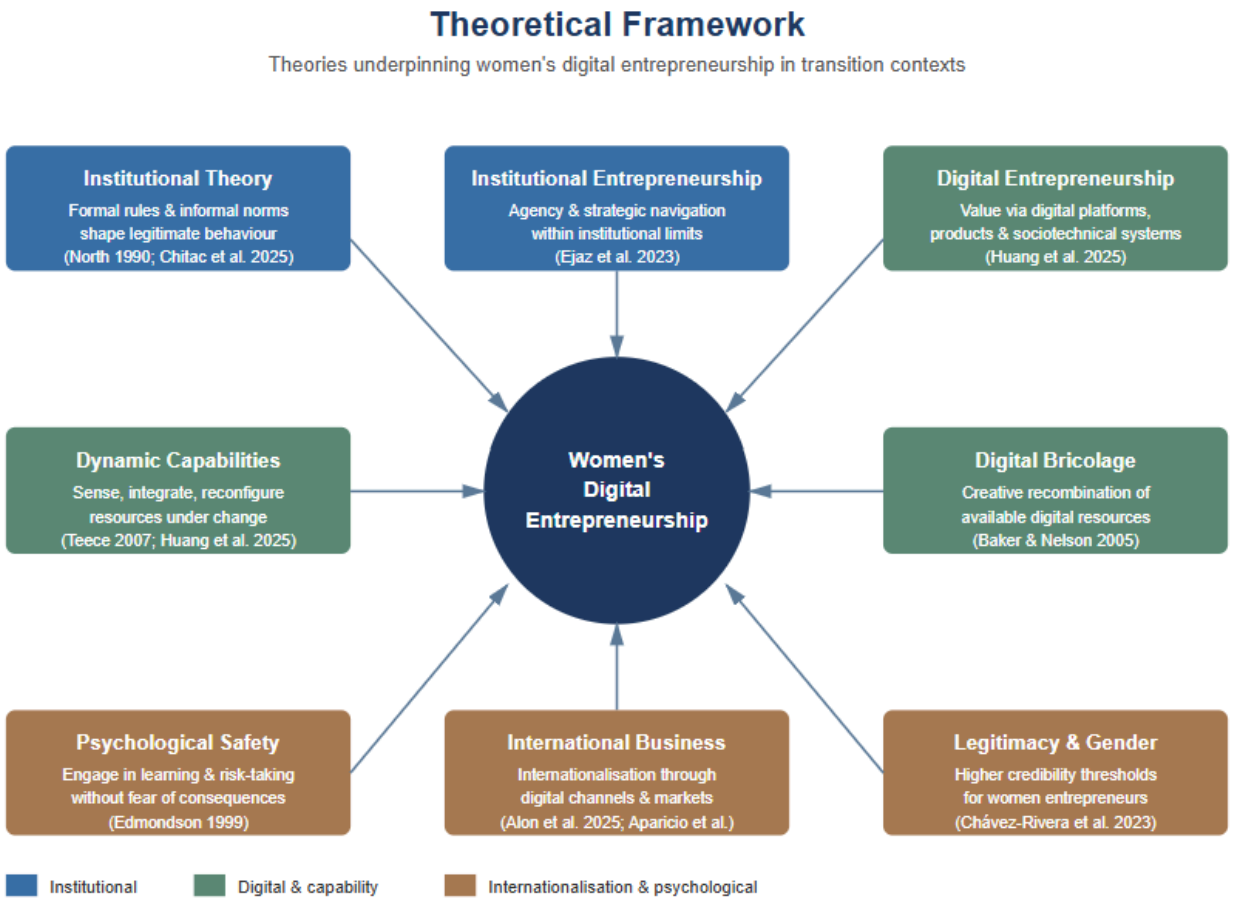

Fig. 2. Theoretical Framework of the Research

Rethinking women's entrepreneurship in digital and institutional contexts

To understand the conceptual model for this research, women's entrepreneurship has to be discussed in relation to the broader institutional and social environments in which entrepreneurial activity takes place. In recent years, the analysis of women's entrepreneurship has been increasingly advancing from considering only individual characteristics or market opportunities, to a phenomenon shaped by institutional structures, sociocultural norms, and economic conditions (Chitac et al., 2025; Sorgner et al., 2024). More so, gendered institutional arrangements influence not only entrepreneurial entry, but also the type of entrepreneurship that develops, specifically in terms of innovation orientation, internationalization and growth potential, and from an international business perspective, entrepreneurial behaviour is strongly connected to formal institutions such as laws, regulations, and support policies, as well as informal norms related to gender roles, legitimacy, and access to resources (Chitac et al., 2025). These institutional configurations influence both who becomes an entrepreneur and how entrepreneurial activity develops over time, particularly in terms of innovation orientation and scaling opportunities (Sorgner et al., 2024). For women entrepreneurs, these effects tend to be stronger, as gendered expectations and structural inequalities continue to shape access to finance, business networks, and decision-making positions (Chitac et al., 2025; Sorgner et al., 2024).

In transition and post-Soviet economies, institutional instability and historical legacies create additional challenges for women's entrepreneurial pathways (Sorgner et al., 2024; Ng & Fu, 2025). In such contexts women are more likely to engage in necessity-driven or survival-oriented entrepreneurship, even when formal entry barriers are relatively low (Sorgner et al., 2024; Ng & Fu, 2025). These patterns suggest that entrepreneurship cannot be fully explained through individual motivation alone, but needs to be analysed as a process shaped by institutional constraints and adaptive responses (Chitac et al., 2025). Qualitative research also points out that women entrepreneurs actively interpret and navigate these constraints, rather than simply reacting to them, especially in environments characterised by uncertainty or institutional gaps (Ejaz et al., 2023).

At the same time, digitalisation has changed entrepreneurial processes by supporting new ways of creating value, coordinating activities, and accessing markets beyond national borders (Huang et al., 2025). Digital entrepreneurship is, as a result, not limited to the use of digital tools for communication or efficiency, but increasingly involves the development of digital or digitally enabled products that depend on platforms, data-based processes, and network effects (Huang et al., 2025). These developments are specifically relevant for women entrepreneurs, as digital products may decrease reliance on local markets and traditional gatekeepers which are limited by national institutional contexts (Huang et al., 2025). However, the same research also shows that digitalisation does not automatically lead to more inclusive entrepreneurial outcomes, as participation in digital entrepreneurship is shaped by sociotechnical systems where technologies interact with institutional structures, cultural norms, and power relations (Huang et al., 2025).

Additionally, pressing on the same research from Huang et al., women's engagement with digital entrepreneurship often differs from that of men, especially in the types of digital activities they focus on (Huang et al., 2025). Women entrepreneurs are more likely to use digital technologies for marketing, communication, and customer interaction, while they remain underrepresented in the development of scalable and innovation-oriented digital products (Huang et al., 2025). These differences are mainly explained by institutional and social factors, such as legitimacy challenges,

confidence gaps, and unequal access to advanced skills and innovation-focused support networks, rather than to technological ability itself (Huang et al., 2025). As a result, digitalisation can function both as an opportunity and as a limitation for women entrepreneurs, which depends on how it is rooted and embedded within national and local entrepreneurial ecosystems (Huang et al., 2025).

This perspective is especially relevant for the research topic in Lithuania and Georgia. Even though both countries have experienced rapid digital development, research and policy reports show that gender gaps remain in innovation-driven and high-growth entrepreneurship (Mačiukaitė-Žvinienė & Skliaustas, 2025; St-Onge & Stevenson, 2023). These findings suggest that digital transformation alone is not enough to overcome institutional and gender-based barriers faced by women entrepreneurs (Mačiukaitė-Žvinienė & Skliaustas, 2025; St-Onge & Stevenson, 2023). This thesis creates a theoretical basis for assessing how women entrepreneurs use digital products as strategic pathways to adapt to limitations, build resilience, and develop their businesses in different institutional environments (Chitac et al., 2025; Huang et al., 2025). These patterns show that digital transformation alone is not sufficient to overcome institutional and gender-based barriers. To understand how women entrepreneurs respond to these conditions, it is necessary to describe the specific structural, sociocultural, and psychological barriers that shape their entrepreneurial activity, which is discussed in the following sections.

Key theoretical barriers shaping women entrepreneurs' growth and innovation

Table 1. Theory summary table

Theory	Key concept	What it explains	Relevance	Link to study
Institutional theory	Formal & informal rules	Why opportunities are unequal	Explains gender barriers	Explains constraints in LT & GE
Digital entrepreneurship	Digital value creation	How firms scale digitally	Enables access beyond institutions	Explains digital pathways
Dynamic capabilities	Adaptation & learning	How firms adjust	Explains resilience	Links to digital tool usage

Women entrepreneurs face various, interconnected barriers that shape their entrepreneurial trajectories across different institutional contexts. These barriers do not operate separately, but connect to each other structurally, socioculturally, and psychologically levels, which is visible in transition and post-Soviet economies, where institutional instability, unequal policy implementation, and persistent gender norms continue to influence women's access to entrepreneurial opportunities

(St-Onge & Stevenson, 2023; Giorbelidze & Jibladze, 2025). As a result, women's entrepreneurship in these contexts is often limited not by lack of motivation, but by limited access to resources, legitimacy, and supportive environments.

Structurally, women entrepreneurs frequently face unequal access to financial capital, innovation support mechanisms, and high-growth or technology-oriented sectors - in Georgia women-owned enterprises are typically smaller in size, generate lower average income, and are more concentrated in low-growth service sectors compared to male-owned enterprises, which includes stricter collateral requirements, weaker investor networks, and limited inclusion in innovation-oriented support programmes (Swaminathan et al., 2023). These structural patterns limit women's ability to grow their capital, invest in innovation, and further scale their strategies. Similar dynamics are observed across post-socialist and developing economies in central Asia, where gendered access to assets, credit, and business networks constrains women's ability to grow and scale their ventures (Akybayeva et al., 2024). Even when formal regulations appear gender-neutral, women often encounter indirect barriers.

At the sociocultural level, persistent gender norms and expectations further shape women's entrepreneurial behaviour and strategic choices. Research conducted in Lithuania shows that women's entrepreneurship is strongly influenced by life-course dynamics, caregiving responsibilities, and expectations related to appropriate professional roles and sectors (Mažuolė, 2025). These factors affect not only the sectors women enter, but also their willingness to take risks, pursue rapid growth, or engage in competitive entrepreneurial environments. In Georgia, national surveys indicate that women entrepreneurs continue to perceive discrimination in access to finance, business networks, and decision-making spaces, even when formal business regulations are relatively supportive (St-Onge & Stevenson, 2023). Such perceptions often influence women's sense of legitimacy within entrepreneurial ecosystems and often lead to more cautious or conservative business strategies.

Psychological barriers form a third, closely connected layer of limitation to women entrepreneurs. Factors, such as fear of failure, lower perceived self-efficacy, and limited psychological empowerment can reduce women's willingness to experiment, innovate, or pursue uncertain growth opportunities (Giorbelidze & Jibladze, 2025). These psychological barriers are often further reinforced by structural and sociocultural conditions, especially in environments characterised by institutional instability or crisis. Here in these contexts entrepreneurship involves higher perceived risk, and failure may carry stronger social and economic consequences for women, especially for those operating without strong financial or social safety nets (Giorbelidze & Jibladze, 2025).

Together these **structural, sociocultural, and psychological barriers** show that women's entrepreneurship cannot be adequately explained through individual motivation alone. Instead, entrepreneurial activity must be understood as embedded within institutional arrangements that shape access to resources, legitimacy, and adaptive capacity across contexts. Importantly, these structural, sociocultural, and psychological barriers do not operate independently, but they enable one another and shape how women interpret risk, opportunity, and legitimacy.

To improve the internal logic of the theoretical framework, these **barriers are grouped into three main categories: structural, sociocultural, and psychological.** Each group is addressed through corresponding enabling mechanisms discussed in the following sections. This allows for a clearer

alignment between types of barriers and the ways in which women entrepreneurs adapt to them, rather than treating solutions as only psychological or individual-level responses.

2.1. Institutional (structural) barriers and navigation solutions

Table 2. Structural and Institutional Barriers

Barriers	**Theoretical background**	**Enablers to overcome the barriers**	**Theoretical background**
Limited access to finance	Institutional theory (Chitac et al., 2025; Sorgner et al., 2024)	Digital market access and platform-based business models	Digital entrepreneurship (Huang et al., 2025)
Weak investor and business networks	Institutional theory; gendered resource access	Internationalisation through digital channels	International business theory (Aparicio et al., 2025)
Limited access to innovation support and high-growth sectors	Institutional and ecosystem constraints	Use of digital products to bypass traditional gatekeepers	Institutional entrepreneurship (Ejaz et al., 2023)

Institutional theory: structural limits and unequal opportunity

Institutional theory (table 2) provides a perspective to understand navigating limits and barriers women founders face, as discussed in the previous section - the theoretical framework offers a useful lens for understanding how entrepreneurial behaviour is shaped by formal rules and informal norms within different national contexts and more so - a research by Chitac et al., from 2025, shows that institutions influence incentives, expectations, and access to resources, and that these effects are not experienced equally by all groups (Chitac et al., 2025; Sorgner et al., 2024). For women entrepreneurs, institutional environments still generate gendered outcomes like before even when formal regulations promote equality, as informal norms and structural arrangements continue to shape access to finance, networks, and growth opportunities (Chitac et al., 2025). As a result, institutional conditions affect not only entrepreneurial entry, but also the type of entrepreneurship that develops, particularly in terms of innovation and scaling potential (Sorgner et al., 2024).

In transition economies such as Georgia, institutional fragility is often reflected in gaps between formal regulations and informal practices. Although in the early 2020s, Georgia has implemented regulatory reforms aimed at improving the business environment, gender impact assessments show that women remain underrepresented in entrepreneurship, especially in higher-growth and innovation-oriented activities (Keshelava et al., 2023). Structural disadvantages, including limited access to external finance, weaker investor networks, and sectoral segregation, continue to constrain women's entrepreneurial opportunities (St-Onge & Stevenson, 2023). These institutional constraints are particularly limiting for women seeking to enter technology-intensive or innovation-driven sectors, where access to capital and networks is critical (Keshelava et al.,, 2023).

The conditions in Lithuania are different, but related, institutionally. As a member of the European Union with a relatively developed startup ecosystem, Lithuania benefits from strong digital

infrastructure and policy support for entrepreneurship. However, a GEM research from 2024-2025 shows that while gender parity has largely been achieved in early-stage entrepreneurial activity, women remain less represented in high-growth, innovation-oriented, and technology-based ventures (Mačiukaitė-Žvinienė & Skliaustas, 2025). Thus, formal institutional support and favourable regulatory frameworks are not enough on their own to address deeper cultural and structural barriers that affect women's scaling, internationalizing and innovative potential (Mačiukaitė-Žvinienė & Skliaustas, 2025; Chitac et al., 2025).

Both country contexts show that institutional theory helps explain why women entrepreneurs often face unequal opportunity structures even though they are participating actively in entrepreneurship - differences in institutional quality, informal norms, and access to strategic resources shape not only entrepreneurial outcomes, but also the strategies women adopt to pursue and sustain their businesses (Sorgner et al., 2024). These insights from mentioned research suggest that women entrepreneurs may seek alternative ways that allow them to reduce dependence on traditional institutional gatekeepers. In the next section, we will discuss how the insights from institutional theory are the basis for assessing women's agency within institutional limits, and use institutional entrepreneurship as a concept to explore theoretical solutions further.

In this context, institutional theory primarily addresses structural barriers related to access to finance, networks, and opportunity structures, while enabling mechanisms include institutional navigation, alternative market access, and reduced dependence on traditional gatekeepers.

Institutional entrepreneurship: women's agency and strategic navigation

Institutional theory showed us the limitations shaping women's entrepreneurial behaviour, but the institutional entrepreneurship concept, as discussed in the Chitac et al., (2025) research, emphasises the role of agency and strategic action within these limitations. The concept has been analyzed in this context before by Ejaz in 2023, and according to the both researches combined - Institutional entrepreneurship focuses on how actors navigate, modify, or work around existing institutional arrangements rather than simply conforming to them (Chitac et al., 2025; Ejaz et al., 2023). From this perspective, women entrepreneurs are not passive players and recipients of institutional barriers, but active agents who develop strategies to operate within, around, or beyond restrictive environments, particularly in contexts which are characterized by institutional instability or gendered norms.

Based on Huang et al. (2025), to exercise such agency is through digital products - they allow entrepreneurs to access remote markets, rely on platform-based infrastructures, and reduce dependence on local institutional arrangements that may be exclusionary and test more internationalization (Huang et al., 2025). Digital products limit exposure to discriminatory practices embedded in local business networks and instead engage with broader customer bases and international markets (Huang et al., 2025). This is especially relevant in contexts where informal norms restrict women's participation in traditional entrepreneurial spaces.

For instance, in Georgia, crisis exposure and economic volatility have influenced entrepreneurial behaviour - evidence from UN women's report from 2024, shows that women entrepreneurs increasingly adopt hybrid strategies that combine necessity-driven motives with opportunity recognition, especially in uncertain institutional environments (St-Onge & Stevenson, 2023). Digital channels support such strategies by allowing experimentation with comparably low upfront

costs, flexible business models, and gradual scaling (Huang et al., 2025). This way, women founders can test ideas, adjust offerings, and respond to market feedback without relying heavily on local financial institutions or formal support mechanisms.

Therefore, Institutional entrepreneurship shows how women entrepreneurs actively deal with institutional constraints rather than simply being constrained by them. Through strategic use of digital products and online platforms, women can reshape their entrepreneurial pathways, build alternative forms of legitimacy, engage with markets beyond their immediate institutional environments and exercise internationalization(Huang et al., 2025; Ejaz et al., 2023; McAdam et al., 2019). Moving forward, this focus on agency and strategic navigation also points to the importance of understanding digital transformation not only as a technological change, but as a process shaped by institutional and gendered dynamics, which is discussed in the next section.

2.2. Sociocultural, capability-related barriers and digital enablers

Table 3. Sociocultural Barriers

Barriers	**Theoretical background**	**Enablers to overcome the barriers**	**Theoretical background**
Gender norms and role expectations	Sociocultural institutional theory	Digital autonomy and remote market participation	Digital entrepreneurship (Huang et al., 2025)
Legitimacy challenges in entrepreneurial ecosystems	Legitimacy theory (Chávez-Rivera et al., 2023)	Digital visibility and performance-based legitimacy (platform metrics, global reach)	Digital market legitimacy theory
Exclusion from informal networks and decision-making spaces	Gendered network theory	Online communities and global digital platforms	Institutional entrepreneurship

Group 2 (Table 3) focuses on sociocultural and capability-related barriers, including legal and legitimacy challenges, limited access to innovation ecosystems, and restricted participation in high-growth entrepreneurial activities, explained by digital and capability-based theories on how women entrepreneurs adapt to these constraints in real life.

Digital transformation and digital entrepreneurship theory

Digital entrepreneurship theory moves away from traditional entrepreneurship frameworks by focusing on ventures that are enabled or mediated by digital technologies and, digital transformation describes changes in how value is created, delivered, and captured through the integration of digital technologies into products, services, and business processes (Huang et al., 2025). It's not only a purely technical shift, but one which affects organisational structures, market access, and entrepreneurial strategies, especially for small and resource-constrained firms.

Importantly, research from Huang et al., (2025) shows that digital transformation is not a linear or uniform process - it includes institutional support, cultural expectations, and social norms in

complex ways, and shapes who benefits from digital opportunities and how (Huang et al., 2025). As a result, women's engagement with digital entrepreneurship is not only shaped by access to technology but also by ecosystem conditions such as access to skills, mentorship, networks, and legitimacy within innovation-oriented environments (Huang et al., 2025).

In Lithuania, digital transformation has been actively promoted through national innovation policies, startup programmes, and support mechanisms, but access to financing, high-growth opportunities, and innovation-oriented networks remains uneven, particularly for women and other underrepresented groups (Menshikov et al., 2024; Mačiukaitė-Žvinienė & Skliaustas, 2025). Therefore, digital infrastructure alone does not guarantee inclusive entrepreneurial outcomes as institutional and social barriers also continue to shape gendered participation in high-growth digital ventures. On the other hand, in Georgia, digital entrepreneurship is often shaped by crisis-adjacent conditions and institutional uncertainty - digital solutions are frequently adopted as survival and resilience strategies rather than as purely growth-oriented innovations (Abuselidze et al., 2024; St-Onge & Stevenson, 2023). In this context, digital entrepreneurship is flexible and adaptable, but may also be limited to short-term scaling and if there's not access to advanced skills, finance and supportive networks it can remain limited and not the subject of long-term scaling or growth.

As a result, findings from Lithuania and Georgia support the need to analyse digital entrepreneurship not only as a technological phenomenon, but as an institutional and gendered process which is shaped by national context, ecosystem conditions, and access to resources (Huang et al., 2025). From this perspective, digital entrepreneurship functions as an enabling mechanism that helps overcome sociocultural barriers such as limited legitimacy, network exclusion, and restricted access to innovation-oriented environments.

Dynamic capabilities and digital adaptation through digital enablers

Women entrepreneur's adaptation capability is shaped by institutional conditions, crisis exposure, and resource constraints, instead of by long-term strategic planning alone (Baker and Nelson, 2005; Sorgner et al., 2024), while the Huang et al., (2025) findings suggest that entrepreneurial survival is ability to respond continuously to change, learn through action, and adjust practices as conditions evolve (Huang et al., 2025).

Consequently - for women founders operating in institutionally fragile or crisis-affected environments, adaptive capacity is often developed through different pathways than those described in stable, innovation-driven ecosystems - when access to finance, formal support programmes, and innovation infrastructure is limited, entrepreneurs rely more heavily on experiential learning, improvisation, and ongoing adjustment to constraints (Komysheva et al., 2026; Aparicio et al., 2025). In 2005 a term has been suggested by the Baker and Nelson, - **digital bricolage** - a process, when existing digital tools are repurposed, combined, and reconfigured to sustain business activity under uncertainty (Baker and Nelson, 2005; Komysheva et al., 2026). Baier‑Fuentes et al. (2023) provide an empirical support, which shows that bricolage is especially effective for owner‑managed SMEs operating under crisis conditions - which is the firm type that dominates the female‑led sample in this study (Baier‑Fuentes et al., 2023). As a form of adaptation, digital bricolage also shows the capability to adapt and survive. This capability is not just a strategic asset, but a context-dependent and crisis-facing response shaped by institutional instability.

In Georgia, where entrepreneurial ecosystem is characterized by economic and political shocks, geopolitical uncertainty, and structural inequalities digital products have allowed for experimentation, pivoting, and business model rethinking with considerably low sunk costs, allowed entrepreneurs to test ideas, adapt offerings, and respond to market feedback in real time (Huang et al., 2025; Ghouse, 2025). Here, digital bricolage is a practical, ongoing process, not a formalised strategic capability. In Lithuania, this type of adaptive capacity is more frequently associated with opportunity-driven digital entrepreneurship supported by ecosystem actors such as incubators, accelerators, and innovation programmes (Mačiukaitė-Žvinienė & Skliaustas, 2025). However, research indicates that gendered differences in confidence, risk perception, and access to strategic resources continue to shape how women entrepreneurs develop and deploy adaptive practices, even within relatively stable institutional environments (Mažuolė, 2025; Aparicio et al., 2025). As a result, the presence of digital infrastructure alone does not guarantee that women can translate digital opportunities into scalable or growth-oriented outcomes.

Now, integrating perspectives on institutional constraints, gendered access to resources, and adaptive entrepreneurial practices - this thesis conceptualises digital products as mechanisms through which women entrepreneurs build and develop or test their own adaptive capacities to interpret, use, and reconfigure digital products in response to institutional limitations under different contexts, rather than assuming uniform or linear pathways of digital growth - and this focus directly supports the research objective (Huang et al., 2025; Chávez-Rivera et al., 2023). These adaptive capabilities act as enabling mechanisms that allow women entrepreneurs to respond to both structural and sociocultural barriers through learning, experimentation, and resource recombination. As a follow up, next section discusses digital bricolage and entrepreneurial digital resilience in more detail.

Digital bricolage and entrepreneurial digital resilience

The term *digital bricolage*, primarily suggested by the Baker and Nelson in 2005, directly describes entrepreneurial activity in uncertain and institutionally constrained environments which naturally emerges as a solution to the instability - entrepreneurs in such contexts rarely follow predictable or planned trajectories and instead they rely on bricolage-based strategies, understood as the creative recombination of available resources to deal with emerging challenges and constraints (Baker & Nelson, 2005). Recent bibliometric work from Singh et al. (2024) also confirms that bricolage stays to be a central and growing framework for understanding entrepreneurial action under limited resources, specifically in resource-poor contexts (Singh et al., 2024). Komusheva's research from 2025-2026 further confirmed empirically that digital bricolage is particularly relevant in crisis-adjacent environments, where access to capital, formal support mechanisms, and advanced technological infrastructure is limited (Komysheva et al., 2026). This concept recognizes how entrepreneurs engage in incremental experimentation, learning-by-doing, and continuous adjustment of digital practices, which supports ventures to remain operational under crisis and uncertainty, especially when long-term strategic planning is difficult.

For women entrepreneurs, digital bricolage is closely linked to institutional conditions: First, it operates as a survival and adaptation strategy, which makes it possible for business to survive in contexts characterised by limited access to finance, weak formal support mechanisms, and high uncertainty (Komysheva et al., 2026). Huang et al.,'s 2025 research further shows that formal resources are scarce, entrepreneurs rely on combining available tools and knowledge to maintain

operations and respond to immediate challenges rather than pursuing planned innovation trajectories (Huang et al., 2025). In this sense, digital bricolage enables women entrepreneurs to sustain activity under structural constraints that would otherwise limit entrepreneurial persistence.

Second, digital bricolage is seen as a mechanism to reduce exposure to gender-based barriers which are the characteristics of local entrepreneurial environments - women often face exclusion from informal business networks, investor communities, and decision-making spaces that are dominated by male actors (Chávez-Rivera et al., 2023; Aparicio et al., 2025). As a result, women founders can partially tackle gender barriers which serve as traditional gatekeepers in male dominated fields, reduce dependence on local networks and gain better autonomy over businesses and decisions by relying on digital channels, online platforms, and remote market access (Huang et al., 2025). This form of autonomy is not absolute , but it reshapes how and where entrepreneurial value is created and evaluated.

Georgian context is one of the illustrations of this dynamic, recently described in 2023 - a survey-based evidence from UN Women and ILO (2023) report shows that women entrepreneurs in Georgia frequently rely on self-financing, informal support networks, and flexible business models, due to both institutional fragility and restricted access to external finance (St-Onge & Stevenson, 2023). Under such conditions, digital bricolage allows women to continue entrepreneurial activity while navigating volatile market conditions, regulatory uncertainty, and persistent sociocultural expectations (Sorgner et al., 2024; Komysheva et al., 2026). Digital tools and platforms here support gradual experimentation and adjustment, instead of high-risk commitments, which aligns with survival-oriented entrepreneurial strategies.

Within this thesis, digital bricolage is therefore conceptualised not only as a practice, but as a resilience-building mechanism which is shaped by institutional and gendered limits, supports women entrepreneurs' capacity to adapt, learn, and persist in environments where formal support is limited or unreliable (Komysheva et al., 2026; Aparicio et al., 2025). This conceptualisation contributes directly to the research aim as it clarifes how women entrepreneurs use digital products as practical pathways to walk-around and break-through, rather than remove, institutional and cultural barriers.

2.3. Psychological barriers and enabling mechanisms

Even though institutional and digital theories explain structural constraints and adaptive practices, they do not fully capture how women entrepreneurs internally experience risk, uncertainty, and experimentation. Psychological enabling mechanisms (table 4), such as fear of failure, lower self-efficacy, and perceived risk, are, therefore, necessary to explain how women translate digital opportunities into action.

Table 4. Psychological Barriers

Barriers	**Theoretical background**	**Enablers to overcome the barriers**	**Theoretical background**
Fear of failure	Psychological entrepreneurship theory (Giorbelidze & Jibladze, 2025)	Psychological safety and support networks	Edmondson (1999)

Barriers	Theoretical background	Enablers to overcome the barriers	Theoretical background
Low self-efficacy and confidence gaps	Gender and entrepreneurship psychology	Capability development through digital experimentation	Dynamic capabilities (Huang et al., 2025)
High perceived risk and uncertainty	Crisis and uncertainty contexts	Digital bricolage and gradual testing	Baker & Nelson (2005); Komysheva et al. (2026)

Psychological safety and resilience as enabling mechanisms

While institutional and technological factors shape entrepreneurial opportunities, psychological conditions which affect women entrepreneurs' willingness to experiment, innovate and pursue growth-oriented strategies has been actively discussed in recent studies (Komysheva, 2026; Giorbelidze & Jibladze, 2025; Abuselidze et al., (2024). In 1999's literature by Edmondson, **psychological safety** has been conceptualized as a perception that one can engage in learning, experimentation, and risk-taking without fear of negative social, professional, or reputational consequences (Edmondson, 1999). This concept is relevant for women entrepreneurs operating in environments where failure is highly visible and socially costly.

For women entrepreneurs, psychological safety is often dismissed by gender stereotypes, fear of failure, and heightened scrutiny in male-dominated entrepreneurial spaces, especially in transition and crisis-affected economies, where failure may carry long-term economic and social consequences (Giorbelidze & Jibladze, 2025). A 2025 research conducted in Georgia by Giorbelidze and Jibladze shows that access to mentorship, peer support, and trusted networks plays a critical role in enhancing women's confidence, decision-making capacity, and openness to innovation (Giorbelidze & Jibladze, 2025). Although, empowerment in this context should not be understood only as an outcome of entrepreneurial success, but as a precondition for active and sustained engagement with digital and innovative activities. Women entrepreneurs, who have support networks, are more likely to perceive themselves as valid economic actors, engage with new technologies, and pursue strategic experimentation even in the face of uncertainty, even more - by providing visible outcomes, measurable progress, and a sense of control over business processes, empowerment enhances women entrepreneurs' confidence for continuity (Giorbelidze & Jibladze, 2025).

Additionally, resilience is conceptualised here as a dynamic and cumulative process rather than a fixed personal trait, which develops through repeated exposure to challenges, reflection on setbacks, and the gradual accumulation of cognitive, emotional, and social resources (Komysheva et al., 2026; Abuselidze et al., 2024). Women entrepreneurs can strengthen resilience by flexible adjustment and continuous learning, which are especially valuable in uncertain environments.

Accordingly, this thesis positions psychological safety, empowerment, and resilience as enabling mechanisms that mediate the relationship between institutional constraints and women's digital entrepreneurial outcomes, which directly informs the empirical analysis by highlighting how internal conditions interact with and tackle external barriers.

2.4. Digital solutions for innovation, legitimacy, and internationalisation → Integrated digital solutions for overcoming multi-level barriers

Building on institutional, digital, and psychological perspectives: the group 4 (table 5) of theoretical solutions focuses on how digital and AI-enabled products directly support innovation, legitimacy construction, and internationalisation for women entrepreneurs.

Table 5. Integrated Digital and Internationalisation Solutions

Barriers	**Theoretical background**	**Enablers to overcome the barriers**	**Theoretical background**
Dependence on local institutional constraints	Institutional theory	Digital internationalisation (market access beyond domestic limits)	International business (Aparicio et al., 2025)
Limited legitimacy in domestic markets	Legitimacy and gender theory	International digital legitimacy (global customers, metrics)	Chávez-Rivera et al. (2023)
Limited capability development opportunities	Resource and capability constraints	AI-enabled tools and digital capability building	Ghouse (2025); Huang et al. (2025)

Table 5 summarises these interconnected digital and AI-enabled solutions - After mapping the structural, sociocultural, and psychological barriers in the previous sections, the analysis now shifts to the digital and AI enablers that women entrepreneurs use to deal with these challenges and unlike the 3 barrier categories, which are discussed separately by domain, the enablers presented here operate across all levels at once. They help reduce dependence on local institutional systems and gatekeepers, support the creation of alternative forms of legitimacy and visibility, and strengthen confidence, experimentation, and adaptability among entrepreneurs. The following section explains how these digital and AI-enabled solutions contribute to innovation, legitimacy-building, and, ultimately, internationalisation.

2.5. Digital and AI products as innovation and legitimacy enablers

Digital products, positioned as more versatile, and different from traditional goods and services in their scalability, modularity, and capacity for continuous iteration, allow entrepreneurs to test value propositions, improve offerings easily, and access international markets with relatively low initial investment (Huang et al., 2025).

In the environments where credibility is often questioned, using and creating digital products may also serve as legitimacy-building instruments, which signals competence, innovation capacity, and market relevance, but based on Huang et al., (2024) women entrepreneurs often underuse advanced digital capabilities. This gap is confirmed by Carvajal et al. (2024) in recent experimental evidence where they showed that women use generative AI tools significantly less than men and are less proficient at writing effective prompts - suggesting that, without active encouragement, AI adoption may widen rather than narrow existing gaps. Otis et al. (2024) also documents this gap at international scale, and show that women globally are approximately half as likely as men to adopt

generative AI tools, with the gap especially pronounced among entrepreneurs. To extend on this - the aforementioned gap is not primarily technological, but social and psychological in nature, which reflects more their confidence gaps, limited exposure to innovation-oriented ecosystems, and constrained access to specialised skills (Huang et al., 2024). As a result of this, women may use digital tools mainly for communication and marketing, less in development of scalable digital products.

In Lithuania, digital infrastructure and startup support mechanisms are relatively well developed. Despite this, GEM data indicate that women remain less visible in technology-intensive and high-growth ventures, even though gender parity has been achieved in early-stage entrepreneurship (Mačiukaitė-Žvinienė & Skliaustas, 2025), which suggests that institutional support alone does not remove deeper gendered barriers to innovation and scaling. On the other hand, in the Georgian context, digital products are developed as adaptive responses to market volatility, crisis exposure, and institutional uncertainty rather than as long-term innovation strategies, which suggests that digital entrepreneurship is best understood as a context-dependent process shaped by necessity, opportunity recognition, and structural constraints (St-Onge & Stevenson, 2023); Sorgner et al., 2024; Komysheva et al., 2026). As seen in previous sections, digital products increasingly serve as tools for adaptation and resilience within constrained domestic environments, but they also open new pathways for women entrepreneurs to engage with international markets as a strategic response to institutional limitations, which is discussed next.

Digital and AI-enabled products as pathways to internationalisation under institutional constraints

Building on the previous discussion of institutional barriers, gendered dynamics, and the ways women entrepreneurs adapt through digital practices, this section turns to internationalisation and tests how digital and AI-enabled products open opportunities beyond domestic markets under limited conditions. Digital entrepreneurship has transformed how internationalisation takes place, particularly for small and resource-constrained firms, but unlike traditional export models, digital and AI-enabled products allow entrepreneurs to access international markets without relying on physical infrastructure, intermediaries, or established domestic networks (Aparicio et al., 2025). For women entrepreneurs, this shift is especially significant, as access to domestic entrepreneurial ecosystems is often shaped by institutional barriers related to gender limits, finance, legitimacy, and network inclusion (Chávez-Rivera et al., 2023).

At the same time, research points out that while digitalisation can increase overall entrepreneurial potential, it does not automatically reduce gender inequalities and digitalisation may even reproduce or reinforce existing structural gaps (Aparicio et al., 2025). This shows that digital technologies should not be understood as neutral or universally enabling tools, but instead of that - as mechanisms whose effects depend on how they are rooted within specific institutional and social environments.

Specifically - AI-enabled digital products, such as generative AI tools automated analytics, AI-enabled marketing and professional tools or services, add a further layer to this transformation as they reduce reliance on specialised labour and external professional services, which are often less accessible and costly to women entrepreneurs (Ghouse, 2025; Huang et al., 2024). Through these tools, women entrepreneurs are able to test international demand, tailor offerings to different

markets, and manage cross-border customer interactions at relatively low cost. In this way, internationalisation through digital and AI-enabled products becomes a practical response to domestic institutional constraints that limit opportunity at home, as well as strategic partner for growth and expansion.

Within this thesis, digital and AI-enabled internationalisation is therefore conceptualised as a theoretical solution to institutional barriers faced by women entrepreneurs. But it's not a linear outcome of technological adoption - women strategically use digital and AI-enabled products to navigate, bypass, or reduce dependence on restrictive domestic institutional environments.

2.6. Internationalisation as institutional escape in women's entrepreneurship

Internationalisation is often explained in the literature as a response to market opportunities, competitive pressure, or growth ambitions. However, Sorgner et al., 2024 and Aparicio et al., 2025 suggest that for women entrepreneurs, particularly in transition and post-socialist economies, internationalisation may also serve a different purpose, functioning as a way to move beyond restrictive domestic institutional environments (Sorgner et al., 2024; Aparicio et al., 2025).

When access to finance, innovation support, or entrepreneurial legitimacy is limited at home, international markets can provide alternative spaces where entrepreneurial performance is evaluated differently - institutional context plays a key role in determining whether entrepreneurial activity leads to growth and innovation outcomes (Chávez-Rivera et al., 2023). As a result in contexts where local institutions press on gendered expectations about appropriate roles or sectors for women, entrepreneurs may move their efforts toward international markets. In these markets, value is more often assessed through measurable indicators such as digital visibility, customer engagement, and scalability, instead of social legitimacy or local networks (Chávez-Rivera et al., 2023).

Therefore, this leads the research to approaching digital forms of internationalisation as a way to further strengthen this dynamic by reducing reliance on domestic gatekeepers. Online platforms, global marketplaces, and cross-border digital services allow entrepreneurs to reach customers and partners without depending heavily on local investors or informal networks, which are frequently male-dominated (Huang et al., 2025). In this way, internationalisation becomes more a strategic response to institutional misalignment between women entrepreneurs and their domestic environments. This perspective also supports the research objective of the thesis by treating internationalisation as an adaptive institutional response as it shows how women entrepreneurs actively use international markets to navigate structural limits, not just simply expanding abroad as a consequence of growth or technological capability. In this sense, internationalisation functions as an enabling mechanism that allows women entrepreneurs to bypass structural and sociocultural barriers embedded in domestic institutional environments.

AI-enabled digital products and cross-border capability development

AI-enabled digital products play an increasingly important role in how entrepreneurial capabilities are developed across borders, as they lower the cognitive and operational barriers associated with market analysis, branding, and customer communication, so they require less dependence on formal training or ecosystem-based learning, so women entrepreneurs often build capabilities through experimentation and interaction with international customers (Komysheva et al., 2026; Ghouse, 2025).

Additionally, Ghouse's 2025 research about AI adoption among entrepreneurs show that accessible AI tools can compensate for limited resources by automating tasks such as content creation, demand forecasting, and customer segmentation (Ghouse, 2025). This is relevant for women entrepreneurs who face time constraints and uneven access to professional support. However, research also shows that AI adoption is shaped by confidence, perceived legitimacy, and digital skills, which still remain gendered (Huang et al., 2024).

Although AI-enabled tools should not be treated only as operational instruments, they also support capability development, as capabilities increasingly improve through ongoing learning, experimentation, and interaction with digital platforms and international users rather than through predefined strategic planning (Huang et al., 2025). This means that capabilities related to digital products and AI-enabled tools are often developed through their use, rather than existing in advance. Accordingly, this thesis conceptualises AI-enabled digital products as capability-building mechanisms that support learning and adaptation under conditions of uncertainty, not merely as efficiency-enhancing tools. The empirical illustrations will be discussed in the next section.

2.7. Legitimacy construction through international digital markets

Legitimacy remains a key challenge for women entrepreneurs, especially in innovation-oriented and technology-based sectors where credibility and recognition are closely tied to growth opportunities - as a result ventures often face higher legitimacy thresholds within domestic entrepreneurial ecosystems, especially in contexts where informal norms and gendered expectations shape access to resources and decision-making spaces (Chávez‐Rivera et al., 2023; Salamzadeh et al., 2024). Also, digital platforms make legitimacy more visible and measurable through indicators such as international customer bases, user engagement, and platform ratings (Huang et al., 2025). In this setting, shifting evaluation away from local norms toward more standardised and performance-based criteria can provide alternative pathways to legitimacy for women entrepreneurs to grow.

Recognition can be especially valuable in institutional environments where women's entrepreneurial authority is questioned or undermined. Signer et al., (2024) suggests that international engagement strengthens both external and domestic legitimacy, especially when it is linked to innovation outcomes and visible market performance (Sorgner et al., 2024).

AI-enabled products support this process by making business performance more standardised and easier to compare across different markets, which helps entrepreneurs show their results internationally (Huang et al., 2024). At the same time, relying on digital platforms creates new dependencies, as key decisions are shaped by algorithms and data rules that entrepreneurs do not fully control (Aparicio et al., 2025). As a result, international digital legitimacy can support women entrepreneurs, but it also remains dependent on platform structures and external rules, which aligns with the focus of this thesis.

Limits and risks of digital and AI-enabled internationalisation

Although its potential benefits, AI-enabled and digital internationalisation also involves important limitations and risks. Research on digital entrepreneurship highlights that platform-based business

models can further enable existing power asymmetries, as entrepreneurs become dependent on digital infrastructures and governance systems they do not control (Aparicio et al., 2025). Algorithmic decision-making may further enable biases that disadvantage women-led ventures, especially in terms of visibility, ranking, and access to opportunities within digital platforms (James et al., 2025; Huang et al., 2024).

Also prolonged digital engagement can increase emotional labour and uncertainty, especially in environments with limited social protection or weak institutional support (Komysheva et al., 2026). While it is true that AI tools may reduce certain operational burdens, they do not remove broader institutional risks related to regulation, taxation, or data protection across borders. These constraints highlight the importance of *analysing digital and AI-enabled internationalisation as an adaptive and context-dependent strategy, instead of an universal or risk-free solution.*

2.8. Integrated conceptual model: internationalisation through digital and AI-enabled institutional escape

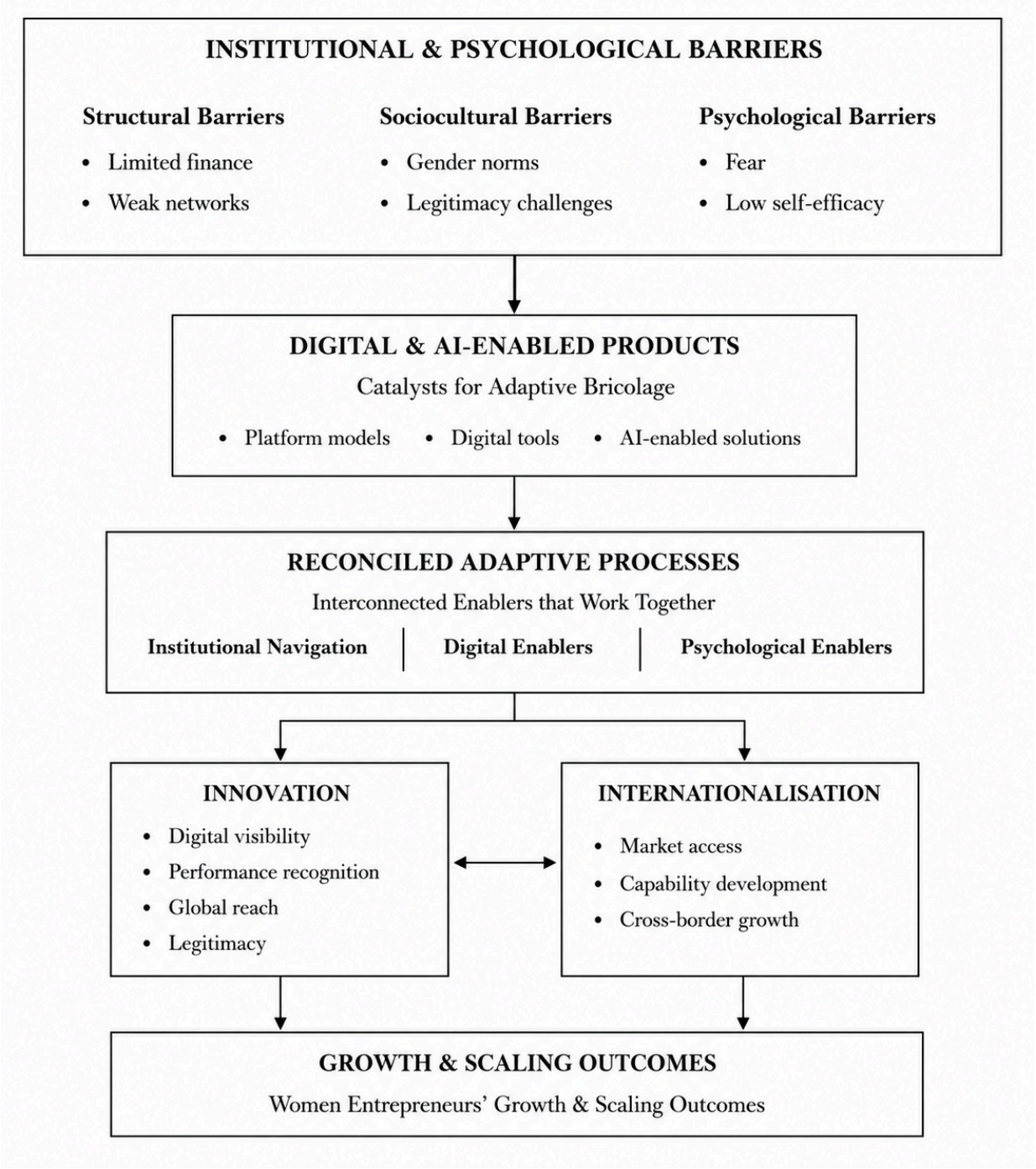

Fig. 3. Conceptual model of digital and AI-enabled internationalisation under institutional constraints

The conceptual model is structured around the relationship between grouped barriers (structural, sociocultural, and psychological) and connecting to enabling mechanisms (institutional navigation, digital adaptation, psychological resilience, and internationalisation through digital and AI-enabled tools). Figure 3 shows a chain reaction where women entrepreneurs transform deep-seated barriers - **institutional, sociocultural, psychological** - into the driving force behind adopting digital and AI tools, and treat technology not as a luxury but as essential survival gear. Once these digital products are in place, they trigger three internal processes that support each other (**reconciled adaptive processes)**: bypassing traditional gatekeepers opens up the space for hands-on digital experimentation, and seeing those small tech wins succeed builds the inner confidence and psychological resilience needed to take bigger risks. Then they flow directly downward, and show that all three processes influence innovation and internationalisation. Within these outcomes, building digital visibility and performance-based credibility through innovation acts as the direct stepping stone to internationalisation, and also allows these women to bypass local boundaries. Combined, the conceptual model shows that based on the literature analysis - psychological enablers, together with international reach, and AI/digital enablers, play a role in sustainable growth and business scaling.

On the other hand, combining institutional theory, digital entrepreneurship, international business, and gender-focused research, this thesis proposes an integrated conceptual model in which **internationalisation is understood as a way for women entrepreneurs to move beyond restrictive domestic institutions** (Sorgner et al., 2024; Aparicio et al., 2025). Institutional environments shape access to finance, legitimacy, and growth opportunities, while gendered norms influence how strongly these constraints affect women entrepreneurs in everyday business practice (Chávez-Rivera et al., 2023; Huang et al., 2024).

Within this model, digital and AI-enabled products play a mediating role by enabling selective internationalisation, capability development, and legitimacy building under constrained conditions (Huang et al., 2025; Ghouse, 2025). Innovation, digitalisation, and internationalisation are not treated as separate stages, but as processes that develop together and support each another over time, especially in environments where formal institutional support is limited (Chávez-Rivera et al., 2023). Through the use of digital and AI-enabled tools, women entrepreneurs are able to test markets, learn from international users, and adjust their business models while reducing dependence on domestic gatekeepers (Aparicio et al., 2025).

At the same time, the conceptual model recognises that these mechanisms do not operate automatically. Psychological safety, empowerment, and resilience influence how effectively women entrepreneurs are able to use digital and AI-enabled products for internationalisation and growth (Giorbelidze and Jibladze, 2025; Komysheva et al., 2026). Differences in confidence, access to skills, and exposure to supportive networks shape whether digital opportunities turn into sustainable outcomes, even when technological tools are available (Huang et al., 2024; Aparicio et al., 2025).

Overall, as illustrated in Figure 3., this conceptual model provides a clear and structured explanation of how women entrepreneurs use digital and AI-enabled products to internationalise under institutional limitations. It offers a foundation for the empirical analysis by linking institutional conditions, digital practices, and individual experience analyzed in in-depth interviews

with Lithuanian and Georgian women entrepreneurs, and directly supports the research objective of explaining how internationalisation functions as an adaptive strategy rather than a uniform path to growth (Sorgner et al., 2024; Huang et al., 2025).

3. Research Methodology

This study uses a **qualitative research approach** to explore how women entrepreneurs in Lithuania and Georgia use digital and AI-enabled tools in their businesses to grow and internationalize. The aim is to understand how these tools help them deal with institutional and cultural constraints and how they support international business activities.

A qualitative approach was chosen because the research focuses on **experiences, meanings, and personal strategies** of entrepreneurs - the aspects which would've been difficult to measure using only numbers or surveys. Qualitative research allows participants to explain their experiences in their own words and describe how they respond to challenges in their business environments. For that reason, the study focuses on the lived experiences of founders in Lithuania and Georgia, and seeks to uncover the practical logic of using technology as a tool for adaptation to barriers.

The study also aims to understand **how entrepreneurs adapt to institutional barriers and digital opportunities**, which often happens through practical decisions and everyday business activities. Because of this, qualitative interviews provide a better way to capture these processe, enablers and understand how digital technologies are used in real entrepreneurial situations.

Research questions:

RQ1*: How do women entrepreneurs in Lithuania and Georgia use digital and AI-enabled tools in their business activities?*

RQ2: *How do digital and AI-enabled tools help women entrepreneurs overcome institutional, cultural, and entrepreneurial barriers?*

RQ3*: How do digital and AI-enabled tools support the internationalisation of women-led businesses?*

RQ4: *What capabilities and skills do women entrepreneurs develop through the use of digital and AI technologies?*

To address these research questions, the study was led by primary qualitative data collected through in-depth interviews with women entrepreneurs operating in Lithuania and Georgia. The following section outlines the research design in greater detail, including the sampling strategy, participant profiles, interview procedure, and the thematic analysis approach used to interpret the data. Together, these methodological choices captured the digital and AI-enabled tools women entrepreneurs use, how they use them, and why, under the specific institutional and cultural conditions of each country.

3.1.Research design and data collection

Primary data will be collected through **semi-structured interviews**, a method that provides both consistency across participants and the flexibility to explore individual experiences in depth. The interview guide will be developed based on:

1. the theoretical framework and research objectives,
2. participants' entrepreneurial background,

3. use of digital and AI-enabled products,
4. experiences with institutional constraints, and internationalisation efforts.
5. Other questions which encourage participants to describe specific events, decisions, and adaptations, which is important for capturing process-oriented phenomena like digital bricolage, capability development, and legitimacy construction.

The interview questions encourage participants to talk about **specific situations, decisions, and challenges** they have faced when they were running their businesses. This informs the study about how entrepreneurs use digital tools to solve problems and develop their businesses.

Interviews were conducted **through video calls**, in order to include participants from both Lithuania and Georgia. Each interview lasted **around 35–60 minutes**.

With the consent of participants, interviews were **recorded and later transcribed** to make sure their answers are accurately captured. For online interviews, **Fathom AI note-taking software** was be used.

During the research process, **field notes and memos** will be kept to record observations, ideas, and conte xtual details thatmay be useful during the data analysis stage.

3.2. Sampling strategy

This study used purposive sampling, which is commonly used in qualitative research to select participants who have relevant knowledge and experience related to the research topic. The final sample consisted of 27 women entrepreneurs - 14 from Georgia (51.9%) and 13 from Lithuania (48.1%), producing a near-balanced cross-country distribution.

Selection Criteria. Participants were selected based on the following criteria. (1) They had to be women actively managing a business, (2) engaging with digital or digitally enabled products or services, (3) operating within Lithuania or Georgia, (4) exposed to institutional, sociocultural, or resource-related barriers, and (5) involved in innovation, scaling, or internationalisation activities at any stage. Participants came from different industries and different stages of business development, so that the research could capture different types of experiences with digital technologies and institutional environments. (6) All participants were aged between 20 and 50 years old, (7) actively running their businesses, and (8) registered as taxpayers in either Lithuania or Georgia. This approach supported analytical depth more than statistical representativeness, which is consistent with qualitative research design - the aim of the study was not to generalise findings to a broader population, but to develop a detailed understanding of patterns, mechanisms, and relationships within specific institutional contexts.

Interview Format and Duration. Interviews were conducted online and lasted approximately 35 to 70 minutes. This sample size was considered sufficient in order to identify recurring themes and patterns and still allow a deeper understanding of individual experiences.

Country Selection and Comparative Logic. The choice of Lithuania and Georgia was intentional and based on how different their business environments feel in practice. Lithuania, as an EU country, offered a more structured and predictable setting, with clearer systems, stronger digital

infrastructure, and more visible support through funding, startups, and innovation programmes, which allowed entrepreneurs to focus more on growth and scaling (Gadomska-Lila & Ścibior-Butrym, 2025; Mačiukaitė-Žvinienė & Skliaustas, 2025). In contrast, Georgia represented a more uncertain environment, where formal systems were less consistent and entrepreneurs often relied more on personal networks and individual effort, which could be especially challenging for women (Işık et al., 2025; St-Onge & Stevenson, 2023). Looking at both contexts together made it possible to see how the same digital or AI tools were used differently (Abuselidze et al., 2024; Huang et al., 2025). At the same time, both countries shared a post-socialist background and ongoing digital development, which made them comparable but still different enough to understand how context shapes entrepreneurial behaviour (Sorgner et al., 2024; Chitac et al., 2025).

Comparing these two contexts helped to understand how women entrepreneurs used digital tools in different institutional settings, how these environments influenced their business strategies, and how women entrepreneurs responded to barriers across different environments - which helped to position digital entrepreneurship not as a universal process, but as something that depends on context and individual experience.

Sectoral Distribution. The sample chose variation across industries intentionally - as well as business stages, and digital orientation. The largest cluster was HR Technology, Recruitment, and HR SaaS, which represented roughly 18.5% of the sample (GE_INT11, GE_INT13, GE_INT10, LT_INT13, LT_INT10). The second largest cluster was SaaS and Business Process / Service Automation, at around 14.8% of the sample (GE_INT04, GE_INT02, LT_INT12, GE_INT01). The third cluster covered Digital Transformation, Consulting, and Financial Services, at around 11.1% (GE_INT03, GE_INT06, LT_INT09). Other sectors represented included Architecture and Interior Design (GE_INT14), Creative Production and Media (GE_INT07), Research and Scientific Consulting (GE_INT08), Coworking and Former HR Tech (GE_INT12), EdTech and Childcare Management Software (GE_INT09), E-commerce and Fintech (GE_INT05), and Food Innovation and Space Food Technology (LT_INT11). Across the full sample, approximately 44% of participants worked in AI-enabled software or platform businesses, around 22% in digital services and consulting, around 15% in creative and design industries, and the remainder in EdTech, e-commerce, fintech, research consulting, and food innovation.

Business Age and Stage. The sample also included the full early- and growth-stage spectrum. Around 30% of participants were in the early or development stage of their business, with under a year of operation or "startup in development" status. Another 30% were in the 2-4 year range. Approximately 22% had been operating for five to ten years, and one participant (LT_INT11) represented the most established business in the sample, with nine years of activity. This spread allowed the analysis to capture how digital and AI tools were used differently across business maturity stages - from experimental early-stage iteration to more consolidated, growth-stage realities.

Digital and AI Tool Adoption. All 27 participants (100%) confirmed active use of digital tools, and *26 (96.3%) confirmed active use of AI tools*. One participant (GE_INT05) reported partial or in-development AI use, which was an honest disclosure of being in the early stages of AI integration, but not a full absence. As a result, the near-universal coverage was an outcome of the inclusion criteria but also it was empirically meaningful - it confirmed that in these two base

contexts, digital and AI tool use has become a basis rather than an exceptional feature of women-led entrepreneurial activity.

Funding and Ownership Patterns. Funding patterns were also visible in the interviews. Around 70 to 75% of participants built their businesses primarily through self-funding, personal savings, or co-founder contributions, especially during the early stages. A smaller group, around 15 to 20%, received partial external support through innovation grants such as GITA in Georgia, government grants in Lithuania, small angel investments, or accelerator programmes such as Impact Hub and Startup Wise Guys. Very few participants said that they received full venture capital investment, which is consistent with broader literature on women-led firms in post-Soviet contexts (Ashraf et al., 2025; Sorgner et al., 2024).

International Orientation. International orientation was also strongly present. Approximately 90% of participants reported either active international client engagement, plans for near-term international expansion, or substantive international collaboration. Markets mentioned across the interviews included EU member states such as Germany, Italy, Greece, Cyprus, Malta, Poland, and Estonia, as well as the United States, the United Kingdom, South Africa, Israel, and the broader post-Soviet region including Armenia, Azerbaijan, Kazakhstan, and Ukraine. This high level of international orientation resonates with one of the central arguments of the thesis - that digital and AI tools reduce the geographic and institutional limitations of operating from smaller post-Soviet economies.

Co-founder and Team Structure. In terms of co-founder and team structure, around 45 to 50% of participants worked with at least one co-founder, often a spouse/domestic partner, business partner, or technical collaborator, while the remainder were solo founders or with rotating freelance support. Team sizes ranged from solo freelance operations - for example, GE_INT14, who worked from home without a permanent team and assembled project-based collaborations - to larger established teams, such as GE_INT13 with over 50 employees and more than 1,500 client organisations.

Note on Demographic Constraints. One thing worth noting about the demographic side of the sample. Personal details such as exact age, formal education level, marital status, and parental status were not collected as standardized data points during the interviews. It was intentional - partly to protect participant anonymity, and partly to keep the focus on entrepreneurial experience rather than personal background. Where these details came up naturally in conversation, they were used in the analysis. For example, LT_INT11 mentioned that she started her business at the age of 40, and several Lithuanian participants spoke about motherhood as one of the reasons they moved into entrepreneurship. These moments were analyzed where relevant. The idea of this is that the sample's age distribution and family structure cannot be presented with full statistical precision, which is acknowledged later in the limitations section.

3.3. Research Instrument

The research instrument (interview guide) was developed based on the research objectives and theoretical framework. The questions aim to explore participants' entrepreneurial experiences, their use of digital and AI-enabled tools, and the challenges they face in different institutional environments.

The interviews are semi-structured, which means the same general topics are discussed with all participants, but the order and follow-up questions may vary depending on the conversation. This approach allows participants to share detailed experiences and examples.

The interview guide consists of several thematic sections: Entrepreneurial background, use of digital and AI tools, institutional and cultural challenges, digital strategies and adaptation, internationalisation, learning and future development. The **full interview guide can be found in Appendix A**.

The questionnaire was designed to ensure clear alignment between the research questions, theoretical framework, and empirical data collection. It is structured into six thematic parts, and each corresponds to specific research questions and theoretical components identified in the conceptual model, This structured approach supports systematic exploration of how women entrepreneurs experience barriers and apply digital and AI-enabled tools as enabling mechanisms in different institutional contexts. Table 1. shows the description of teach thematic section of the interview, its description and connection to the research questions (RQ).

Table 6. Research Questionnaire Key

Thematic Section	**Description**	**Which RQ?**
Entrepreneurial Background	The first section focuses on understanding the participants' entrepreneurial journey, business context, and operational environment. Questions such as "Can you tell me about your entrepreneurial journey?" and "What motivated you to start your own business?" provide background information which is necessary for interpreting later responses.	This section does not directly correspond to a single research question, but provides essential contextual data that supports the analysis of all research questions, allows for identifying differences in business type, stage, and customer base, which may influence how digital tools are used and how barriers are experienced.
Use of Digital and AI Tools	Questions such as "What digital tools or platforms do you currently use?" and "Do you use any AI-based tools?" are designed to identify the types of technologies used, their functions, and their role in business operations; Additionally, questions like "How did you first start using these tools?" provide insights about reflection processes and initial motivations. This allows the study to capture how and why they are integrated into entrepreneurial activities. From a theoretical perspective, this section links to digital entrepreneurship theory and the concept of digital products as enabling mechanisms, as discussed in the theoretical chapter.	RQ1: How do women entrepreneurs in Lithuania and Georgia use digital and AI-enabled tools in their business activities?
Barriers (Insitutional, sociocultural, psychological, etc)	Questions such as "What challenges did you face when starting or growing your business?" and "Have you experienced difficulties related to regulations or institutional support?" were designed to identify structural barriers which includes access to finance, bureaucracy, and policy-related (legal) constraints; At the same time, the question "Do you think being a woman entrepreneur influenced your experience?" aims to	first part of RQ2: How do digital and AI-enabled tools help women entrepreneurs overcome institutional and cultural barriers?

Thematic Section	Description	Which RQ?
	show sociocultural barriers, including gender norms, legitimacy challenges, and exclusion from networks. This section directly reflects the theoretical grouping of barriers (structural and sociocultural), allowing the empirical data to be analysed in line with the conceptual model.	
Digital Strategies and Adaptation	Hare, questions such as “How have digital tools helped you solve problems?” and “Can you describe a situation where technology improved your business?” explore how digital tools are used in practice to overcome identified barriers in the theoretical part. Specifically, the question “Do digital tools help you reduce dependence on local institutional systems?” directly connects to the concept of institutional navigation, which is a key theoretical enabler in the conceptual model. This section shows the relationship between barriers and enabling mechanisms, which allows a direct empirical examination of how digital tools support adaptation in constrained environments.	second part of RQ2, which focuses more on how women entrepreneurs use digital tools as adaptive and enabling mechanism.
Internationalisation (RQ3)	questions such as “Does your business operate internationally?” and “What role do digital platforms play in reaching international customers?” explore the extent and mechanisms of international engagement. These questions aim to capture how digital tools enable access to international markets, reduce dependence on domestic environments, and support international business activities; The question “What challenges have you faced when expanding internationally?” treats internationalisation is not as a purely positive outcome, but as a process influenced by both opportunities and constraints. This section directly links to international business theory and the concept of internationalisation as an institutional escape mechanism, as discussed in the theoretical framework.	RQ3: How do digital tools support the internationalisation of women-led businesses?
Capabilities and Learning	the questions such as “What skills have been most important?”, “What ability have you gained while managing your busying via digital tools?” and “How did you learn to use digital or AI tools?” are designed to explore capability development processes, which includes both formal and informal learning, as well as experiential learning through practice and experimentation. Additionally, the question “What advice would you give to other women entrepreneurs?” provides reflective insights to our study about perceived success factors and capability-building strategies. This section is theoretically linked to dynamic capabilities, digital adaptation, and digital bricolage, as it captures how entrepreneurs	RQ4: What capabilities and skills do women entrepreneurs develop through the use of digital and AI technologies?

Thematic Section	Description	Which RQ?
	develop and apply skills under conditions of uncertainty and constraint.	

3.4. Data analysis process

The data were analysed using qualitative thematic analysis supported by MAXQDA 24 software. Thematic analysis is actively used in entrepreneurship and international business research because it provides a systematic approach to identifying patterns of meaning across qualitative data and remaining theoretically flexible. MAXQDA 24 was selected because it supports both code-based and visual analytical methods, which allows the researcher to perform close textual coding and broader pattern visualisation across the dataset.

The analysis followed a hybrid inductive–deductive approach. Initial codes were developed deductively from the theoretical framework - including categories such as institutional and regulatory barriers, cultural and gender-related barriers, digital tools used, AI tools used, internationalisation, and entrepreneurial capabilities. Additional codes were created inductively from the data as new patterns surfaced, including AI for strategic decision-making, AI for automation and efficiency, digital tools overcoming barriers, and current coping solutions and adaptation strategies (with sub-codes for digital and financial coping).

The final code system includes 14 codes organised across thematic categories and the analysis was conducted in six phases: (1) full familiarisation with transcripts through repeated reading; (2) initial coding using MAXQDA, and applying both deductive and inductive codes; (3) generation of broader thematic categories by clustering related codes; (4) reviewing and refining themes through code-frequency analysis, the Code Matrix Browser, and the Code Relations Browser within MAXQDA; (5) defining and naming final themes and sub-themes (presented across Chapters 5.1–5.7); and (6) producing the analytical narrative integrating quotations, code patterns, and theoretical interpretation.

The coding process resulted in 1,113 coded segments across the 27 documents. The Code Frequencies output confirms that 11 of the 14 codes appeared in 100% of the interviews - including all five core analytical categories (*Entrepreneurial capabilities and learning, Digital tools overcoming barriers, Current coping solutions and adaptation strategies, Internationalisation and market expansion, Cultural and gender-related barriers, Institutional and regulatory barriers, AI for strategic decision-making, AI for automation and efficiency, AI tools used, Digital tools used, and Suggested support needs and future solutions*). The Business background and motivation code and the digital sub-code under coping strategies each appeared in 25 of 27 documents (92.6%), and the Financial sub-code appeared in 22 documents (81.5%). This is a near-universal coverage which shows that the analytical themes were not isolated to a small group of participants but were reflected in the cross-participant dataset.

Coded Segment Frequency. the strongest theme across the dataset was *Current coping solutions and adaptation strategies* (246 segments, 22.1% of all coded segments), followed by *Digital tools*

overcoming barriers (134 segments, 12.0%) and *Internationalisation and market expansion* (109 segments, 9.8%), which directly supports the central analytical argument of the thesis — that adaptive coping behaviour, the use of digital tools to compensate for institutional and resource limitations, and internationalisation strategies form the dominant entrepreneurial logic visible in the data. *Suggested support needs and future solutions* (74 segments) and *Entrepreneurial capabilities and learning* (72 segments) followed closely, which shows that participants engaged extensively with reflective and forward-looking approach of their entrepreneurial practice. The AI-related codes collectively (*AI for strategic decision-making, AI for automation and efficiency, AI tools used*) have 149 coded segments combined, which means that AI was not a peripheral nor supporting theme but an extensive analytical dimension of the dataset.

	Frequency	Percentage	Percentage (valid)
Entrepreneurial capabilities and learning	27	100.00	100.00
Digital tools overcoming barriers	27	100.00	100.00
Current coping solutions and adaptation strategies	27	100.00	100.00
Internationalisation and market expansion	27	100.00	100.00
Cultural and gender-related barriers	27	100.00	100.00
Institutional and regulatory barriers	27	100.00	100.00
AI for strategic decision-making	27	100.00	100.00
AI for automation and efficiency	27	100.00	100.00
AI tools used	27	100.00	100.00
Digital tools used	27	100.00	100.00
Suggested support needs and future solutions	27	100.00	100.00
digital	25	92.59	92.59
Business background and motivation	25	92.59	92.59
Financial	22	81.48	81.48
DOCUMENTS with code(s)	27	100.00	100.00
DOCUMENTS without code(s)	0	0.00	-
ANALYZED DOCUMENTS	27	100.00	-

Fig. 4. Code Frequencies (MAXQDA view)

Color	Parent code	Code	Code alias	Cod. seg. (all documents)
		Entrepreneurial capabilities and learning		72
	Current coping solutions and adaptation strategies	digital		49
		Digital tools overcoming barriers		134
	Current coping solutions and adaptation strategies	Financial		41
		Current coping solutions and adaptation strategies		156
		Internationalisation and market expansion		109
		Cultural and gender-related barriers		64
		Institutional and regulatory barriers		62
		AI for strategic decision-making		53
		AI for automation and efficiency		44
		AI tools used		52
		Digital tools used		61
		Business background and motivation		52
		Suggested support needs and future solutions		74

Fig.5. Code Alias Table (frequencies - MAXQDA view)

The Code Matrix Browser. The code matrix browser was also used to verify that themes were distributed across the dataset rather than being driven by a small number of unusually rich interviews, even though certain interviews showed particularly dense coding patterns - for example, LT_INT04 (74 total coded segments) and GE_INT09 (53 segments) - the analytical themes were visible across virtually all participants. This horizontal distribution gives the findings empirical clarity; the analytical data is grounded in cross-sample patterns, not in isolated rich cases. The Code

Matrix Browser also shows comparative dimension of the analysis and makes it visible how coding patterns differed between Georgian and Lithuanian participants, which informed the comparative discussion in Chapter 5.7.

The Code Relations Browser was used to check how codes overlapped within the same coded segments, which helped identify analytically significant and most common patterns.. The strongest overlap in the dataset appeared between *Current coping solutions and adaptation strategies and Digital tools overcoming barriers* (238 co-occurrences), which provides empirical grounding for the central argument that coping and digital tool usage are not separate phenomena but two dimensions of the same adaptive entrepreneurial logic. Similarly, strong co-occurrence patterns appeared between *Current coping solutions and Internationalisation* (170 co-occurrences), *Digital tools overcoming barriers and Internationalisation* (159 co-occurrences), and *Current coping solutions and Digital tools used* (130 co-occurrences). *The Cultural and gender-related barriers and Institutional and regulatory barriers codes also overlapped strongly* (89 co-occurrences), which supports the argument that participants experience these two barrier categories as connected together rather than distinct. The AI-related codes also showed strong internal overlap *(AI for strategic decision-making and AI for automation and efficiency*: 85 co-occurrences; *AI tools used and AI for strategic decision-making*: 91 co-occurrences), which shows that participants did not separate AI's strategic and operational functions in their own reasoning. They used AI for both simultaneously.

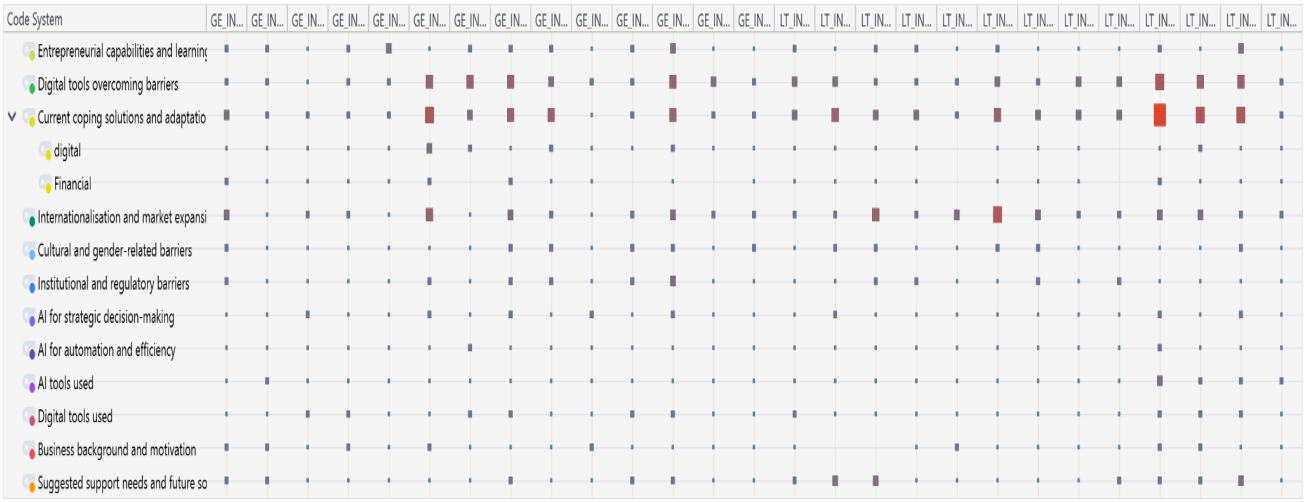

Fig. 6. Code Matrix Browser (MAXQDA view)

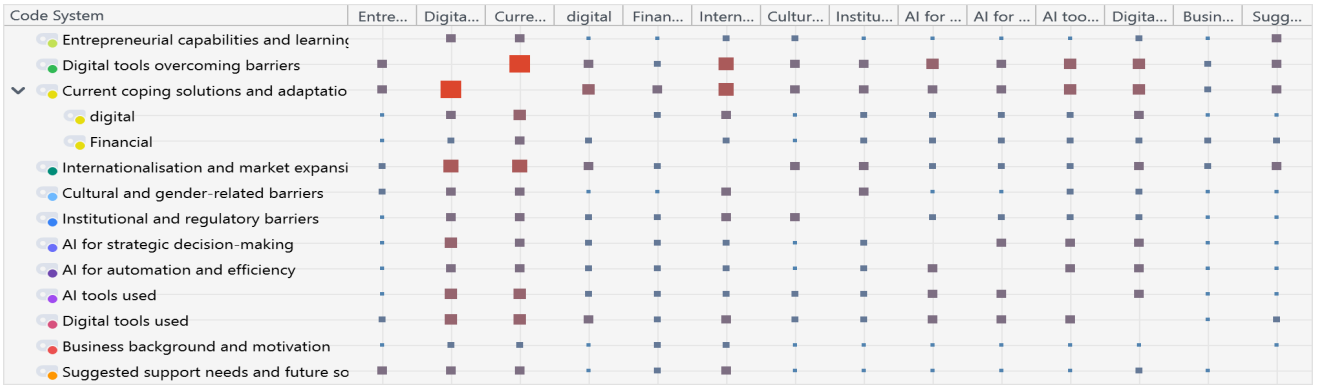

Fig. 7. Code Relations Browser (MAXQDA view)

The Code Cloud. This visualisation generated through MAXQDA confirmed at a glance that "Current coping solutions and adaptation strategies," "Digital tools overcoming barriers," and "Internationalisation and market expansion" dominated the visual landscape of the dataset, and this corresponded to the frequency analysis and confirmed that these themes are central in the analytical narrative.

Comparative analysis between Lithuania and Georgia was conducted by examining how codes and themes appeared across the two country groups using the Code Matrix Browser. This was a contextual analysis designed to identify both shared patterns and meaningful differences in intensity and orientation (as discussed in Chapter 5.7).

Fig. 8. Code Cloud (MAXQDA view)

3.5. Research quality and ethics

To make sure research remains of high quality, the study followed the four standard criteria for qualitative trustworthiness - credibility, transferability, dependability, and confirmability. Credibility was supported through close, repeated engagement with the transcripts, the use of direct quotations to ground the interpretations, not paraphrasing them away, and ongoing triangulation between the interview data and the theoretical framework. Both countries' contexts were explained in enough detail, that transferability was supported and participant profiles had enough detail for readers to judge how far the findings might apply to other settings. Dependability was also strengthened by documenting the analytical process step by step in MAXQDA, which kept a full audit trail from the raw transcripts through to the final themes - the code system, code frequency outputs, Code Matrix Browser, and Code Relations Browser are available as supporting documentation (Appendices). And, finally - confirmability was supported through reflexive engagement throughout the coding process; the researcher kept analytical notes to surface and staying aware of personal assumptions that might shape how the data were read.

Standard ethical principles in social research were also preserved. Informed consent was obtained from every participant before each interview; Participants were also told what the research was about, that they could withdraw at any point without giving a reason, and how their data would be protected. All identifying information was removed from transcripts before analysis to ensure confidentiality is secured. Due to confidentiality, anonymity, and data protection considerations, full interview transcripts are not included in the appendices. Instead, anonymised representative quotations, coding structures, and thematic outputs generated through MAXQDA 24 are provided. Recordings and transcripts were only kept on an encrypted, researcher's password-protected device and the data will be kept only for as long as Kaunas University of Technology's research data protocol requires; after that it will be permanently deleted.

Some of the topics that came up during the interviews were sensitive - financial difficulties, emotional exhaustion, and the kind of skepticism several participants had experienced because of their gender. The researcher tried to stay attentive and empathetic to how participants were feeling throughout the conversations and did not push anyone to go into detail on things they preferred to keep more abstract and general.

3.6 Use of Generative Artificial Intelligence in the Research Process

In accordance with the *Policy on the Ethical Use of Generative Artificial Intelligence in the Study Process at Kaunas University of Technology* (Rector's Order No. A-45 of 26 January 2024), this section transparently shares how Generative Artificial Intelligence (GenAI) tools were used in preparing this thesis. All analytical interpretation, coding decisions in MAXQDA 24, theoretical synthesis, and conceptual development - including the three concepts introduced in this thesis - are the author's own work. **Fathom AI** (Fathom Video Inc., 2026) was used to transcribe interview recordings, with all transcripts manually compared with the original audio. **HappyScribe** (HappyScribe, 2026) was used to translate 6 Georgian interviews into English, with each translation reviewed by the author. **Claude** (Anthropic, 2026) was the GenAI tool used for structuring notes, refining the clarity and flow of paragraphs already drafted by the author. **ChatGPT** (OpenAI, 2026) was used selectively to verify APA 7 reference formatting and brainstorm section headings in the initial stages of the research; all references were verified manually against original sources. **RabbitSearch.AI** (2026) and **Scite.AI** (2026) has been used for searching research papers.

4. Results: The Thematic Analysis of Empirical Findings, Discussion, Recommendations and Future Research

This chapter shares findings from qualitative thematic analysis of 27 semi-structured interviews with women entrepreneurs from Lithuania and Georgia, which were analyzed using MAXQDA. Participants worked across diverse sectors - digital services, creative industries, SaaS, architecture, education, e-commerce, consulting, and technology - and were asked about their entrepreneurial journeys, the barriers they faced, how they used digital and AI tools, as solutions to tackle barriers, and how they approached internationalisation.

Coding produced five main themes: **(1) entrepreneurial motivations, (2) institutional, cultural and psychological barriers, (3) digital adaptation, (4) AI-enabled solutions, and (5) internationalisation strategies.** Patterns were consistent across interviews despite differences in industry, firm size, and country. Most participants described shared struggles - financial pressure, limited institutional support, emotional strain, market unpredictability, and difficulties around visibility and resource access.

Digital tools had become a regular part of how these women ran their businesses - not just for communication or marketing, but to *cut costs, automate tasks, reach international clients, and fill gaps where expertise or staff were missing*. AI tools like OpenAI platforms, Claude, Gemini, and Canva AI were not optional but shaped daily decisions and longer-term strategy.

The two country contexts differed noticeably. Lithuanian entrepreneurs often linked their work to personal autonomy and work-life balance. Georgian entrepreneurs more frequently described entrepreneurship as a survival response to unstable conditions where resources were limited. Even so, both groups showed strong adaptability and a readiness to experiment with digital tools.

What stood out across both contexts was that these women were not simply reacting to barriers but they were building around them. They combined *low-cost tools, self-taught skills, and AI-supported workflows* to keep businesses running, improve efficiency, and reach wider international markets.

The sections that follow present findings thematically and connect interview data to the theoretical framework. The focus is on both the barriers participants encountered and the concrete digital strategies they developed in response.

4.1 Entrepreneurial Motivations and Business Formation

Entrepreneurial motivations among the women interviewed in Lithuania and Georgia were shaped by overlapping economic, personal, and professional factors instead of a single driving force. Across both contexts, entrepreneurship begun not simply as a business decision but as an adaptive life strategy - a response to labour market instability, limited professional opportunities, and the desire for greater autonomy (Ng & Fu, 2025; Sorgner et al., 2024). This pattern aligns with the theoretical framework discussed earlier, which shows that in post-Soviet transition economies, entrepreneurship often develops as a reaction to structural conditions rather than as a purely opportunity-driven choice (Chitac et al., 2025).

The most consistent motivation across Georgia and Lithuania was the desire for independence and control over professional life. Many participants described traditional employment as rigid,

emotionally draining, and misaligned with their values (GE_INT11; GE_INT12; GE_INT14; LT_INT04; LT_INT06). Among those, for some, entrepreneurship was less about profit and more about building something on their own terms. As one Lithuanian entrepreneur put it, she:

"*wanted to build a business that would allow me to combine creativity with independence, because traditional employment did not feel suitable for me anymore*" (LT_INT06).

A Georgian participant expressed a similar drive, stating that she:

"*always wanted to create something independently and build my own company instead of working only for someone else*" (GE_INT12).

These motivations reflect what Chitac et al. (2025) describe as entrepreneurship emerging at the intersection of institutional constraint and personal agency - where limited access to flexible, fulfilling employment pushes women toward self-employment as an alternative structure.

This was especially visible among freelancers, designers, consultants, and those working in digital industries, where the logic of autonomy spanned beyond daily schedules to include d geographic freedom (GE_INT11; GE_INT13; GE_INT14; LT_INT06; LT_INT10). One participant observed that

"digital business models make it possible to work with clients from any country without being limited by local geography" (GE_INT11),

which illustrates how digital entrepreneurship itself became a vehicle for mobility and reduced institutional dependence.

Among specifically Georgian participants, necessity was a stronger and more explicit motivator. Entrepreneurship was frequently described not as a choice but as the only real path forward in a market where formal employment was not only limited, but also poorly paid, or inaccessible to beginners and newcomers (GE_INT10; GE_INT12; GE_INT13; GE_INT14). This shows the broader pattern identified by Sorgner et al. (2024), who show that in weaker institutional environments, women are more likely to engage in necessity-driven entrepreneurship oriented toward survival rather than growth. One participant explained that accumulating professional experience through conventional employment was nearly impossible, noting that

"in my profession, accumulating experience is extremely difficult if no one gives you a chance" (GE_INT14).

As a result, she began independently sharing her work online, over time she built a client base through social media - a form of digital bricolage that substituted for the institutional pathways she could not access. Another described starting under extreme financial pressure:

"for the first period I was practically paying back my own salary from whatever projects were coming in" (GE_INT10).

Lithuanian participants, by contrast, more frequently connected entrepreneurship to flexibility, self-development, and work-life balance (LT_INT04; LT_INT06; LT_INT07; LT_INT08; LT_INT11). Family responsibilities played a visible role in shaping entrepreneurial decisions, particularly for those who transitioned to remote or digital-first business models (LT_INT07; LT_INT08; LT_INT10). One participant described how motherhood shifted her thinking, and explained that

"after becoming a mother, I started thinking about technologies that could create meaningful experiences for children and parents, which later became the foundation of my business" (LT_INT08).

These motivations align with Gadomska-Lila and Ścibior-Butrym (2025), who note that even within more stable institutional environments like Lithuania, women entrepreneurs often prioritise stability and balance over rapid scaling, which shows both personal preference and the structural conditions that still limit access to growth-oriented resources.

Across both countries, a strong recurring pattern was that business ideas emerged directly from lived experience - from frustrations, inefficiencies, or gaps encountered in participants' own professional or personal lives (GE_INT11; GE_INT13; GE_INT14; LT_INT02; LT_INT04; LT_INT08). This process of opportunity recognition through experience aligns with effectuation theory, in which entrepreneurial action arises from available means, existing knowledge, and accumulated observations rather than predetermined strategic plans (Sorgner et al., 2024; Chitac et al., 2025). One entrepreneur working in HR technology explained that her

"professional experience in HR and management showed me how inefficient many processes still were, and I saw technology as a way to improve them" (GE_INT13).

Another identified a gap not only in technical hiring but in assessing cultural fit, noting that she

"noticed that companies had difficulty not only with technical hiring, but also with finding people who fit the culture of the team, and that inspired me to build a product that combines psychology and AI for recruitment" (GE_INT11).

In architecture and education, participants similarly described how client frustrations and communication difficulties opened new directions (GE_INT14; LT_INT02), and one noted that repeated difficulties clients had in conveying technical design ideas eventually led her to expand into consultation and educational services (GE_INT14).

Many participants also described launching businesses experimentally instead of formalised plans (GE_INT12; GE_INT13; GE_INT14; LT_INT04; LT_INT05; LT_INT08). Low-cost digital infrastructure reduced barriers to quickly testing ideas. One Lithuanian founder shared that

"at first, it was not even about building a company - it was more about testing an idea and seeing whether people actually needed this type of solution" (LT_INT04),

while another noted that: *"at the beginning, the business was simply a Facebook page where I*

shared my projects, but over time it developed into a professional service" (GE_INT14).

One participant also shared that her:

"previous startup failed completely, but that experience taught me more than any university could have taught me about entrepreneurship and resilience" (GE_INT12),

Which shows that experimentation sometimes involved failure that itself became a learning resource. This experimental, low-investment approach resonates to what Huang et al. (2025) describe as digital bricolage - the recombination of available digital tools to explore and validate business ideas under resource constraints, which was particularly visible in the Georgian context, where formal institutional support was limited.

Overall, entrepreneurial motivations in this study were rooted in structural conditions and personal experience, instead of purely growth-oriented ambitions. The distinction between opportunity-driven and necessity-driven entrepreneurship - well documented in the literature (Ng & Fu, 2025; Sorgner et al., 2024) - was visible across both countries, though more actively in Georgia. Participants across both contexts, regardless of their initial motivations, showed strong adaptive behaviour, using digital tools and experimentation to move their businesses forward within and around the institutional conditions and barriers they faced.

4.2. Main Barriers Faced by Women Entrepreneurs

Moving to the next theme - the interviews showed that women entrepreneurs in Lithuania and Georgia faced multiple interconnected barriers throughout the development of their businesses, which can be grouped into 3 types - (1) institutional and financial barriers, (2) cultural and gender-based barriers, and (3) psychological and personal barriers. Precisely - barriers were not limited to financial difficulties or market uncertainty - participants described a combination of institutional, cultural, gender-related, psychological, and communication challenges that continuously shaped entrepreneurial decision-making and daily operations (GE_INT10; GE_INT11; GE_INT12; GE_INT13; GE_INT14; LT_INT03; LT_INT05; LT_INT07; LT_INT09). Importantly, many of these barriers directly explain why digital adaptation, AI integration, and flexible business models became necessary responses instead of only optional solutions. The findings also reflect broader patterns in the post-Soviet transition economy literature, where entrepreneurship frequently requires constant adaptation within fragmented, or unstable support systems (Sorgner et al., 2024; Chitac et al., 2025).

Table 7. Structural and Institutional Barriers

Barrier	**Description**	**Illustrative quotes**
Group 1: Structural and Institutional Barriers		
Limited access to finance	Characterized by limited access to startup capital, marketing budgets, and external investment;	*"At the beginning, we were building everything entirely with personal finances because we wanted to prove the product worked before seeking investment."* (GE_INT11)

Barrier	Description	Illustrative quotes
	reliance on personal savings and self-financing.	*"One of the biggest challenges was not having enough budget for marketing and visibility during the early stages of the business."* (GE_INT14) *"Financial uncertainty forced us to become much more strategic and flexible in how we approached growth and expansion."* (LT_INT07)
Weak investor and business networks	Limited investor trust in digital and SaaS business models; difficulty accessing formal support systems and professional networks.	*"Many investors initially believed that companies in Georgia would never trust SaaS products with sensitive data, which became one of the biggest barriers at the beginning."* (GE_INT13) *"In Lithuania, there are support systems, but many early-stage entrepreneurs still do not know how to access them or feel that the process is too bureaucratic."* (LT_INT03) *"We decided not to seek investment immediately because we wanted to first validate the product and gain real customers."* (GE_INT12)
Limited access to innovation support and high-growth sectors	Fragmented mentorship, lack of affordable specialists, and insufficient training opportunities for AI and digital implementation in small businesses.	*"What would help most is access to experienced mentors who understand both technology and business, because when you are building something digital, you often feel lost between those two worlds."* (GE_INT11) *"Access to affordable specialists is still a major issue. Many startups cannot hire experienced developers, marketers, or consultants during the early stages."* (GE_INT14) *"It would help if there were more affordable training opportunities focused specifically on AI implementation for small businesses, not only large corporations."* (LT_INT07)

Source: Author, based on thematic analysis of interview data categorised in themes in MAXQDA software (N = 27 interviews).

Institutional and Financial Barriers

One of the most dominant findings across the interviews was the presence of institutional and financial barriers, especially among Georgian participants and those operating in technology-related industries (GE_INT11; GE_INT12; GE_INT13; GE_INT14; LT_INT03; LT_INT07). Participants revealed that conditions such as weak investment ecosystems, difficulties accessing startup funding, institutional distrust toward digital business models, and heavily bureaucratic administrative systems forced many entrepreneurs to rely on personal savings, self-financing, and gradual organic growth strategies, instead of formal support mechanisms (Ashraf et al., 2025; Sorgner et al., 2024).

A strong pattern in the Georgian interviews was early-stage investor skepticism toward digital and SaaS products. One participant explained that investors initially doubted whether Georgian companies would trust cloud-based systems with sensitive data, describing this as: *"one of the biggest barriers at the beginning" (GE_INT13)*.

Another founder described building the business entirely through personal finances before approaching external investment:

"At the beginning, we were building everything entirely with personal finances because we wanted to prove the product worked before seeking investment" (GE_INT11).

Several participants shared that they intentionally postponed fundraising to first validate their products independently (GE_INT11; GE_INT12; GE_INT13), one explaining:

"We decided not to seek investment immediately because we wanted to first validate the product and gain real customers" (GE_INT12).

These patterns suggest that many entrepreneurs operated within startup environments where there's lower trust and institutional support for innovation remain fragmented, which aligns with Ashraf et al.'s (2025) finding that weak institutions increase reliance on informal arrangements and personal resources.

Furthermore, financial pressure shaped operational decisions. Participants across both countries described limited marketing budgets, difficulties hiring specialists, and the need to manage multiple business functions independently (GE_INT14; LT_INT05; LT_INT07; LT_INT08). One Georgian entrepreneur noted that

"one of the biggest challenges was not having enough budget for marketing and visibility during the early stages" (GE_INT14),

while a Lithuanian participant explained that:

"financial uncertainty forced us to become much more strategic and flexible in how we approached growth and expansion" (LT_INT07).

As Sorgner et al. (2024) note, these resource constraints are structurally produced rather than individually chosen, and disproportionately affect women-owned firms in transition economies.

Bureaucratic complexity also revealed to be as another significant institutional barrier (GE_INT13; GE_INT14; LT_INT03; LT_INT05). Participants described difficulties with taxation, contracts, certifications, compliance, and administrative documentation - challenges that intensified considerably during internationalisation. One participant described international expansion as requiring adaptation not only to new markets but to entirely different compliance systems:

"In Europe, clients paid much more attention to certifications and data security standards before considering cooperation" (GE_INT13).

Another gave a concrete illustration of how institutional complexity multiplied across borders, and described how a single project in New York became a six-month process navigating different processes such as district councils, heritage approvals, and building regulations connected to even a

minor structural element (GE_INT14). This example shows how institutional barriers did not disappear during internationalisation but became layered and more demanding, which led entrepreneurs to continuously self-educate about new regulatory systems.

Fragmented support systems and limited access to professional guidance were also consistently mentioned (GE_INT11; LT_INT03; LT_INT05; LT_INT07; LT_INT08). Participants from both countries described difficulties finding affordable mentors, consultants, and specialists during early stages. One Lithuanian participant noted that:

"there are support systems, but many early-stage entrepreneurs still do not know how to access them or feel that the process is too bureaucratic" (LT_INT03).

A Georgian founder similarly explained that what would help most is:

"access to experienced mentors who understand both technology and business, because when you are building something digital, you often feel lost between those two worlds" (GE_INT11).

These findings connect to Huang et al.'s (2025) observation that access to digital infrastructure alone is not enough without mentorship, skills support, and policy frameworks that help to better address gender-specific barriers.

Cultural and Gender-Based Barriers

Table 8. cultural and gender-based barriers

Group 2: cultural and gender-based barriers		
Gender norms and role expectations	Underestimation of women founders based on gender, age, and appearance; persistent assumptions in male-dominated industries.	*"Sometimes people first judge your appearance or age before they take your business seriously, especially when you are a young female founder."* (GE_INT11) *"The construction field is still very male-dominated, and many craftsmen initially assume that a woman does not understand technical details."* (GE_INT14) *"I often felt that I had to prove my competence more strongly because I was a woman working in technology-related entrepreneurship."* (LT_INT07)
Legitimacy challenges in entrepreneurial ecosystems	Repeated need to prove competence and expertise before being taken seriously by clients, partners, and investors; local skepticism toward digital products.	*"There are still industries where women are not fully taken seriously until they demonstrate expertise repeatedly."* (LT_INT09) *"When I spoke professionally and demonstrated technical knowledge, attitudes toward me immediately changed."* (GE_INT14) *"One of the biggest challenges was gaining trust from clients who were unfamiliar with digital products and AI-based solutions."* (GE_INT13)
Exclusion from informal networks and decision-making spaces	Limited inclusion in local professional networks and decision-making spaces;	*"In Georgia, I experienced much more skepticism from clients compared to international markets, where*

	reliance on international platforms to reach equal communication and visibility.	*communication felt more equal and professional."* (GE_INT11) *"There should be more networking spaces where young entrepreneurs can meet people from technology, marketing, and business backgrounds together."* (GE_INT09) *"I sometimes felt discomfort working in environments where most team members and developers were male."* (GE_INT11)

Source: Author, based on thematic analysis of interview data categorised in themes in MAXQDA software (N = 27 interviews).

Cultural expectations, legitimacy struggles, and gender-related challenges formed another highly visible sub-category of barriers, actively prevalent among women working in architecture, construction, SaaS, AI, and technology-related fields (GE_INT11; GE_INT12; GE_INT13; GE_INT14; LT_INT07; LT_INT09). Participants frequently described situations in which they had to prove competence, technical expertise, or leadership credibility several times before being taken seriously by clients, developers, partners, or investors - connecting to what Huang et al. (2025) describe as higher legitimacy thresholds faced by women entrepreneurs in gendered institutional environments.

Legitimacy struggle was one of the strongest recurring themes across both countries (GE_INT11; GE_INT12; GE_INT14; LT_INT07; LT_INT09). Participants shared that they were evaluated not only on business performance but on age, gender, appearance, and communication style. One Georgian founder explained that:

"sometimes people first judge your appearance or age before they take your business seriously, especially when you are a young female founder" (GE_INT11),

and further noted that:

"some startup environments still unconsciously look down on younger entrepreneurs, especially when they are women" (GE_INT11).

These experiences were especially pronounced in male-dominated industries. One entrepreneur working in architecture and construction described how craftsmen routinely assumed she lacked technical understanding:

"The construction field is still very male-dominated, and many craftsmen initially assume that a woman does not understand technical details" (GE_INT14).

Attitudes shifted only after direct demonstrations of expertise:

"When I spoke professionally and demonstrated technical knowledge, attitudes toward me immediately changed" (GE_INT14).

A Lithuanian participant resonated with this dynamic, sharing:

"I often felt that I had to prove my competence more strongly because I was a woman working in tech-related entrepreneurship" (LT_INT07),

while another noted that:

"there are still industries where women are not fully taken seriously until they demonstrate expertise repeatedly" (LT_INT09).

This pattern is also consistent with Salamzadeh et al. (2024), who note that gender stereotypes and social biases against women carry over into the digital world, as well as intensify legitimacy challenges in traditionally masculine fields. Technology startup founders described additional dimensions of this legitimacy challenge. One participant explained that building a startup without a technical background made interactions with developers emotionally difficult:

"Communication with developers was difficult because I had no technical background, and I had to learn their language and processes while building the startup" (GE_INT12).

These findings reflect what Chitac et al. (2025) describe as gendered institutional arrangements that treat men and women asymmetrically across normative and cognitive dimensions, shaping not only who is taken seriously but how entrepreneurial competence is read and evaluated.

Emotional labour also was prevalent among barriers as a significant hidden cost of entrepreneurship for many participants (GE_INT11; GE_INT12; GE_INT14; LT_INT07; LT_INT09). Women entrepreneurs described the need to continuously balance professionalism with warmth, confidence with approachability, and expertise with emotional availability. One participant noted that:

"warmth and the ability to truly listen to people helped me much more than aggressive sales techniques" (GE_INT12),

which shows that relationship management became both a strategic tool and an emotional burden. These patterns align with broader research showing that women entrepreneurs face additional social performance expectations that male counterparts typically do not encounter (Sorgner et al., 2024; Chitac et al., 2025).

Notably - several participants observed that international markets sometimes felt more equal and merit-based than local ones (GE_INT11; GE_INT13; GE_INT14). One Georgian founder stated:

"In Georgia, I experienced much more scepticism from clients compared to international markets, where communication felt more equal and professional" (GE_INT11).

This finding is significant because it suggests that internationalisation itself occasionally functioned as a partial escape from restrictive local legitimacy norms - a dynamic that helps explain why digital

and international expansion strategies were more attractive to participants beyond purely economic reasoning.

Psychological and Personal Barriers

Table 9. Psychological Barriers

Group 3: Psychological Barriers		
Fear of failure	Hesitation toward experimentation and high-stakes decisions due to high social and economic cost of failure in transition and crisis-affected economies.	*"My previous startup failed completely, but that experience taught me more than any university could have taught me about entrepreneurship and resilience."* (GE_INT12) *"One of the most important entrepreneurial skills is the ability to continue even after failure and not allow setbacks to stop you."* (GE_INT13) *"Resilience is essential because entrepreneurship constantly brings uncertainty, pressure, and unexpected setbacks."* (LT_INT05)
Low self-efficacy and confidence gaps	Communication anxiety, self-doubt, and hesitation when entering unfamiliar industries, working with new technologies, or operating internationally.	*"Communication with developers was difficult because I had no technical background, and I had to learn their language and processes while building the startup."* (GE_INT12) *"Over time, I became much more confident in decision-making because entrepreneurship forced me to solve problems independently."* (LT_INT05) *"Entrepreneurship taught me how to communicate with very different types of people, including developers, clients, investors, and international partners."* (GE_INT12)
High perceived risk and uncertainty	Burnout, isolation, and emotional exhaustion produced by concentrated responsibility, market volatility, and continuous adaptation under institutional pressure.	*"Persistence is both my greatest strength and sometimes my greatest weakness, because I cannot stop until I solve the problem."* (GE_INT14) *"I learned that entrepreneurship requires constant adaptation because markets, technologies, and customer expectations are always changing."* (GE_INT14) *"I realized that flexibility and the ability to pivot quickly are essential for survival when the market does not respond as expected."* (GE_INT12)

Source: Author, based on thematic analysis of interview data categorised in themes in MAXQDA software (N = 27 interviews).

Beyond institutional and cultural obstacles, the interviews revealed important psychological and emotional dimensions of entrepreneurship that are often underrepresented in quantitative research (GE_INT11; GE_INT12; GE_INT14; LT_INT04; LT_INT07; LT_INT08). Participants described

burnout, self-doubt, communication anxiety, emotional exhaustion, and isolation as recurring parts of their entrepreneurial journeys - dimensions that resonate with the continuous adaptation under pressure that characterises entrepreneurship in post-Soviet and transition contexts (Sorgner et al., 2024; Ng & Fu, 2025).

Burnout appeared consistently across both Lithuanian and Georgian interviews (GE_INT12; GE_INT13; GE_INT14; LT_INT07; LT_INT08). Entrepreneurs named extremely long working hours, concentrated responsibility, and emotional exhaustion tied to persistent uncertainty. For instance, one participant reflected that:

"persistence is both my greatest strength and sometimes my greatest weakness, because I cannot stop until I solve the problem" (GE_INT14),

which illustrates how the same traits that drove entrepreneurial resilience also created personal cost. Others described how slow technical progress or repeated setbacks generated strong discouragement during critical development stages (GE_INT12; LT_INT07).

Isolation was another highly visible theme, specifically among founders working independently or with very small teams (GE_INT11; GE_INT12; GE_INT14; LT_INT04; LT_INT05). Several participants described early-stage entrepreneurship as emotionally lonely, with responsibility for product development, marketing, strategy, client communication, and financial survival concentrated around a single person. This aligns with Floris and Palmas (2024), who note that women entrepreneurs in resource-constrained environments often absorb disproportionate operational burdens without adequate institutional or professional support.

Fear and self-doubt appeared frequently, especially among founders entering unfamiliar industries or working with new technologies (GE_INT11; GE_INT12; LT_INT04; LT_INT07). One participant even shared about the tension between the risk of moving too slowly and the vulnerability of exposing unfinished work early, noting that showing an incomplete product and receiving difficult feedback early is preferable to spending a year solving problems that may not exist (GE_INT12). This reflects the psychological cost of experimental entrepreneurship - where validation requires visibility before confidence has been fully established.

Communication anxiety emerged as another important and often hidden barrier, specifically in the Georgian interviews (GE_INT12; GE_INT13; GE_INT14). Participants described difficulties communicating with developers, institutions, contractors, and foreign clients. Language barriers, unfamiliarity with technical vocabulary, and uncertainty about professional communication norms all affected confidence, especially in international work contexts (GE_INT13; GE_INT14). These findings add a specific layer of complexity to the internationalisation literature, which often focuses on market and regulatory barriers, but underweights the psychological and communicative dimensions of cross-border entrepreneurial activity (Alon et al., 2025).

Taken together, these findings suggest that simplified narratives of women entrepreneurs as simply resilient or determined are misguided. Instead, the interviews show a more complex picture - a continuous adaptation under institutional, emotional, and professional pressure, where learning, improvisation, emotional regulation, and strategic restructuring happened simultaneously and often without adequate external support (Chitac et al., 2025; Sorgner et al., 2024). This framing is

academically important because it positions entrepreneurship not as a static personal trait but as a demanding adaptive process which is actively shaped by structural conditions, and it directly shares a context on why digital tools, AI solutions, and flexible operational models became so central to how these women sustained and developed their businesses.

4.3 Digital Tools as Everyday Entrepreneurial Enablers

The thematic analysis of the interviews in this research suggests that participants do not view digital tools as optional or technological add-ons to existing business models. Bus instead, they function as everyday entrepreneurial solutions that help women entrepreneurs survive financial instability, compensate for institutional gaps, reduce operational pressure, and access opportunities that would otherwise have been difficult to reach (GE_INT11; GE_INT12; GE_INT13; GE_INT14; LT_INT04; LT_INT07; LT_INT08; LT_INT10). Across both Lithuanian and Georgian interviews, participants consistently described technology as something deeply integrated into their daily problem-solving rather than as a separate strategic activity. This pattern is connected to what Huang et al. (2025) describe as digital embeddedness in entrepreneurial practice - where digital tools become part of how entrepreneurial agency itself is exercised, not as a layer added on top of it.

Importantly, digital adaptation was rarely connected to abstract innovation goals. In most cases, it emerged from necessity. Entrepreneurs used digital tools because they lacked staff, financial resources, institutional support, or access to traditional business networks, particularly in the early stages when digital systems often functioned as alternative entrepreneurial infrastructure (Sorgner et al., 2024; Huang et al., 2025). Participants discussed technology in rather practical terms - saving time, reducing costs, simplifying communication, organising chaotic workflows, replacing expensive specialists, and enabling remote work - which suggests that digital adaptation among the women interviewed was pragmatic and directly connected to surviving operational demands.

Digital Tools as Cost-Reduction Solutions

One of the clearest patterns across the interviews was the role of digital tools in reducing operational costs under tight financial constraints (GE_INT11; GE_INT12; GE_INT14; LT_INT05; LT_INT08; LT_INT10). This was especially strong among Georgian participants, many of whom started businesses with very limited resources and almost no external investment. These participants explained that digital platforms allowed them to avoid expensive infrastructure, large teams, or custom software development and instead use a software (GE_INT11; GE_INT12). One founder explained that platforms such as *Skedda* allowed her coworking business to automate booking and operational management without major investment:

"Platforms like Skedda helped us automate bookings and coworking management without needing to build an expensive custom system from scratch" (GE_INT12).

Similarly, several participants added to it:

"affordable digital platforms allowed us to avoid expensive custom development during the initial stages" (GE_INT12),

Which reflects what Huang et al. (2025) describe as digital bricolage - the recombination of available tools to compensate for missing institutional or financial resources.

Free or low-cost tools were described as essential entrepreneurial infrastructure rather than auxiliary aids, several times by several entrepreneurs (GE_INT11; GE_INT12; GE_INT14; LT_INT05; LT_INT08). *Canva, Google Drive, CRM systems, AI assistants, and social media platforms* were used not for convenience but because they made professional-level operations financially accessible and realistic. As one founder explained,

"digital tools helped reduce costs significantly because many useful platforms and AI tools have free or affordable versions" (GE_INT11).

Automation became closely tied to cost reduction as well, particularly in reducing the need to hire during early stages. A Lithuanian participant put it this way:

"For startups, automation and AI are some of the biggest ways to save money because they reduce the need for additional employees" (LT_INT08).

A Georgian founder echoed this:

"Digital automation allowed us to manage bookings, workflows, and operational processes much more efficiently without increasing staff" (GE_INT12).

These patterns align with Sorgner et al. (2024) and Floris and Palmas (2024), who observe that women entrepreneurs in transition economies frequently compensate digital solutions for missing institutional and financial resources, rather than treating them as investments in innovation.

AI tools were mentioned to echo cost-reduction logic especially where entrepreneurs would traditionally require professional services. One participant noted that:

"AI tools helped reduce consulting and administrative costs because they could provide quick summaries, comparisons, and planning support" (GE_INT14).

Together, these findings suggest that digital tools functioned as low-cost entrepreneurial infrastructure, enabling operations in contexts of financial and institutional scarcity, particularly in post-Soviet contexts where fragmented support systems remain common (Chitac et al., 2025; Sorgner et al., 2024).

Digital Tools as Time-Saving and Workflow Solutions

A second consistent sub-category and a finding was the role of digital tools in improving operational speed and workflow organisation (GE_INT12; GE_INT13; GE_INT14; LT_INT04; LT_INT07; LT_INT08; LT_INT10). Time was repeatedly described as one of the most limited entrepreneurial resources, particularly for participants managing multiple business functions simultaneously. Workflow tools such as *Monday.com, Miro, BPM systems, and CRM platforms* appeared regularly across the interviews. One Lithuanian entrepreneur explained:

"We relied heavily on Monday.com and Miro to organise projects, tasks, and workflows, especially because creative work can easily become chaotic without structure" (LT_INT07).

A Georgian founder similarly described the early integration of operational systems:

"We integrated BPM systems and digital internal management systems very early, which allowed projects and workflows to continue smoothly even during travel or lockdowns" (GE_INT13).

AI-supported information processing was also a common time-saving mechanism (GE_INT11; GE_INT13; GE_INT14; LT_INT05; LT_INT07; LT_INT08). Several participants described how AI reduced the time required for research, editing, comparison, and communication preparation. One noted that:

"what previously took me hours of comparing materials and specifications can now be summarized by AI in minutes" (GE_INT14),

while another explained that AI tools:

"save an enormous amount of time because they quickly organize and summarize information that would otherwise require long manual analysis" (LT_INT08).

Notably, entrepreneurs discussed AI not as a replacement for decision-making but as a way to reduce cognitive overload:

"AI became useful not for replacing human decisions, but for helping organise information and simplifying the decision-making process" (LT_INT07).

This reflects what Huang et al. (2025) describe as digital tools serving cognitive and operational scaffolding functions, not substituting for entrepreneurial judgement.

Automation also reduced repetitive operational work, especially in tech where small teams managed disproportionate workloads. One founder described how AI handled candidate database analysis automatically (GE_INT11), and another emphasised that physical presence is not required to optimize operations for the business (GE_INT13). These findings closely align with dynamic capabilities theory, which explains adaptive responsiveness - the ability to sense, integrate, and reconfigure resources under changing conditions - as central to entrepreneurial survival in unstable environments (Sorgner et al., 2024; Huang et al., 2025).

Digital Tools as Accessibility and Legitimacy Solutions

Another finding was that digital tools significantly increased entrepreneurial accessibility and helped construct legitimacy in environments where traditional pathways were limited (GE_INT11; GE_INT12; GE_INT13; GE_INT14; LT_INT08; LT_INT10). For many participants, digital business models created professional opportunities that would have been difficult through conventional employment or through on-site, offline systems - especially for women entrepreneurs juggling flexibility, motherhood, international reach, and reduced dependence on local geography. As one Lithuanian participant explained, motherhood became directly tied to her technological

direction:

"After becoming a mother, I started thinking about technologies that could create meaningful experiences for children and parents, which later became the foundation of my business" (LT_INT08).

Remote work capabilities were equally significant - participants noted that digital systems allowed them to manage clients and projects regardless of physical location (GE_INT13; LT_INT10), and that businesses with strong digital infrastructure adapted more easily during lockdowns and uncertainty (GE_INT13).

For entrepreneurs from smaller markets, digital tools also reduced dependence on local economies. One participant explained simply:

"Digital tools reduced dependence on local markets because entrepreneurs could reach clients, partners, and audiences internationally" (LT_INT08).

These patterns align with Alon et al. (2025), who argue that digital products lower transaction costs and enable internationalisation with relatively low initial investment, and with Huang et al. (2025), who say that digital channels reduce reliance on traditional institutional gatekeepers.

Digital tools also played a central role in constructing professional legitimacy, especially for entrepreneurs operating in male-dominated industries or working independently without strong institutional backing (GE_INT11; GE_INT12; GE_INT14). One Georgian architect described how her business effectively began through social media:

"The business started from a very personal need. I could not gain enough practical experience in my field, so I began posting my own work online and slowly attracting clients" (GE_INT14).

Later adding that:

"at the beginning, the business was simply a Facebook page where I shared my projects, but over time it developed into a professional service" (GE_INT14).

Handling traditional barriers like this reflects what Chitac et al. (2025) identify as an alternative legitimacy pathway, where digital visibility substitutes for institutional recognition. *LinkedIn* also was mentioned as a key tool for international visibility and networking:

"I actively use LinkedIn to expand my network internationally and connect with potential collaborators and future clients" (GE_INT11).

Another participant noted that:

"digital tools helped me overcome one of my biggest early barriers, which was visibility, because without social media and online platforms it would have been almost impossible to attract clients independently" (GE_INT14).

These findings suggest that digital tools supported and expanded entrepreneurial participation by reducing barriers tied to geography, parenthood, and traditional employment structures, while also offered alternative legitimacy pathways in environments where women entrepreneurs faced higher credibility thresholds, connecting to several theories mentioned earlier in this research (Huang et al., 2025; Chitac et al., 2025).

4.4 AI-Enabled Tools as Strategic and Adaptive Solutions

One of the most notable findings of this research was the rapidly growing role of artificial intelligence within women-led entrepreneurial activities in both Lithuania and Georgia (GE_INT11; GE_INT12; GE_INT13; GE_INT14; LT_INT05; LT_INT07; LT_INT08; LT_INT10). Participants did not discuss AI as a futuristic or abstract innovation but instead, they described it as a daily tool - practical, adaptive mechanism which is integrated into daily business processes, strategic planning, research, communication, and learning. Importantly, AI was rarely positioned as a replacement for human thinking - entrepreneurs framed it as a support system that reduced informational barriers, simplified complex processes, and helped them compensate for limited financial, institutional, and human resources. AI adoption was problem-oriented rather than driven by technological enthusiasm, which aligns with Huang et al.'s (2025) observation that women's digital engagement tends to be shaped by practical resource constraints rather than by innovation-oriented strategy alone.

AI as a Knowledge and Learning Solution

A pattern across the interviews was the use of AI as an accessible knowledge and learning mechanism (GE_INT12; GE_INT13; GE_INT14; LT_INT05; LT_INT07; LT_INT08). Participants described AI tools as systems that helped them learn about and understand unfamiliar topics, simplify technical information, improve professional communication, and conduct research independently - which was especially valuable for entrepreneurs without access to expensive professional services with consultants, formal training, or institutional support. One entrepreneur working in architecture and design explained that she actively used *ChatGPT* and *Gemini* for material research, comparing resources and specifications, summarising technical documents, and editing official English texts (GE_INT14), which shows us how AI has become handy for them in both technical and communication-related tasks.

AI also became important for administrative and legal understanding. One founder explained that AI helped her formulate professional contract language (GE_INT14), and another emphasised that:

"even free AI tools can provide meaningful support for research, planning, communication, and operational efficiency in small businesses" (LT_INT05).

Several participants connected AI directly to self-development and described learning through experimentation rather than formal education (GE_INT12; GE_INT14; LT_INT05; LT_INT07). This pattern aligns with effectuation theory and adaptive entrepreneurship, as discussed in the theoretical framework, in which entrepreneurs use available technological resources to build knowledge independently rather than waiting for institutional guidance (Sorgner et al., 2024; Chitac et al., 2025).

AI as a Strategic Decision-Making Solution

A further finding was the role of AI in strategic decision-making (GE_INT12; GE_INT13; GE_INT14; LT_INT03; LT_INT05; LT_INT07; LT_INT08; LT_INT10). Participants described using AI tools for market analysis, competitor evaluation, trend identification, branding strategy, customer behaviour analysis, and international market research - these functions previously associated mainly with larger companies or specialised consultancies. One Georgian entrepreneur described using AI to analyse competitors' advertising strategies:

"AI helped me analyze competitors' advertisements and identify which marketing strategies were performing best in the Georgian market" (GE_INT14).

Another participant noted that:

"when planning a new website and social media strategy, I used AI to identify current trends and understand what audiences respond to most" (GE_INT14).

Lithuanian participants similarly described AI as central to international research:

"I often use AI for preliminary research before entering a new market because it helps reduce uncertainty and saves time" (LT_INT10).

One founder explained that the company was building AI directly into its analytics infrastructure so businesses could receive automatic recommendations based on internal data:

"We are integrating AI into analytics so companies can receive automatic insights and recommendations based on their business data" (GE_INT13).

This positions AI not just as an operational tool but as part of the business infrastructure itself - a specific shift that resonates with Alon et al.'s (2025) finding that digital capabilities support innovation and internationalisation in small and women-led firms, especially recently.

Although, participants did not place full trust in AI as a decision-maker. As one entrepreneur stated:

"I do not fully trust AI to make decisions for me, but it is extremely useful for organising information and identifying possible directions" (GE_INT12).

Another noted that:

"the combination of personal experience, human advice, and AI-generated insights creates the strongest foundation for decision-making" (GE_INT12). This nuance is academically important - it shows that AI functioned as a cognitive scaffold, not as a compensation for entrepreneurial judgement - resonated with Huang et al. (2025), who describe AI as expanding entrepreneurial cognition rather instead of replacing it. The near-universal AI adoption observed in Otis et al. (2024),the sample (96.3 %) confirming this suggests that women entrepreneurs operating under limited resources may, in fact, be closing the gender AI gap faster than the global average.

AI as a Resource-Constraint Solution

Across the interviews, AI was actively named as a direct response to resource scarcity (GE_INT11; GE_INT12; GE_INT13; GE_INT14; LT_INT05; LT_INT07; LT_INT08). Participants started AI adoption due to limited budgets, small teams, time pressure, and operational overload, and because of that, often turned to AI precisely because hiring employees, consultants, or agencies was financially unrealistic. One founder stated it directly:

"For startups with limited budgets, AI tools are extremely valuable because they reduce the need to hire additional people during the early stages" (GE_INT11).

Another participant noted that AI-supported summarisation dramatically shortened research processes that would otherwise require hours of manual work (LT_INT08).

Notablu, the recruitment sector provided clear examples, where AI replaced lengthy manual processes:

"AI automatically reads resumes, extracts important information, and fills out forms, which saves recruiters a significant amount of manual work" (GE_INT13),

and as other echoed:

"the system can automatically go through databases, identify suitable candidates, and send relevant next-step links without fully manual intervention" (GE_INT11).

Participants also described AI as a bridge for missing expertise (GE_INT12; GE_INT14), and one explained that AI helped simplify technical communication despite her lack of programming background (GE_INT12). These findings closely align with bricolage theory (Huang et al., 2025; Sorgner et al., 2024).

Lastly, several participants also noted that AI reduced the psychological pressure of entrepreneurial overload (GE_INT12; GE_INT14; L_INT07). Furthermore, AI-powered organisation and summarisation made entrepreneurs feel more capable and less overwhelmed, so AI operated not only as a technical resource but also as a psychological coping mechanism. AI was commonly treated as a entrepreneurial survival strategy in uncertain and resource-limited post-Soviet environments - adaptive infrastructure rather than luxury innovation (Chitac et al., 2025; Ng & Fu, 2025).

AI Limitations and Risks

Even though participants generally described AI positively, the interviews also revealed important concerns and limitations (GE_INT12; GE_INT13; GE_INT14; LT_INT07). This is academically central because it shows that entrepreneurs did not adop AI without criticism. One of the concerns were inaccurate or unrealistic AI-generated outputs. The architect-entrepreneur noted that AI-generated visuals sometimes ignored real measurements, construction limitations, and material realities, and that some clients became overly attached to AI-generated concepts that could not exist in practice (GE_INT14). Several other participants also pressed on that AI outputs required human

verification and professional expertise, and that AI was useful "*only when used intelligently"* (GE_INT14), which is a pragmatic stance in light of Carvajal et al. (2024), who warn that without targeted policy support gender gaps in AI proficiency can grow, which presents itself as a a risk that the women in this study actively counter through self-directed experimentation.

Distrust toward AI systems also surfaced, particularly within post-Soviet business environments. One Georgian HR tech founder explained that:

"at first, banks and large organizations were afraid to use cloud-based HR systems because they did not trust digital infrastructure" (GE_INT13), and that: *"many investors initially believed that companies in Georgia would never trust SaaS products with sensitive data*" (GE_INT13).

These observations resonate to Ashraf et al.'s (2025) point that institutional trust in digital systems is itself shaped by broader institutional quality - and that adoption hesitancy is more structural, not purely individual.

Participants also expressed concern about overdependence on AI outputs and emphasised the continued importance of human creativity, emotional understanding, and contextual judgement (GE_INT12; GE_INT14; LT_INT07). Based on these entreprneeurs, AI did not remove the need for entrepreneurial interpretation, particularly in international regulations, cultural communication, and technical implementation where contextual nuance remained central. Taken together, these findings suggest that women entrepreneurs from the interviews both in Georgia approached AI pragmatically rather than ideologically - and view it as highly useful under financial and institutional pressure but also remain aware of its limitations. This balance is clearly explained earlier by Huang et al. (2025) who described it as sociotechnical embedding: digital tools become genuinely useful only when interpreted, adjusted, and validated through human judgement within specific institutional and cultural contexts.

4.5 Digital Adaptation, Resilience, and Bricolage

One of the central analytical findings of this research was that the women interviewed in Lithuania and Georgia did not use digital tools passively. They continuously adapted, improvised, and combined fragmented resources to survive and grow within unstable entrepreneurial environments (GE_INT09; GE_INT11; GE_INT12; GE_INT13; GE_INT14; LT_INT04; LT_INT05; LT_INT07; LT_INT08). Across the interviews, entrepreneurship was described less as a stable journey and more as an ongoing process of adjustment - a pattern that connected to what Sorgner et al. (2024) and Chitac et al. (2025) name as the adaptive logic of entrepreneurship in transition economies.

This section moves beyond individual tools to focus on entrepreneurial behaviour. The findings showed strong patterns of *resilience, learning-by-doing, multitasking, improvisation, and self-directed problem-solving.* Participants operated under uncertainty, limited financial resources, weak institutional support, and shifting market expectations, so digital adaptation became closely connected to entrepreneurial survival itself. Very few participants described themselves as "technology experts." They developed digital capabilities gradually, through necessity and experimentation, which aligns with what Huang et al. (2025) describe as digital bricolage - the recombination of available tools and knowledge under resource constraints rather than as part of a planned digital transformation strategy.

Improvisation and Learning-by-Doing

Improvisational entrepreneurial behaviour was one of the clearest patterns across the interviews (GE_INT09; GE_INT12; GE_INT13; GE_INT14; LT_INT04; LT_INT07; LT_INT08). Participants often described building businesses without complete knowledge, stable structures, or long-term certainty. Rather than waiting for the right conditions - they learned through doing. Several openly admitted they had no formal preparation for many of the responsibilities they ended up taking on - accounting, taxation, contracts, client communication - and figured these out while running projects and trying to stay financially afloat. As one Lithuanian entrepreneur put it:

"at the beginning, I did not know how to manage many business processes, but over time I learned through practice, mistakes, and experimentation" (LT_INT08).

This learning-by-doing logic was especially strong among founders working independently and without institutional backing (GE_INT12; GE_INT14; LT_INT04; LT_INT08). The Georgian interviews especially showed strong improvisational patterns tied to unstable labour conditions, with several participants describing how they built their businesses gradually - taking on freelance work, accepting small projects, leaning on personal networks, and continuously adjusting their business models as the market shifted (GE_INT10; GE_INT12; GE_INT14). Improvisation was also closely tied to digital adaptation itself. Entrepreneurs experimented with different platforms, AI systems, and communication tools without any formal training. One founder simply explained that many tools were adopted because:

"we needed to solve problems quickly and had no time to wait for ideal solutions" (GE_INT09).

This reflects dynamic capabilities theory closely - the idea that survival depends on continuously sensing, adapting, and reconfiguring resources under changing conditions (Sorgner et al., 2024; Huang et al., 2025).

Resilience Under Structural Pressure

Resilience appeared throughout the interviews, but not in the romanticised sense often used in entrepreneurship discourse (GE_INT11; GE_INT12; GE_INT13; GE_INT14; LT_INT07; LT_INT08). Participants described entrepreneurship as emotionally exhausting, unstable, and psychologically demanding. Resilience here often came from necessity, persistence, and survival - not inspiration. Many also openly discussed exhaustion, lack of rest, and the pressure of handling everything alone. One participant described herself as someone who simply did not stop until a problem was solved, even when the situation became irrational and draining (GE_INT14). Others described continuing despite repeated setbacks - rejected projects, unstable income, regulatory difficulties, technical failures (GE_INT11; GE_INT12; GE_INT14; LT_INT07).

Several entrepreneurs connected this resilience to broader post-Soviet labour conditions, where rigid employment structures and limited professional growth pushed them toward entrepreneurship in the first place (GE_INT10; GE_INT12; GE_INT14). In the contect of the thematic analysis of the interviews as part of this research, resilience became connected to business growth but to personal autonomy and long-term survival within unpredictable systems. This finding resonates to entrepreneurial resilience theory and Floris and Palmas (2024), who argue that women

entrepreneurs in resource-constrained settings often build resilience through everyday coping instead of stable institutional protection.

Multitasking and Self-Teaching

Another visible pattern was multitasking and self-teaching (GE_INT11; GE_INT12; GE_INT13; GE_INT14; LT_INT04; LT_INT05; LT_INT07; LT_INT08). Most participants worked within fragmented environments where they had to perform multiple professional roles simultaneously - manager, marketer, strategist, accountant, designer, and customer support. As one Georgian founder explained, in small businesses,

"there are not separate people for every position," so entrepreneurs constantly switched between responsibilities (GE_INT13).

This was even more important because most participants did not have access to stable support teams or the financial resources to hire specialists.

Digital tools and AI supported self-teaching in notable ways. Entrepreneurs described learning independently through *YouTube tutorials*, *articles, AI-generated explanations, webinars, online communities, and professional networking platforms* (GE_INT12; GE_INT13; GE_INT14; LT_INT05; LT_INT07). Several participantsmentioned that they had to keep updating themselves because digital environments changed quickly - especially in design, HR technology, marketing, and online branding (GE_INT11; GE_INT13; GE_INT14; LT_INT07). Self-teaching, and continuous learning, was not framed as a temporary stage but as a permanent part of entrepreneurial identity - which reflects dynamic capabilities theory directly (Huang et al., 2025; Alon et al., 2025).

Digital Bricolage and Resource Combination

A central theoretical contribution of this research becomes visible through digital bricolage (GE_INT11; GE_INT12; GE_INT13; GE_INT14; LT_INT04; LT_INT05; LT_INT07; LT_INT08). Entrepreneurs consistently combined fragmented digital resources, personal networks, AI systems, free applications, social media, outsourced labour, and improvisational strategies to compensate for structural limitations. Instead of operating with stable infrastructures, they gathered what was available - one participant described building her business through Facebook posts, student projects, personal contacts, and gradual experimentation before even formally registering the company (GE_INT14). Another explained that free online groups and social media exposure became critical substitutes for paid advertising during early business stages (GE_INT14; LT_INT05).

Several founders combined AI tools with social media branding, freelance outsourcing, and digital coordination platforms (GE_INT11; GE_INT13; GE_INT14). One entrepreneur explained that she had no permanent office or stable internal team, so she continuously gathered temporary project-based collaborations through digital coordination systems (GE_INT14). Resource combination was especially visible among those facing financial limitations - free design tools, AI systems, cloud storage, project management apps, and communication platforms were used strategically because full professional infrastructure was not affordable (GE_INT11; GE_INT12; GE_INT14; LT_INT05). Bricolage was not only technological but also involved emotional, social, and professional adaptation - this connects to Huang et al. (2025), who argue that digital bricolage

in resource-constrained environments works as a survival-oriented adaptive mechanism instead of as pure innovation - entrepreneurs use whatever is accessible, affordable, and flexible enough to keep going.

The findings of this section suggest that digital adaptation among women entrepreneurs in Lithuania and Georgia extended beyond simple technology adoption, because they continuously experimented, improvised, multitasked, self-taught, and combined fragmented resources to overcome structural limitations and sustain business activity - digital adaptation was deeply connected to survival logic rather than purely innovation-oriented growth (Chitac et al., 2025; Sorgner et al., 2024; Huang et al., 2025).

4.6. Internationalisation Through Digital and AI-Enabled Solutions

Based on the findings, digital and AI-enabled systems significantly changed how the women interviewed approached internationalisation. For many participants, international expansion was not a long-term ambition but an early survival strategy (GE_INT11; GE_INT13; GE_INT14; LT_INT05; LT_INT10; LT_INT11). Entrepreneurs from smaller post-Soviet economies frequently described local markets as financially limited, institutionally unstable, or simply too small to support sustainable growth, which made digital platforms, AI tools, and online visibility critical and important to overcoming structural constraints.

Internationalisation here was not limited to exporting products abroad, but remote freelancing, digital networking, cross-border cooperation, participation in international competitions, global branding, and international legitimacy-building (GE_INT11; GE_INT13; GE_INT14; LT_INT05; LT_INT10). The findings suggest that digital tools reduced traditional dependence on geography, infrastructure, and local gatekeepers, and at the same time, AI-enabled systems supported faster market understanding, communication adaptation, and operational flexibility across borders - which is consistent with Alon et al.'s (2025) argument that digital capabilities are increasingly central to how small and women-led firms internationalise, and also with Pergelova et al.'s (2019) democratization thesis on digital technologies and female-led SME internationalisation.

Internationalisation Through Digital Visibility

Digital visibility played a central role in enabling internationalisation (GE_INT11; GE_INT13; GE_INT14; LT_INT05; LT_INT10). Online platforms, social media, digital portfolios, networking systems, and remote communication created opportunities that would have been inaccessible without serious investment or physical relocation. This was especially clear among architects, designers, freelancers, consultants, and SaaS founders, who described internationalisation as beginning through visibility, not only though formal export strategies.

One Georgian architect explained that her business started as a simple Facebook page where she shared student projects because she lacked access to professional experience locally (GE_INT14). Over time, this visibility led to clients and then to projects across Germany, Greece, Italy, Lithuania, and the United States. She reflected that:

"I have completed projects in Germany, Greece, Italy, Lithuania, and the United States, which helped me gain confidence working internationally" (GE_INT14).

This shows how visibility worked not only as marketing but also as a path toward legitimacy and confidence-building - a pattern what Chitac et al. (2025) describe as alternative legitimacy construction in environments where institutional recognition is harder to access.

LinkedIn appeared frequently as a major internationalisation tool across both countries (GE_INT11; LT_INT05; LT_INT10; LT_INT11). One founder explained that:

"LinkedIn became one of the main tools for trying to connect with international clients and foreign business networks" (GE_INT11), which aligns with Hu et al. (2024), who show in their resesarch that digital platforms support SME internationalisation specifically through knowledge sharing and learning from foreign customers, not only through transactional reach.

Another described actively using the platform to expand her network and find international collaborators (GE_INT11). Lithuanian participants similarly emphasised that digital networking reduced their dependence on local professional circles and gave direct access to international stakeholders (LT_INT05; LT_INT10).

In visually oriented industries - architecture, design, consulting, creative entrepreneurship - digital portfolios and social media branding even worked as substitutes for institutional legitimacy. Entrepreneurs built credibility directly through online visibility, instead of relying on local recommendations or formal industry gatekeepers (GE_INT11; GE_INT13; GE_INT14). One participant described international competitions and online exposure as one of the strongest ways to become visible outside Georgia (GE_INT14). At the same time, digital visibility required constant adaptation - entrepreneurs actively managed their branding, communication style, portfolios, websites, and social media presence to appear internationally competitive - which shows how visibility itself becomes a strategic entrepreneurial capability in digital environments (Huang et al., 2025).

Internationalisation as Institutional Escape

One of the central findings of this research was that internationalisation often worked not only as a growth strategy but as a form of institutional escape (GE_INT11; GE_INT13; GE_INT14; LT_INT05; LT_INT11). This pattern was especially strong among Georgian participants but appeared among Lithuanian entrepreneurs as well. Many described local environments as restrictive - small markets, bureaucratic inefficiencies, unstable systems, conservative business cultures, limited investment ecosystems, and low trust toward digital innovation pushed them outward.

One participant stated directly that:

"*small local markets like Lithuania and Georgia naturally push entrepreneurs toward internationalisation because growth opportunities are limited domestically"* (LT_INT05).

Several Georgian founders described difficulties connected to local trust systems, particularly in SaaS and technology. One explained that:

"many investors initially believed that companies in Georgia would never trust SaaS products with

sensitive data, which became one of the biggest barriers at the beginning" (GE_INT13).

International markets often responded differently, showing more openness toward digital innovation. Another founder reflected:

"In Georgia, I felt more cultural pressure and skepticism from clients, while international partners treated me much more equally" (GE_INT11).

This suggests that internationalisation also operated as a pathway toward legitimacy and professional recognition - Huang et al. (2025) also notes that digital channels reduce dependence on local institutional arrangements that may be exclusionary.

Bureaucratic pressure also pushed entrepreneurs outward, specifically administrative work, taxes, contracts, certifications, and compliance requirements often consumed time and energy, but digital business models reduced dependence on local institutions because many tasks could be handled online (GE_INT14). However, internationalisation was not idealised as participants openly discussed difficulties with foreign regulations, standards, and certification systems. One described how European clients prioritised compliance:

"In Europe, clients paid much more attention to certifications and data security standards before considering cooperation" (GE_INT13). Another described a small bakery project in New York becoming a six-month bureaucratic struggle involving district councils, heritage approvals, and building rules over even a small external pipe (GE_INT14). Despite these obstacles, entrepreneurs continued pursuing international markets because local limitations often felt more restrictive than those in foreign markets. This finding contributes to post-Soviet entrepreneurship literature because it shows that digital internationalisation can function not only as economic expansion but also as a strategic escape from fragmented local ecosystems (Sorgner et al., 2024; Ashraf et al., 2025).

AI and Cross-Border Capability Development

AI-supported systems also helped entrepreneurs develop cross-border capabilities (GE_INT11; GE_INT13; GE_INT14; LT_INT05; LT_INT07; LT_INT10). Participants used AI for translation, communication, research, competitor analysis, market understanding, branding adaptation, and international strategic planning, rarely as a replacement for human judgment - it functioned as a support mechanism that reduced informational barriers and accelerated learning about foreign markets. One Lithuanian participant explained that:

"I often use AI for preliminary research before entering a new market because it helps reduce uncertainty and saves time" (LT_INT10). A Georgian architect similarly described using AI to analyse competitors, identify market trends, and evaluate visual expectations before redesigning her Facebook page and website (GE_INT14), and added that:

"AI tools and digital research platforms helped me better understand trends, customer preferences, and visual expectations in international markets before entering them" (GE_INT14).

These findings show that AI functions as a strategic learning infrastructure for smaller entrepreneurs who do not have access to expensive consultants or specialised research teams - a

theme observed by Alon et al.'s (2025) and Huang et al.'s (2025) - noting that digital capabilities can partially substitute for missing institutional support. Translation and communication adaptation also emerged as important capabilities. Several participants discussed language barriers and the difficulty of adjusting communication styles across countries. AI helped by improving professional writing, summarising information, and structuring clearer communication (GE_INT14). One entrepreneur explained that:

"AI helps simplify complex information very quickly, which makes strategic planning much faster than traditional manual research" (LT_INT07).

The findings also suggest that AI reduced psychological barriers connected to internationalisation - entrepreneurs felt more capable of exploring foreign opportunities because information became more accessible and uncertainty easier to manage (GE_INT12; GE_INT14; LT_INT07; LT_INT10). But, participants remained cautious and one emphasised that:

"I do not fully trust AI to make decisions for me, but it is extremely useful for organizing information and identifying possible directions" (GE_INT12).

This pragmatism around the usage of AI suggests that AI is treated as adaptive cross-border infrastructure rather than a complete solution - used to compensate for structural disadvantages such as limited access to consultants, restricted international exposure, and informational asymmetries.

Overall, the findings of this section suggest that digital visibility, alternative legitimacy pathways, and AI-supported cross-border capabilities reshaped how women entrepreneurs in Lithuania and Georgia approached internationalisation. Internationalisation also worked not only as growth strategy but also as institutional escape - a finding that emerged especially strongly among Georgian participants and which contributes meaningfully to the literature on digital entrepreneurship in transition economies (Huang et al., 2025; Chitac et al., 2025; Alon et al., 2025; Lim et al., 2024).

4.7. Synthesis of comparative findings: shared patterns and contextual differences between Lithuania and Georgia

The comparative findings of this research showed, on one hand, clear similarities and on the other - contextual differences between the women entrepreneurs interviewed in Lithuania and Georgia. While participants in both countries experienced similar pressures connected to digital adaptation, institutional limitations, resource constraints, and internationalisation, the intensity and expression of these experiences often differed depending on local economic, institutional, and cultural conditions. The findings do not support a simple binary division between the two countries. Instead, the interviews showed a shared post-Soviet entrepreneurial logic shaped by historical transition, unstable labour markets, growing digitalisation, and increasing reliance on international markets (Sorgner et al., 2024; Chitac et al., 2025). At the same time, Georgian participants more frequently described entrepreneurship through survival, improvisation, and structural instability, while Lithuanian participants more often emphasised optimisation, flexibility, and strategic scaling.

Table 10. Comparative analysis: Lithuania and Georgia

Dimension	Lithuania	Georgia
Entrepreneurial Motivation	Autonomy, flexibility, work-life balance, creativity; dissatisfaction with corporate structures	Economic adaptation, survival under labour market instability; necessity-driven entrepreneurship more pronounced
Institutional Environment	EU member; relatively stable institutions; formal support exists but complex to access	Non-EU transition economy; fragmented institutions; stronger reliance on informal norms and personal networks
AI & Digital Tool Use	Optimisation-oriented: workflow efficiency, strategic planning, analytics, structured scaling	Compensation-oriented: cost reduction, replacing unavailable expertise, survival-first resource management
Internationalisation	Growth and scaling logic; natural next step in business development; EU market integration	Institutional escape logic; international markets offer legitimacy, fairness, and stability unavailable locally
Digital Maturity	More structured and systematised: CRM, BPM, formal project management	More improvisational: combining free tools, experimental subscriptions, rapidly shifting workflows
Psychological Themes	Burnout, perfectionism, self-pressure, exhaustion from multi-role balancing	Resilience, survival mentality, adaptation under sustained uncertainty and financial constraint
Bricolage Style	Digital bricolage used but embedded within more structured operational systems	Strong bricolage: layered adaptive ecosystems from free tools, social media, AI, and personal networks
Shared Patterns (Both Countries)	Improvisation, continuous self-learning, multitasking, resilience, digital resourcefulness, and internationalisation through digital visibility; Same post-Soviet entrepreneurial inheritance shapes both contexts, with differences in intensity, not kind.	

Table 11. Participant profile summary (selected participants)

Participant ID	Business Sector	Digital Tools Used	Country	Entrepreneurship Type
LT_INT01	HR Technology	AI recruiting, LinkedIn, CRM	Lithuania	Opportunity
LT_INT02	Product Design	Canva AI, Figma, Shopify	Lithuania	Opportunity
LT_INT03	Consulting	ChatGPT, Notion, Zoom	Lithuania	Opportunity
LT_INT04	Creative / Freelance	Instagram, ChatGPT, Trello	Lithuania	Opportunity
LT_INT05	SaaS / Tech	LinkedIn, AI analytics, CRM	Lithuania	Opportunity

Participant ID	Business Sector	Digital Tools Used	Country	Entrepreneurship Type
LT_INT06	Education / Coaching	Zoom, Canva, social media	Lithuania	Mixed
LT_INT07	Marketing	ChatGPT, Gemini, BPM tools	Lithuania	Opportunity
LT_INT08	E-commerce	Shopify, AI SEO, ChatGPT	Lithuania	Opportunity
LT_INT09	Architecture / Design	AutoCAD, AI render, Behance	Lithuania	Mixed
LT_INT10	Business Consulting	ChatGPT, LinkedIn, Notion	Lithuania	Opportunity
LT_INT11	Digital Services	LinkedIn, Slack, AI tools	Lithuania	Opportunity
LT_INT12	Retail / Fashion	Instagram, AI styling tools	Lithuania	Mixed
LT_INT13	Legal Tech	ChatGPT, LegalZoom-type tools	Lithuania	Opportunity
GE_INT09	Architecture	AutoCAD, Facebook, AI tools	Georgia	Mixed
GE_INT10	Freelance / Writing	ChatGPT, social media	Georgia	Necessity
GE_INT11	Consulting / SaaS	LinkedIn, AI systems	Georgia	Mixed
GE_INT12	Creative Services	Canva AI, free tools	Georgia	Necessity
GE_INT13	SaaS / Cloud	AI, cloud platforms, CRM	Georgia	Opportunity
GE_INT14	Architecture / Design	Facebook, AI analytics, AutoCAD	Georgia	Mixed

Entrepreneurial Motivations

Motivations in both Lithuania and Georgia strongly incline towards desire for autonomy, independence, and professional self-realisation. However, the Georgian interviews showed stronger connections between entrepreneurship and economic adaptation or survival-oriented necessity (GE_INT10; GE_INT12; GE_INT13; GE_INT14). Lithuanian participants more often described entrepreneurship as a path toward flexibility, creativity, and work-life balance (LT_INT04; LT_INT06; LT_INT07; LT_INT08; LT_INT11). Several Lithuanian women underlined dissatisfaction with rigid corporate environments and the desire to create more autonomous structures, especially with motherhood, remote work flexibility, and combining creativity with independence emerging especially strongly. Digital entrepreneurship, in many cases, allowed them to combine family responsibilities with more flexible work.

Georgian participants, by contrast, more frequently started entrepreneurship as a response to unstable labour markets and structural barriers (GE_INT10; GE_INT12; GE_INT14). This difference does not mean Lithuanian entrepreneurs avoided instability or that Georgian entrepreneurs lacked self-realisation motives - the contrast differs through intensity - within otherwise similar processes. This pattern aligns with Sorgner et al. (2024) and Ng and Fu (2025), who write that necessity-driven entrepreneurship is more pronounced in weaker institutional environments, while opportunity-driven framing becomes more common where institutional support is stronger. Entrepreneurs in both Lithuanian and Georgian contexts frequently built businesses based on personally experienced problems - HR founders responded to recruitment inefficiencies, designers addressed market gaps, technology founders solved operational frustrations they had encountered themselves (GE_INT11; GE_INT13; GE_INT14; LT_INT02; LT_INT08). This is a shared pattern, which reflects their own needs and opportunity recognition processes, rooted in their own lived experience rather than abstract market analysis.

Barriers

Table 12. Institutional and structural barriers: Lithuania vs. Georgia

Barrier Category	Lithuania	Sakartvelo
Financial	Access to finance exists but limited for digital SMEs; early-stage capital remains scarce	Weak investment ecosystem; low investor trust in SaaS/cloud products; restricted credit access
Institutional / Bureaucratic	Formal support systems exist but complex to navigate; administrative overload reported	Unstable legal and regulatory environment; informal norms dominate over formal rules
Gendered Legitimacy	Legitimacy gaps in tech/innovation-driven sectors; higher credibility thresholds for women	Cultural skepticism toward women in business; stronger gendered expectations in professional interactions
Network & Ecosystem	Access to networks exists but male-dominated in high-growth sectors	Weak startup ecosystem; reliance on personal informal networks rather than formal channels
Digital Infrastructure	Comparably good digital infrastructure; challenges in advanced AI adoption at SME level	Slower digital infrastructure development; lower initial trust in cloud and SaaS platforms
Psychological / Emotional	Burnout, perfectionism, self-pressure; balancing multiple roles and responsibilities	Survival mentality, resilience under uncertainty; entrepreneurship often tied to economic necessity
International Expansion	Local market size limits; EU compliance creates structured but demanding path	Conservative local clients; institutional escape motivates internationalisation as psychological repositioning

Institutional barriers appeared in both countries, but their forms differed (GE_INT11; GE_INT13; GE_INT14; LT_INT03; LT_INT05; LT_INT07). Lithuanian entrepreneurs more frequently

described bureaucratic complexity, administrative overload, slow institutional processes, and fragmented support systems. Formal entrepreneurial infrastructure existed more visibly in Lithuania, but participants often explained that the systems were difficult to navigate or felt disconnected from practical entrepreneurial realities. One Lithuanian participant noted that:

"there are support systems, but many early-stage entrepreneurs still do not know how to access them or feel that the process is too bureaucratic" (LT_INT03).

Georgian participants more often described institutional instability directly and intensely (GE_INT11; GE_INT13; GE_INT14). They mentioned weak startup ecosystems more, as well as low investor trust, restricted financial accessibility, and slow acceptance of digital infrastructure. Georgian SaaS founders explained that local companies initially distrusted cloud-based systems because they felt unfamiliar and risky (GE_INT13). Though , At the same time, both countries demonstrated strong self-reliance - participants bridged the gaps through self-learning, experimentation, and relied on digital self-management tools instead of institutional guidance (GE_INT12; GE_INT13; GE_INT14; LT_INT05; LT_INT07; LT_INT08). This shared post-Soviet entrepreneurial characteristic, where adaptive independence emerges because institutional systems feel incomplete or impractical, connects to the researches by Chitac et al.'s (2025) and Ashraf et al.'s (2025) and observations on how weak institutions push entrepreneurs toward informal arrangements and self-organised solutions.

AI Usage and Digital Adaptation

The usage of AI and digital tools were clearly visible across both countries, but the orientation of the usage were different (GE_INT11; GE_INT12; GE_INT13; GE_INT14; LT_INT05; LT_INT07; LT_INT08; LT_INT10). Lithuanian participants more often approached AI as an optimisation and productivity mechanism - workflow organisation, strategic planning, communication improvement, analytics, branding, operational efficiency (LT_INT05; LT_INT07; LT_INT08; LT_INT10). So, AI became integrated into structured operational processes and scaling activities.

Georgian participants also used AI extensively, but the interviews more often framed AI as a survival-oriented resource compensation mechanism (GE_INT11; GE_INT13; GE_INT14). AI helped them reduce costs, replace unavailable expertise, access learning opportunities, and compensate for limited staffing. Several Georgian founders described how AI allowed them to complete tasks that would otherwise require expensive consultants, developers, or marketers (GE_INT11; GE_INT13; GE_INT14). AI therefore worked not just as a productivity tool but as a structural adaptation mechanism under limited conditions. Both groups, however, showed strongly experimental digital behaviour - constantly testing new tools, subscriptions, and workflows (GE_INT13; GE_INT14; LT_INT05; LT_INT07).

Internationalisation Patterns

Entrepreneurs in both countries frequently saw international expansion as necessary because local markets were too limited for long-term growth (GE_INT11; GE_INT13; GE_INT14; LT_INT05; LT_INT10; LT_INT11). But the emotional and strategic meaning of internationalisation slightly differed: Lithuanian participants more often framed it as scaling and growth optimisation -

international clients, remote collaboration, digital branding, and market expansion appeared as natural next steps within business development (LT_INT05; LT_INT10; LT_INT11).

Georgian participants more often described internationalisation as adaptation and institutional escape (GE_INT11; GE_INT13; GE_INT14). Foreign markets were associated with greater legitimacy, stronger opportunities, larger customer bases, and more stable professional environments. As one participant noted,

"in Georgia, I experienced much more skepticism from clients compared to international markets, where communication felt more equal and professional" (GE_INT11).

This line shows an important psychological dimension of digital internationalisation - international expansion was economic, but also symbolic and institutional. At the same time, both countries relied heavily on digital platforms for international visibility, through LinkedIn, Instagram, online portfolios, and international competitions becoming common pathways toward foreign clients and collaborations (GE_INT11; GE_INT14; LT_INT05; LT_INT10). The findings therefore suggest that digital entrepreneurship significantly reduced traditional geographic limitations for women operating within smaller economies.

Digital Maturity and Entrepreneurial Behaviour

The findings also revealed differences in digital organisational maturity (GE_INT11; GE_INT12; GE_INT13; GE_INT14; LT_INT05; LT_INT07; LT_INT08). Lithuanian entrepreneurs generally showed more structured and systematised digital processes - BPM systems, CRM systems, workflow platforms, structured project management, and formal operational organisation (LT_INT05; LT_INT07; LT_INT08). Georgian entrepreneurs, while they did also demonstrate advanced digital adaptation, their interviews more often reflected improvisational and highly adaptive approaches. Entrepreneurs often combine various free tools, experimental subscriptions, personal networks, and rapidly shifting workflows, depending on immediate business needs (GE_INT11; GE_INT12; GE_INT14). But, this is not lower capability - it shows stronger bricolage under more unstable or resource-constrained conditions (Huang et al., 2025; Sorgner et al., 2024). In both countries, however, entrepreneurs displayed highadaptability, as well as fast-learning behaviour, and continuous experimentation.

Psychological and Emotional Themes

Across both countries, psychological themes were clearly prevalent (GE_INT11; GE_INT12; GE_INT14; LT_INT04; LT_INT07; LT_INT08). Lithuanian participants more often described burnout, self-pressure, perfectionism, and emotional exhaustion connected to balancing multiple responsibilities and maintaining high performance standards (LT_INT04; LT_INT07; LT_INT08). Georgian participants more often mentioned resilience, survival mentality, persistence, and adaptation under uncertainty, and also described entrepreneurship as emotionally demanding but unavoidable (GE_INT11; GE_INT12; GE_INT14). In both countries entrepreneurs experienced continuous pressure, and less of stable entrepreneurial confidence. The findings challenge the idealised narrative of entrepreneurship and instead present entrepreneurs as humans constantly adapting under financial, institutional, and emotional strain - a framing that aligns with Floris and

Palmas (2024) and supports the value of treating entrepreneurship as an ongoing adaptive process instead of a fixed identity.

The comparative findings show strong similarities between Lithuanian and Georgian women entrepreneurs, which is shaped by shared post-Soviet adaptation processes. Entrepreneurs in both countries relied heavily on digital systems, AI-enabled tools, self-learning, experimentation, and internationalisation strategies to navigate structural limitations, although - the findings also revealed clear differences in intensity and orientation: Lithuanian participants more often emphasised optimisation, flexibility, and structured growth, while Georgian entrepreneurs more strongly focused on survival-oriented adaptation, improvisation, and institutional escape. These differences should not be exaggerated. The research demonstrates a shared entrepreneurial logic based on adaptation, resilience, digital resourcefulness, and continuous capability development within changing economic environments (Chitac et al., 2025; Sorgner et al., 2024; Huang et al., 2025).

4.8. Conclusion from the empirical analysis

This chapter has presented the empirical findings of the qualitative thematic analysis of 27 interviews with women entrepreneurs in Lithuania and Georgia. Taken together, the findings show that entrepreneurship in both contexts cannot be understood as a single, linear process driven by individual ambition, but as an adaptive response to overlapping institutional, financial, cultural, and psychological conditions - a process where digital and AI-enabled tools were not optional additions but central to how participants built, sustained, and expanded their businesses internationally (Sorgner et al., 2024; Chitac et al., 2025; Huang et al., 2025).

Motivations for entering entrepreneurship were shaped by a combination of autonomy, dissatisfaction with traditional employment, lived experience, and - particularly in the Georgian context - economic necessity. Across both countries, the women interviewed described entrepreneurship as both a professional path and an adaptive life strategy, which come from problems they had personally encountered rather than from abstract market analysis (GE_INT11; GE_INT12; GE_INT13; GE_INT14; LT_INT04; LT_INT06; LT_INT08). The distinction between opportunity-driven and necessity-driven entrepreneurship was visible in both countries but was more pronounced in Georgia, which reflects broader patterns identified in transition economy literature (Ng & Fu, 2025; Sorgner et al., 2024).

The barriers participants faced extended well beyond financial constraints, since weak investment ecosystems, fragmented institutional support, bureaucratic complexity, as well as active cultural skepticism and gendered legitimacy thresholds, and lastly - significant emotional pressure shaped daily entrepreneurial decision-making were prevalent. Legitimacy struggles were especially visible among women working in male-dominated industries such as architecture, construction, SaaS, and technology, where competence and skills had to be demonstrated continously before being taken seriously (GE_INT11; GE_INT12; GE_INT14; LT_INT07; LT_INT09). These findings reinforce Chitac et al.'s (2025) and Huang et al.'s (2025) observation that gendered institutions continue to shape entrepreneurial behaviour through asymmetric expectations across regulative, normative, and cognitive dimensions, even in environments where formal equality frameworks exist.

The findings also showed that digital and AI-enabled tools became active in the participant’s entrepreneurial practice - not as innovation projects but as everyday solutions to cost, time,

expertise, visibility, and accessibility constraints. These tools became low-cost alternative infrastructures, while AI was adopted pragmatically for knowledge, decision-making support, and resource compensation. Also, participants did not treat AI uncritically, maintained human judgement as the final decision-making mechanism and approached AI outputs with awareness of their limitations, specifically regarding accuracy, contextual fit, and ethical use and overall, this balance positions women entrepreneurs in both contexts as pragmatic rather than techno-utopian adopters - a finding that supports existing digital entrepreneurship literature (Huang et al., 2025; Alon et al., 2025).

Across the chapter, one of the most analytically important findings was that participants combined fragmented resources - digital tools, AI systems, personal networks, free platforms, self-learning practices - into layered adaptive ecosystems. *This bricolage behaviour was not a temporary phase but a sustained mode of operating under uncertainty.* Entrepreneurs improvised, learned by doing, multitasked across many roles, and developed resilience through everyday survival logic rather than through stable institutional protection (Sorgner et al., 2024; Floris & Palmas, 2024; Huang et al., 2025). Internationalisation then emerged as a significant outcome of this adaptive logic, as for participants, especially in Georgia, international expansion meant not only a growth strategy but as a form of institutional escape from fragmented local ecosystems, restrictive cultural norms, and limited market opportunities - as digital visibility, LinkedIn networking, online portfolios, and AI-supported cross-border research allowed participants to reach foreign clients and construct legitimacy independently of local gatekeepers - a pattern that contributes meaningfully to entrepreneurship literature in transitional economies.

When it comes to the comparative analysis, it revealed that Lithuanian and Georgian women entrepreneurs operate within a shared post-Soviet entrepreneurial logic shaped by adaptation, resilience, and digital resourcefulness, but important differences in intensity and orientation were visible. Lithuanian participants more frequently approached digital and AI tools through the lens of optimisation, flexibility, and structured growth, while Georgian participants more often used the same tools as survival-oriented resource compensation mechanisms under unstable institutional and financial conditions, which is due to different institutional environments - economy being relatively more stable in Lithuania, and as a contrast, more fragmented and informal in Georgia - but should not be exaggerated into a simple binary (Gadomska-Lila & Ścibior-Butrym, 2025; Işık et al., 2025; Ashraf et al., 2025).

The findings challenge simplified narratives that frame women entrepreneurs either as victims of structural inequality or as inherently resilient heroines who succeed against the odds, since both framings flatten the complexity visible in this research. The women interviewed were neither passive nor superhuman - they were continuously adapting, often under exhaustion, frequently without adequate institutional support, and consistently constructing functional entrepreneurial pathways through combinations of digital, social, emotional, and improvisational resources. Entrepreneurship in this study is best understood as an ongoing adaptive process rooted within structural conditions rather, and less as a static identity or trait.

Taken together, the empirical findings directly support and extend the theoretical framework developed earlier. They confirm that institutional theory, gendered entrepreneurship, dynamic capabilities, digital bricolage, and adaptive resilience operate not as separate analytical categories but as interconnected dimensions of how women entrepreneurs actually function in transition

economies. They also demonstrate that digital and AI-enabled tools, while not being solutions to structural inequality on their own, significantly reshape and impact what is practically possible - reducing dependence on local geography, traditional barriers and gatekeepers, and rigid institutional pathways. Therefore the findings show digital entrepreneurship not as an adaptive resilience mechanism shaped by post-Soviet economic realities, evolving entrepreneurial ecosystems, and the ongoing negotiation of structural constraints by the women operating within them.

The following chapter discusses these findings in relation to the broader theoretical framework, identifies the central contributions of the research, and considers their implications for policy, practice, and future research on digital and AI-enabled entrepreneurship in transition economies.

4.9. Discussion and Recommendations

This chapter discusses the empirical findings presented in Chapter 5, which reflects on the theoretical framework developed in Chapter 3 and the problem analysis in Chapter 2. The discussion is organised around the four research questions, with attention to where the findings confirm existing literature, where they nuance it, and where they explore it in new directions not yet fully captured by the existing research. The chapter of the discussion treats women's entrepreneurship in Lithuania and Georgia as an adaptive process, which is shaped, simultaneously, by institutional environments, as well as gendered legitimacy structures, digital infrastructures, and lastly, the everyday improvisational behaviour of the women themselves.

Table 13. Digital and AI tool functions by research question

Tool / Platform	**Primary Function**	**RQ Addressed**	**Country Pattern**
ChatGPT / Gemini	Strategic planning, market research, communication, legal drafting, decision support	RQ1, RQ2, RQ4	Both (LT: optimisation; GE: compensation)
Canva AI	Branding, visual content, marketing materials at zero/low cost	RQ1, RQ2	Both
LinkedIn	International visibility, client acquisition, professional networking	RQ1, RQ3	Both; stronger internationalisation use in Sakartvelo
Instagram / Facebook	Social media visibility, portfolio sharing, early-stage client acquisition	RQ1, RQ3	GE: started from Facebook pages; LT: marketing
CRM / BPM Systems	Workflow management, customer relations, operational scaling	RQ1, RQ4	LT: structured; GE: improvised combinations
Notion / Trello / Slack	Project management, team coordination, remote collaboration	RQ1, RQ4	LT: systematic use; GE: flexible/experimental
AutoCAD / Design Software	Core product creation (architecture, design sectors)	RQ1	Sector-specific across both countries

Tool / Platform	Primary Function	RQ Addressed	Country Pattern
Online Portfolios / Behance	Alternative legitimacy construction; international credibility	RQ2, RQ3	Visually-oriented sectors in both countries
AI Translation Tools	Cross-border communication, client adaptation, language barrier reduction	RQ3, RQ4	Both; especially relevant for Sakartvelo founders
YouTube / Online Communities	Self-teaching, capability development, free learning infrastructure	RQ4	Both; normalised as permanent learning practice

4.10. Comparating dimensions and answering research questions

The comparative analysis revealed a shared entrepreneurial logic alongside meaningful differences in intensity between Lithuania and Georgia and orientation and this nuanced framing is important because **it pushes back against simplistic binary comparisons between EU and non-EU contexts.**

The Comparative Dimension: Lithuania and Georgia (RQ1)

Lithuanian participants more often approached digital and AI tools through the logic of optimisation, structured growth, and strategic scaling, which aligns with Gadomska-Lila and Ścibior-Butrym (2025) and the GEM Lithuania report (Mačiukaitė-Žvinienė & Skliaustas, 2025), which describe Lithuania as having relatively stable institutional infrastructure but active gender gaps in high-growth and innovation-oriented sectors. The findings also confirm that Lithuanian participants operated within more formalised digital ecosystems but still experienced legitimacy and visibility challenges in tech sectors. Whereas, Georgian participants more frequently described digital and AI tools as survival-oriented resource compensation mechanisms. This aligns with St-Onge and Stevenson (2023) and Işık et al. (2025), who describe Georgia's entrepreneurial environment as institutionally fragmented and characterised by stronger reliance on informal networks. The findings also extend this picture by showing that this institutional fragility does not produce passivity, but instead anadaptive sophistication - Georgian entrepreneurs combined digital tools, AI systems, personal networks, and improvisational strategies into layered adaptive ecosystems which allowed them to function effectively despite structural constraints and survival-first motivations..

The shared enablers across both countries is more striking than the differences as both groups demonstrated strong improvisational behaviour, continuous self-learning, multitasking, and bricolage. This suggests that the post-Soviet entrepreneurial inheritance - adaptive independence under fragmented institutional conditions - continues to shape entrepreneurial behaviour more than 30 years after independence, even in contexts that have been different with the EU (Chitac et al., 2025; Sorgner et al., 2024).

Digital and AI Tools in Practice (RQ1)

The first research question also asked how women entrepreneurs in Lithuania and Georgia use digital and AI-enabled tools in their business activities. **The findings demonstrate that digital and AI tools have become a central part of everyday entrepreneurial practice across both countries, but the meaning attached to that integration is different in important ways.**

Across both contexts, participants used digital tools for cost reduction, workflow organisation, communication, visibility, and operational management. This resonates with Huang et al. (2025), who note that women in entrepreneurial contexts frequently use digital technologies for communication, marketing, and customer interaction instead of just innovation or automation. However, this study goes further than Huang et al. (2025) in two respects. First, the findings show that AI adoption - particularly tools such as ChatGPT, Gemini, and Canva AI - has moved beyond optional support functions and into more strategic territory. Participants used AI for competitor analysis, market research, decision-making support, and even product development (GE_INT11; GE_INT13; GE_INT14; LT_INT08; LT_INT10). Second, the findings show that the boundary between "communication use" and "innovation use" is blurrier in practice than the existing literature suggests. The same tool - for instance, ChatGPT - was for routine communication, and also for legal document drafting, and analytical decision support. This challenges the binary often present in the digital entrepreneurship literature, which separates "low-level" digital use from "innovation-oriented" digital use (Huang et al., 2025; Sorgner et al., 2024).

A second finding worth discussing in relation to RQ1 is the pragmatic and problem-oriented nature of AI adoption. Participants did not adopt AI because they were technology enthusiasts, but because it solved concrete problems, such as lack of time, lack of expertise, financial constraints, communication difficulties. This pragmatic logic aligns with effectuation theory (Sarasvathy, 2001, as discussed in Sorgner et al., 2024) and with what Huang et al. (2025) describe as sociotechnical embedding - where digital tool usage is shaped by the institutional and resource conditions in which entrepreneurs operate and less by abstract innovation strategies. The findings also support this argument by showing that AI adoption among women entrepreneurs in post-Soviet contexts is best understood as a form of digital bricolage - the creative recombination of available technologies to compensate for structural limitations (Komysheva et al., 2026; Huang et al., 2025).

Importantly, the findings also push back against techno-utopian framings of AI. Participants maintained human judgement as the final decision-making mechanism and were openly critical of AI's limitations. As GE_INT12 put it, *"I do not fully trust AI to make decisions for me, but it is extremely useful for organising information and identifying possible directions.*" This pragmatic statement shows that women entrepreneurs are discerning rather than unconditional and uncritical adopters of AI - which is a noteworthy nuance often missing from policy discussions about AI in small business contexts (Ghouse, 2025).

Digital Tools and Overcoming Barriers (RQ2)

The second research question asked how digital and AI-enabled tools help women entrepreneurs overcome barriers. **The findings show that digital tools function as partial - but not complete - workarounds for structural constraints.** This nuance is important and deserves careful unpacking.

First, the findings strongly support the institutional theory framework developed in Chapter 3, as participants described how the institutional environment - the weak institutional support, fragmented startup ecosystems, bureaucratic complexity, and low investor trust shaped their entrepreneurial decisions, particularly in Georgia (GE_INT11; GE_INT13; GE_INT14). This is consistent with Chitac et al. (2025), Ashraf et al. (2025), and Sorgner et al. (2024), who argue that institutional quality is a strong predictor of women's entrepreneurial outcomes. The findings also confirm that women face higher legitimacy thresholds - pressured to demonstrate competence repeatedly in male-dominated industries - which aligns with Huang et al. (2025) and Wu and Si (2019).

What the findings add is a more granular understanding of how digital tools function as a partial response to these barriers. Three patterns are particularly important here. (1) digital visibility (through LinkedIn, Instagram, online portfolios, and digital branding) allowed entrepreneurs to construct legitimacy independently of traditional gatekeepers (GE_INT11; GE_INT14; LT_INT05). This supports what Chitac et al. (2025) call institutional entrepreneurship - agency exercised within and around institutional constraints. (2) AI tools reduced dependence on expensive professional services such as legal consultation, marketing agencies, and analytics consultancies (GE_INT11; GE_INT13; GE_INT14). This is a meaningful extension of Ghouse (2025), who argues that generative AI lowers operational barriers for women entrepreneurs - and the findings here show specifically how this works in practice in post-Soviet contexts. (3) digital communication and remote work infrastructures reduced dependence on physical office space and local labour markets, which is particularly valuable in contexts where women face cultural skepticism in face-to-face professional environments (Huang et al., 2025; Floris & Palmas, 2024).

However, the findings also show important limits to this digital workaround logic, as the research participants consistently described continuing emotional labour, persistent skepticism in client interactions, and the ongoing need to "prove competence" even in digitally mediated environments (GE_INT11; GE_INT14; LT_INT07; LT_INT09), suggesting that digital tools do not remove gendered barriers - they redirect, mitigate, or, partially, compensate for them. Additionally, James et al. (2025) reached a similar conclusion in their qualitative study of marginalised women entrepreneurs, where digital engagement was a source of opportunity and a source of new threats, at the same time. This finding is important because it directly challenges overly optimistic narratives in digital entrepreneurship literature that frame digital tools as straightforward "democratising" mechanisms (Sussan & Acs, 2017). The findings here support a more nuanced view, which align with Huang et al. (2025), on what he says that digital tools become genuinely transformative only when they are used within supportive social and institutional conditions.

Digital Tools and Internationalisation (RQ3)

The third research question asked how digital tools support the internationalisation of women-led businesses. **The findings extend existing literature in several important ways.**

(1) the findings confirm Alon et al. (2025), who argue that **digital capabilities are increasingly central to how small and women-led firms internationalise**. Participants from both Lithuania and Georgia frequently used digital platforms - LinkedIn, social media, online portfolios, remote communication tools - to access foreign clients and markets and as a result, international expansion

was rarely framed as a distant future ambition, but was a near-term operational reality which was enabled by digital infrastructure (GE_INT11; GE_INT13; GE_INT14; LT_INT05; LT_INT10).

(2) the findings introduce a concept that deserves more analytical attention in international business research - **internationalisation as institutional escape**. Participants, particularly in Georgia, described internationalisation not only as a growth strategy but as a way to reduce dependence on restrictive local institutional environments, low-trust investor ecosystems, and conservative business cultures (GE_INT11; GE_INT13; GE_INT14). One participant captured this clearly: *"Even when you are physically in Lithuania, mentally you are not limited to Lithuania anymore."* This finding directly resonates to Floris and Palmas (2024) and contributes a meaningful nuance to the international entrepreneurship literature. Since existing studies frame internationalisation primarily through scale, learning, and market access (Alon et al., 2025), the findings here suggest that for women entrepreneurs in weaker institutional environments, internationalisation also functions as an institutional and psychological escape, reshaping and repositioning..

(3) and lastly, the findings show that **AI tools play a growing role in cross-border capability development,** as the participants from both countries used AI for translation, market research, competitor analysis, and communication adaptation across cultural contexts (GE_INT13; GE_INT14; LT_INT07; LT_INT10). This is an underexplored area in the existing literature, which tends to focus on digital platforms generally rather than on AI specifically. The findings suggest that AI is becoming a strategic learning infrastructure for small and entrepreneurs with limited resources, partially replacing the need for consultants and international agencies typically used by larger firms, meaningfully supporting what Huang et al. (2025), Hu et al. (2024), and Alon et al. (2025) analyzed and opens a clear avenue for future research.

Although the findings also reveal important limits. **Internationalisation introduced new layers of complexity - specifically around foreign regulations, certification systems, cultural adaptation, and language barriers** (GE_INT13; GE_INT14). This is consistent with Floris and Palmas (2024), who note that women entrepreneurs often face additional barriers related to financing, strategic knowledge, and access to international networks and in this case, digital tools reduced some of these barriers but did not remove them completely. Particularly in highly regulated sectors (architecture, SaaS, finance), the institutional weight of foreign markets often is as demanding as the local environment, but simply in a different form.

Capability Development Through Digital and AI Use (RQ4)

The fourth research question asked what capabilities and skills women entrepreneurs develop through their use of digital and AI technologies. The findings strongly support dynamic capabilities theory while extending it in directions specific to the post-Soviet context.

Research participants actively described entrepreneurship as a continuous process of learning, adaptation, and capability reconfiguration, so self-teaching through digital channels - YouTube tutorials, online articles, AI-generated explanations, online communities - was normalised as part of entrepreneurial identity (GE_INT13; GE_INT14; LT_INT05; LT_INT07). This aligns with Teece's (2007, as discussed in Huang et al., 2025) framing of dynamic capabilities as the ability to sense, seize, and adapt to resources under changing conditions. The findings, additionally, resonate to this framework by shiwing that in post-Soviet contexts, **dynamic capabilities are developed not**

through structured organisational learning programmes but through bricolage-based experimentation. Capabilities are developed from improvisation under constraint and barriers and less than from systematic training.

This is a meaningful theoretical contribution because most of the dynamic capabilities literature has been developed in the context of established firms with internal capability-building trainings and infrastructure, but the findings show that in entrepreneurial environments, characterized by limited resources, dynamic capabilities take a different shape: they are messier, more improvisational, more entangled with personal identity and emotional resilience (Komysheva et al., 2026; Huang et al., 2025). The findings also reinforce Ghouse's (2025) argument that **AI is becoming a capability multiplier for women entrepreneurs, which allow them to take on tasks that would previously have required specialist expertise.**

Again, the findings raise a tension worth examining - while AI expands and supports capability development in some areas (information processing, communication, research), **it may also create dependency risks if entrepreneurs lose the underlying skills that AI is performing for them.** Several participants reflected on this tension, noting that AI is useful *"only when used intelligently"* (GE_INT14) and this pragmatic stance suggests that women entrepreneurs in Lithuania and Georgia are already navigating questions of human–AI complementarity in sophisticated and complex ways - the exact questions that policy and practice are only beginning to address.

4.11. Empirical findings in comparative international perspective

After interpreting the empirical findings through the theoretical framework, it is important to place them in the wider discussion of women's digital and AI-enabled entrepreneurship in different institutional contexts. The patterns found in the interviews from Lithuania and Georgia - such as pragmatic AI adoption, digital bricolage, institutional escape, and alternative legitimacy construction - are not only visible in these two countries. Similar processes have also been identified in other emerging and developing economies, although the institutional barriers and digital opportunities often differ depending on the local environment. The following discussion compares the findings of this study with recent empirical research from similar contexts in order to show what is common, what is different, and how this study contributes to the existing literature.

Lithuania

In Lithuania, national and international reports show that women entrepreneurs actively engage with digital tools for market entry, customer interaction, and international visibility, specifically within platform-based and service-oriented business models (Mačiukaitė-Žvinienė & Skliaustas, 2025). While gender equality has been achieved in early-stage entrepreneurship, women remain underrepresented in high-growth and technology-intensive ventures. Menshikov et al., (2024) suggests that women-led businesses are more likely to adopt accessible digital tools such as e-commerce platforms, digital marketing technologies, and AI-supported analytics as incremental growth strategies rather than pursuing capital-intensive technological innovation (Menshikov et al., 2024; Huang et al., 2025). These tools allow women entrepreneurs to access markets faster - test value propositions, reach international customers, and build credibility without relying heavily on domestic resources, including investor networks or traditional gatekeepers.

Georgia

Digital tool adoption in Georgia is more closely linked to resilience and survival strategies as the context is characterised by institutional fragility, economic volatility, and limited access to formal support mechanisms (St-Onge & Stevenson, 2023). The evidence from Abuselidze et al., (2024) survey shows that women entrepreneurs frequently rely on self-financing, informal networks, and flexible business models, which limits their capacity for traditional scaling. In this environment, digital and AI-enabled tools support adaptive strategies such as online sales, remote service provision, and digital marketing aimed at international or diaspora markets (Abuselidze et al., 2024). Women entrepreneurs in Georgia, by learning AI-enabled and digital tools, develop capabilities to reduce dependence on local market conditions and remove institutional barriers related to finance, legitimacy, and network exclusion.

Other Cultural Contexts

Beyond the Baltic and post-Soviet contexts, international research highlights similar patterns in other regions where women entrepreneurs face structural and gendered constraints, where women entrepreneurs across diverse contexts tend to adopt digital tools in ways that prioritise flexibility, experimentation, and gradual capability accumulation rather than rapid technological scaling (Huang et al., 2024). This pattern is visible in emerging and developing economies, as well as in peripheral regions of developed markets, where institutional support for women-led innovation remains uneven.

For example, research on women's digital entrepreneurship in **India** and **Southeast Asia** shows that women entrepreneurs often use digital platforms and basic AI-enabled tools to test products, manage customer relationships, and access international demand, often while working outside formal innovation ecosystems (Maharana et al., 2024; Gholve & Godke, 2025; Ghouse, 2025). In these contexts, AI-enabled tools such as automated marketing, customer analytics, and content generation reduce reliance on specialised labour and professional services, which are often costly or inaccessible to women entrepreneurs from these countries (Gholve & Godke, 2025; Ghouse, 2025). As a result, tool adoption supports incremental growth and early international engagement, even when domestic institutional support is limited.

Similar dynamics are observed in parts of **Latin America** - in Ecuador, where women entrepreneurs use digital platforms to overcome fragmented domestic markets and weak institutional trust, so international digital engagement allows women entrepreneurs to access customers and partners beyond local networks, helps them to overcome gendered barriers related to finance, credibility, and innovation visibility (Chávez-Rivera et al., 2023). In these cases, as well, internationalisation through digital channels often precedes formal business scaling, which is more adaptive rather than growth-driven strategy.

Based on the narrative literature review by Nyamboga (2025) from **Sub-Saharan Africa** (including Nigeria, South Africa, Zambia, Ethiopia, Ghana, Malawi, and Tanzania) conducred on digital and fintech adoption by female entrepreneurs, shows that women there leverage mobile technology, AI tools, blockchain, and digital payments to enhance market access, financial inclusion, and capacity building for business growth, even though digital literacy gaps, regulatory hurdles, and gender biases remain significant barriers to sustained adoption and scaling (Nyamboga, 2025).

In the **Ukrainian** context, digital tools have played a central role in how entrepreneurs maintain operations and adapt business models amid extreme, war-shaped institutional instability. Recent

work by Komysheva and colleagues on *entrepreneurial digital resilience* shows that Ukrainian SMEs, including women-led ventures, actively repurpose and recombine existing digital tools, platforms, and infrastructures to sustain operations, support remote work, and adapt their business models under conditions of war-induced disruption. This digital bricolage-driven use of digital resources support not only survival strategies but also capability development through iterative learning and improvisation with digital assets, and as a result, findings illustrate how digitalisation functions as a resilience mechanism and an adaptive entrepreneurial strategy even when traditional institutional support is weakened or absent (Komysheva, Rothe & Wessel, 2026).

At the same time, evidence from multiple regions suggest cautions against viewing digital and AI-enabled tools as universally transformative. Huang et al., (2024) and Aparicio et al., (2025) point to persistent gender gaps in access to advanced digital skills, confidence in AI adoption, and participation in innovation-oriented ecosystems (Huang et al., 2024; Aparicio et al., 2025), which leads to limit long-term autonomy and value capture, particularly for women-led ventures operating without strong institutional protection (Aparicio et al., 2025).

These international and culturally different contexts support one of the main arguments of this thesis: digital and AI-enabled entrepreneurship should be understood as an **adaptive and context-dependent strategy rather than a universal pathway to business growth** and patterns identified in the Lithuanian and Georgian interviews - **adaptive digital compensation, AI-enabled entrepreneurial bricolage, and internationalisation-as-escape** - are also visible in countries such as India, Southeast Asian states, Latin America, Sub-Saharan Africa, and Ukraine. In these contexts, women entrepreneurs also combine digital technologies with personal networks, flexibility, and improvisational strategies to deal with institutional barriers. At the same time, the differences between these cases show that the effectiveness of digital and AI tools depends strongly on local institutional and ecosystem conditions, instead of the technologies alone - and the Lithuanian and Georgian findings show a wider cross-regional pattern of pragmatic and bricolage-based digital entrepreneurship under structural constraints.

4.12. Theoretical Synthesis: Toward an Integrated Understanding of Shared Enablers

Taken all the abovementioned together, the findings support an integrated theoretical view of **shared enablers** of women's entrepreneurship in post-Soviet contexts that brings together institutional theory, digital entrepreneurship theory, dynamic capabilities, and digital bricolage, since these frameworks are typically used separately. The findings suggest they are most useful when treated as interconnected dimensions of a single adaptive process and building on this integrated framing, the research develops three concepts that aim to capture analytical patterns visible across the dataset but not fully named in the existing literature.

Table 14. Three theoretical concepts developed in the thesis

Concept	Definition	Mechanism	Theoretical Grounding
Adaptive Digital Compensation	Strategic use of digital/AI systems to substitute for structural, institutional, financial, and capability-related gaps	Systematic substitution: AI replaces consultants; platforms replace staff; LinkedIn replaces networking infrastructure	Institutional theory + Digital entrepreneurship + Dynamic capabilities

Concept	Definition	Mechanism	Theoretical Grounding
AI-Enabled Entrepreneurial Bricolage	Combining fragmented digital resources, AI, personal networks, and improvised strategies to overcome resource constraints	AI is the first bricolage resource that substitutes for expertise itself, not only physical or organisational resources	Bricolage theory (Baker & Nelson, 2005) extended with AI as a qualitative shift
Internationalisation-as-Escape	Entrepreneurial expansion into foreign markets motivated by institutional instability, legitimacy barriers, and structural constraints — not only growth	Digital visibility + AI cross-border research + institutional push = legitimacy repositioning in international markets	International entrepreneurship + Push-factor theory + Institutional theory

(1). Adaptive Digital Compensation means the strategic use of digital and AI-enabled systems by entrepreneurs to compensate for structural, institutional, financial, and capability-related limitations within constrained entrepreneurial environments. This concept itself differs from digital bricolage in an important way, as Bricolage describes the creative *recombination* of available resources (Komysheva et al., 2026; Huang et al., 2025); Adaptive Digital Compensation describes the systematic *substitution* of digital tools for functions that institutions, finance, networks, or labour markets failed to provide. Across the dataset, this substitution logic was visible in highly consistent ways - AI replacing consultants (GE_INT11; GE_INT14; LT_INT05), digital tools replacing staff (GE_INT11; GE_INT12; LT_INT08), remote systems replacing physical offices (GE_INT13; LT_INT10), LinkedIn replacing traditional professional networking (GE_INT11; LT_INT05), AI replacing unavailable specialist expertise (GE_INT12; GE_INT14), and digital branding replacing institutional legitimacy (GE_INT11; GE_INT14). Based in findings, the substitution is partial, never complete, and frequently combined with persistent constraints - but the pattern is clear. So, as a whole - Adaptive Digital Compensation connects institutional theory (which explains *why* compensation is needed) with digital entrepreneurship theory (which explains *what* is being used) and dynamic capabilities (which explains *how* the substitution is learned and sustained).

(2). AI-Enabled Entrepreneurial Bricolage describes the process through which entrepreneurs combine fragmented digital resources, AI systems, personal networks, and improvised strategies to overcome resource-based limitations and continue entrepreneurial activity. Bricolage as a concept is well-established in entrepreneurship research (Baker & Nelson, 2005, as discussed in Komysheva et al., 2026), in this case - including AI as a bricolage resource introduces a qualitative shift that deserves naming. Earlier bricolage resources - free tools, social media, personal networks, second-hand equipment - substitute for *physical or organisational* resources. AI is the first widely accessible bricolage resource that can substitute for *expertise itself*. Participants used AI to perform tasks that previously required specialist consultants - legal drafting, market research, competitor analysis, communication adaptation, strategic synthesis (GE_INT11; GE_INT13; GE_INT14; LT_INT05; LT_INT07; LT_INT10). This means that AI does not simply expand the bricolage toolkit, but changes *what kinds of capability gaps* can be addressed through bricolage. This form of bricolage theory is especially relevant for women entrepreneurs in transition economies, who frequently face shortages around finance, networks, and specialist expertise.

(3). Internationalisation-as-Escape refers to entrepreneurial expansion into foreign digital markets motivated not only by growth ambitions but also by attempts to overcome local institutional instability, market limitations, legitimacy barriers, and structural constraints. This concept expands classical push-factor explanations of internationalisation, which typically frame "push" in primarily economic terms - small domestic markets, weak local demand, or saturation (Alon et al., 2025). The findings here show a different kind of push: *institutional and legitimacy-based*. Particularly among Georgian participants, international expansion was driven by the experience that foreign clients treated them more equally than local ones (GE_INT11), that European compliance frameworks, even though they're experienced as demanding as part of research's participant's responses, were at least predictable (GE_INT13), and that international visibility provided forms of professional recognition which were not available locally (GE_INT14). One participant captured this clearly: *"Even when you are physically in Georgia, mentally you are not limited to Georgia anymore.*" This is not market-size push; it is *institutional and psychological repositioning*. So, the concept is especially relevant for post-Soviet and other transition economies where women entrepreneurs experience cultural skepticism, as well as low investor trust within their domestic environments, and it opens a clear venue analytically for future research on internationalisation among women entrepreneurs in similar contexts.

Combined Together, these three concepts - Adaptive Digital Compensation, AI-Enabled Entrepreneurial Bricolage, and Internationalisation-as-Escape - are connected dimensions of a single underlying entrepreneurial logic rather than as three separate dimensions. The Adaptive Digital Compensation is the broader theoretical frame; AI-Enabled Entrepreneurial Bricolage is the operational mechanism which shows compensation occurring practically. and Internationalisation-as-Escape is the most strategic form that compensation takes when local conditions become limiting.

Against Simplified Narratives

The findings push back against two simplified narratives that often appear in research and policy discussions about women's entrepreneurship in transition economies, where the first is the victim narrative - the idea that women entrepreneurs are primarily defined by the barriers they face. The second is the heroine narrative - the idea that women entrepreneurs succeed primarily through exceptional individual resilience. **Based on findings, both framings flatten the complexity visible in this research, as the women interviewed were neither passive nor superhuman; They were continuously adapting, often under burnout and exhaustion, frequently without adequate institutional support, building functional entrepreneurial pathways through combinations of digital, social, emotional, and improvisational resources.** This more layered and nuanced understanding of women's entrepreneurship in post-Soviet contexts is in itself a contribution to both the academic literature and to policy discussions about how to better support women entrepreneurs in these environments.

4.13. Recommendations

The findings of this research create several actionable recommendations for policymakers, entrepreneurial support organisations, educators, and women entrepreneurs themselves. These recommendations are grouped into three categories - (1) policy and institutional, (2) educational and capability-building, and (3) practical entrepreneurial recommendations.

Policy and Institutional Recommendations

Support systems for women entrepreneurs are suggested to be redesigned with practical accessibility in mind. The findings show that even in Lithuania, where formal infrastructure is relatively developed, entrepreneurs often described support systems as bureaucratically difficult to handle or disconnected from real entrepreneurial needs (LT_INT03; LT_INT05). Policymakers should focus less on creating new programmes and *more on simplifying access to existing ones* - clear application processes, fewer documentation requirements at early stages, and direct outreach to underserved entrepreneurial communities, resonates with Skica et al. (2025), who argue that institutional design quality matters more than institutional density.

Another suggestion is that financial support mechanisms should be specifically designed for digital and AI-enabled women-led businesses, as participants consistently described financial barriers as a primary constraint, with several explicitly calling for "*more financial support programs specifically for women entrepreneurs working with digital businesses"* (GE_INT05). Existing financial instruments often resonate to more traditional asset-based business models and overlook the realities of digital and AI-enabled ventures. Microgrants, milestone-based funding, and AI-tool subscription support funds could address the actual cost structures these entrepreneurs face, as this also aligns with the European Investment Bank's recent recommendations on women's access to finance and with St-Onge and Stevenson (2023). Additionally, evidence from Hellmann et al. (2025) on equity crowdfunding shows that even digital finance channels create the gender funding gap unless they are supporting the design of milestone‑based, and gender‑aware instruments (Hellmann et al., 2025)

In the Georgian context specifically, policy attention is suggested to focus on building investor trust in digital and SaaS business models, since several participants described how local investors initially rejected SaaS products because of perceived data-security risks (GE_INT13). Government-supported pilot programmes which legitimize digital products within local institutional environments - such as with banks, insurance companies, and public sector institutions - would reduce this barrier.

In the Lithuanian context, gender-specific attention is suggested to focus on the transition from early-stage entrepreneurship to growth-stage scaling. As Mačiukaitė-Žvinienė and Skliaustas (2025) also note, gender parity has been largely achieved at entry but disappears at scale, so as a result - targeted support for women-led businesses transitioning from early-stage to growth-stage - including accelerator access, venture capital connections, and international expansion mentorship - could address this specific gap.

Educational and Capability-Building Recommendations

It's recommended that practical AI literacy programmes be developed for small business owners. Participants explicitly called for *"more practical education for entrepreneurs about digital tools and AI*" (GE_INT02) and *"more affordable training opportunites focused specifically on AI implementation for small businesses, not only large corporations*" (LT_INT07). Existing AI training tends to be either too technical (oriented toward developers) or too generic (oriented toward awareness-building). The gap is in mid-level, application-oriented AI training for non-technical small business owners.

Additionally, universities are recommended to be engaged more directly with women-led startups and digital businesses, as one participant suggested, *"universities should cooperate more with startupis and digital businesses, because students need real practical experience and entrepreneurs need fresh talent"* (LT_INT05). Structured internship and mentorship programmes between universities and women-led businesses could also address both the talent gap entrepreneurs face and the practical experience gap students face.

When it comes to mentorship networks - they are recommended to be expanded with particular attention to the intersection of technology and business, since participants, for several instances, described difficulties finding mentors who understood both domains - *"when you are building something digital, you often feel lost between those two worlds"* (GE_INT11). Mentorship matching programmes that specifically pair experienced technology entrepreneurs with early-stage women founders would address this gap directly.

Practical Recommendations for Women Entrepreneurs

Women entrepreneurs starting digital businesses are recommended to embrace *experimental and bricolage-based approaches from the beginning* rather than waiting for ideal conditions. The findings show that successful entrepreneurs in both countries built businesses through gradual experimentation, free or low-cost tools, and learning-by-doing rather than through formalised business planning. This validates an approach which encourages starting small, iterating fast, combining resources creatively as a legitimate strategic path rather than a fallback option.

Also, *internationalisation is suggested to be considered earlier rather than later in business development.* The findings show that for entrepreneurs from smaller economies, local market constraints make early international engagement strategically important, as research participants who built international visibility through LinkedIn, online portfolios, and international competitions from early stages were generally more successful in accessing foreign opportunities later (GE_INT11; GE_INT14; LT_INT05).

Finally - women entrepreneurs should *approach AI adoption pragmatically and selectively, rather than either rejecting it out of caution or adopting it without criticism*, as the research's findings show that the most effective AI use among participants combined AI-supported information processing with strong human judgement, contextual interpretation, and emotional intelligence. This balanced approach could be additionally modelled and encouraged in training and support programmes for women entrepreneurs.

4.14. Research Contributions

This thesis makes four main contributions to the academic literature on women's entrepreneurship, digital entrepreneurship, and international business in transition economies.

(1) the thesis contributes a comparative empirical analysis of women's digital and AI-enabled entrepreneurship across two distinct EU and non-EU institutional contexts.

While existing academic papers have been focusing on women's entrepreneurship in either EU or non-EU post-Soviet contexts separately (Mačiukaitė-Žvinienė & Skliaustas, 2025; St-Onge & Stevenson, 2023; Işık et al., 2025), few studies have compared these contexts systematically recently while holding the post-Soviet historical background constant and varying institutional development. This comparative framework reveals both a shared entrepreneurial logic and also meaningful differences which are more visible in intensity, and this contributes the nuance which is often missing from research that treats EU and non-EU contexts as separate analytical categories.

(2) Second, the thesis contributes 3 connected theoretical concepts that capture analytical patterns that are visible across the dataset but not fully named in the existing literature.

Adaptive Digital Compensation - which is the strategic use of digital and AI-enabled systems by entrepreneurs to compensate for structural, institutional, financial, and capability-related limitations within constrained entrepreneurial environments - functions as the broader theoretical frame, extends Huang et al. (2025), Chitac et al. (2025), McAdam et al. (2019) and Komysheva et al. (2026) by giving a name to a pattern that runs across all four sub-questions of this research.

AI-Enabled Entrepreneurial Bricolage - the process through which entrepreneurs combine scattered digital resources, AI systems, personal networks, and improvised strategies to overcome resource constraints - extends classical bricolage theory extends classical bricolage theory (Baker & Nelson, 2005; Singh et al., 2024) by adding AI as a qualitative shift in what bricolage can substitute for. AI is the first widely accessible bricolage resource that can substitute for *expertise itself*.

Internationalisation-as-Escape - entrepreneurial expansion into foreign digital markets, motivated not only by growth ambitions but also by attempts to tackle local institutional instability, market limitations, legitimacy barriers, and structural constraints - extends classical push-factor explanations of internationalisation and recognises that institutional and legitimacy-based push factors operate alongside economic ones; especially relevant for post-Soviet, emerging-market, and other transition-economy contexts.

Not three separate contributions but three connected dimensions of a single underlying entrepreneurial logic.

(3) The thesis contributes an integrated theoretical framework that brings together institutional theory, digital entrepreneurship, dynamic capabilities, and digital bricolage. which have been typically explained separately, though this study's findings show that they are most analytically useful when treated as interconnected dimensions of a single adaptive process. This framework positions women's digital entrepreneurship in EU and non-EU contexts - not as a technological story or a gender story - but as an adaptive resilience story which is shaped by specific institutional conditions.

***(4) the thesis contributes empirical evidence on the pragmatic and bricolage-based nature of AI adoption among women entrepreneurs in post-Soviet contexts*,**

as existing research on AI in small business contexts is mainly speculative or focused on developed economies (Ghouse, 2025). The findings here also show empirically how AI is used in practice by women entrepreneurs who are operating under resource limitations- pragmatically, selectively, and in combination with strong human judgement, contributing to grounded, qualitative understanding of AI adoption than is currently available in the literature.

The thesis also offers topics for the future research, as discussed in the 7th chapter.

4.15. Research Limitations and Future Research

Several limitations should be acknowledged.

(1) the sample size of 27 interviews, even though its substantial for qualitative research, does not allow for statistical generalisation. As a result, the findings are analytical rather than statistically generalisable - they describe patterns visible within the sample rather than on the population-level. Future quantitative research could test the prevalence and significance of the patterns identified here across larger samples. Additionally, (2) even though it was an intentional methodological choice to focus on digitally active women entrepreneurs, the purposive sampling combined with snowball referral creates the risk of sampling bias toward more digitally engaged entrepreneurs. Women entrepreneurs who do not use digital and AI tools, or who use them more passively, are likely underrepresented in this sample. Given the focus of the research, it means the findings should not be read as representative of all women entrepreneurs in Lithuania and Georgia.

(3) the research focuses only on two post-Soviet countries, due to this the findings cannot be directly extrapolated to other post-Soviet or transition economies, even though for this particular research this framing is analytically productive. Future research should test whether the patterns identified here - specifically the concept of internationalisation as institutional escape and the integrated bricolage-capabilities framework - apply in other contexts such as Ukraine, Moldova, Armenia, or Central Asian economies.

(4), the research relies on participant self-reports about their digital and AI tool use, so even though participants spoke in concrete and verifiable terms about specific tools and practices, the research did not include direct observation of their digital workflows. Future research could combine interview data with observational or digital data to and to triangulate self-reported practices.

(5) The fast-evolving nature of AI tools means that findings about specific platforms (ChatGPT, Gemini, Canva AI) may become outdated quickly. Therefore - the deeper analytical findings - about adaptive behaviour, bricolage, and institutional escape - are more durable. But even specific tool-level findings should be read with awareness that the AI landscape is changing rapidly.

(6) the researcher's own background - including being a Georgian researcher conducting research in both Georgian and Lithuanian contexts - shapes the analysis. It may have also subtly shaped the framing of certain findings, even though this positionality offered substantial advantages in accessing Georgian participants and interpreting Georgian institutional dynamics. Specifically -

Reflexive engagement throughout the analytical process was used to mitigate this, but it remains a limitation worth acknowledging openly.

(7) the three theoretical concepts introduced in this thesis - Adaptive Digital Compensation, AI-Enabled Entrepreneurial Bricolage, and Internationalisation-as-Escape - are grounded in this specific empirical dataset and require future empirical testing before they can be treated as established theoretical contributions. Even though the patterns these concepts describe are visible consistently across the 27 interviews and align with broader theoretical debates in the literature, the concepts themselves should be tested across other transition economy contexts (Ukraine, Moldova, Armenia, Central Asian countries), non-transition emerging markets, EU countries, and developed economies where women entrepreneurs face different set of institutional, financial, and cultural limitations. Future research could also focus on if these concepts apply equally to male and female entrepreneurs or if they are particularly characteristic of women's entrepreneurship in environments where there are limited resources. The concepts are offered here as analytical contributions developed inductively from the data instead of as finalised theoretical frameworks.

Conclusions

(1). The problem analysis showed that women entrepreneurs in Lithuania and Georgia work in institutional environments where participation in entrepreneurship has overall increased for the past years, but women-led businesses still tend to remain smaller, less innovative, and less internationally active than businesses led by men. This situation cannot be explained only by differences in motivation or individual abilities. Instead, it reflects the influence of overlapping institutional, sociocultural, and digital conditions that shape entrepreneurial development. The post-Soviet historical background, continuing gender expectations, fragmented support systems, and uneven digital ecosystems together demonstrate that access to digital technologies alone does not automatically lead to innovation or internationalisation. Therefore, the main issue is not simply the availability of digital tools, but how these tools are used and adapted under different institutional conditions.

(2). The theoretical analysis combined four theoretical perspectives that are often discussed separately - institutional theory, digital entrepreneurship theory, dynamic capabilities, and digital bricolage - into one integrated conceptual framework, which groups the barriers faced by women entrepreneurs into three main categories: structural, sociocultural, and psychological barriers. It also identifies several enabling mechanisms, including institutional navigation, digital adaptation, psychological resilience, and internationalisation through digital and AI-enabled tools and within this framework, digital and AI-enabled products act as mediating mechanisms that support legitimacy construction, capability development, and selective internationalisation under constrained conditions. The framework also suggests that innovation, digitalisation, and internationalisation should not be understood as isolated stages, but as interconnected processes that develop together over time, especially in contexts where institutional support remains limited.

(3). The methodology of the study was based on a qualitative research design using 27 semi-structured interviews conducted with women entrepreneurs in Lithuania and Georgia. The interviews were analysed through thematic analysis in MAXQDA 24 using a hybrid inductive-deductive approach, which generated 1,113 coded segments across the dataset. MAXQDA analytical tools, including the Code Frequencies, Code Matrix Browser, Code Relations Browser, and Code Cloud, showed that the identified themes appeared in most interviews instead than being shaped by only a few participants. The qualitative methodology was approproate for this research because it allowed the research to explore how women entrepreneurs interpret, adopt, and use digital and AI-enabled products within specific institutional environments. Ethical principles, including informed consent, anonymity, and secure data storage, were also followed throughout the study, with the qualitative trustworthiness criteria of credibility, transferability, dependability, and confirmability.

(4). The empirical findings showed that digital and AI-enabled products functioned mainly as *adaptive everyday infrastructure rather than as purely innovation-oriented systems.* Across both countries, Georgia and Lithuania, participants used digital technologies to compensate for i*nstitutional limitations, reduce dependence on expensive professional services, create legitimacy independently from traditional gatekeepers, reach international markets, and develop capabilities through experimentation and self-learning.* AI was generally adopted in a pragmatic and critical way,participants using it as a support mechanism while remaining aware of its ethical, contextual, and accuracy-related barriers. Three theoretical concepts emerged from the empirical analysis:

Adaptive Digital Compensation, AI-Enabled Entrepreneurial Bricolage, and Internationalisation-as-Escape. These concepts connect institutional theory, digital entrepreneurship, dynamic capabilities, and bricolage within one analytical framework. The comparative analysis also identified both similarities and differences between the Lithuanian and Georgian contexts. *Lithuanian participants more often approached digital and AI tools through optimisation, workflow efficiency, and structured scaling within relatively stable EU institutional systems. Georgian participants more frequently used digital tools as survival-oriented adaptive mechanisms under less stable institutional and financial conditions, relied on combinations of free digital platforms, AI tools, personal networks, and improvisational strategies.* Lithuanian participants more often discussed burnout, perfectionism, and self-pressure connected to balancing responsibilities, while Georgian participants more frequently described resilience and survival mentality under uncertainty. Internationalisation among Lithuanian participants was more closely linked to growth and scaling, whereas for Georgian participants it more often represented institutional and psychological escape from restrictive local conditions. Even though the differences persist, shared patterns of improvisation, multitasking, self-learning, and digital bricolage appeared strongly across both contexts, which suggests that shared history and institutional entrepreneurial legacies continue to influence entrepreneurial behaviour even more than three decades. Based on these findings, the thesis proposes recommendations related to policy and institutional design, education and capability development, and practical entrepreneurial strategy in order to support and strengthen the adaptive digital practices already being developed by women entrepreneurs in Lithuania and Georgia.

List of references

1. **Abuselidze, G. (2024).** *Challenges and perspectives of the startup ecosystem for the development of innovative economy in Georgia*. *European Journal of Sustainable Development,* European Center of Sustainable Development. Retrieved from https://ecsdev.org/ojs/index.php/ejsd/article/view/1562

2. **Aidis, R., Welter, F., Smallbone, D., & Isakova, N. (2007)**. *Female entrepreneurship in transition economies: The case of Lithuania and Ukraine*. *Feminist Economics, 13*(2), 157–183. https://doi.org/10.1080/13545700601184831

3. **Alon, I., Elia, G., & Passiante, G.** (2025). Business innovation and internationalisation in female-owned businesses: A fuzzy-set QCA approach. *Journal of the Knowledge Economy*. https://doi.org/10.1007/s40497-025-00435-6

4. **Aparicio, S., Urbano, D., & Audretsch, D. B.** (2025). Digitalization and entrepreneurial potential: Gender differences across institutional contexts. *Small Business Economics*. https://doi.org/10.1007/s11187-025-00892-z

5. **Ashraf, N., Delfino, A., Glaeser, E. L., & Solmone, I.** (2025). Institutions, gender, and entrepreneurship under uncertainty. *AEA Papers and Proceedings*, 115, 500–508. https://doi.org/10.1257/pandp.20251070

6. **Baier‐Fuentes, H., Andrade‐Valbuena, N. A., González‐Serrano, M. H., & Gaviria‐Marin, M. (2023).** Bricolage as an effective tool for the survival of owner‐managed SMEs during crises. *Journal of Business Research, 157*, 113608. https://doi.org/10.1016/j.jbusres.2022.113608

7. **Baker, T., & Nelson, R. E.** (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, 50(3), 329–366. https://doi.org/10.2189/asqu.2005.50.3.329

8. **Berman, T., Schallmo, D., & Kraus, S.** (2024). Strategies for digital entrepreneurship success: The role of digital implementation and dynamic capabilities. *European Journal of Innovation Management*, 27(9). https://doi.org/10.1108/EJIM-01-2024-0081

9. **Carvajal, D., Franco, C., & Isaksson, S.** (2024). *Will artificial intelligence get in the way of achieving gender equality?* (NHH Department of Economics Discussion Paper No. 03/2024). Norwegian School of Economics. https://doi.org/10.2139/ssrn.4759218

10. **Chávez-Rivera, A., Hernández-Perlines, F., & Ibarra-Cisneros, M. A.** (2023). The effects of context and characteristics of women entrepreneurs on innovation performance. *Journal of Small Business Management*. https://doi.org/10.1080/00472778.2023.2171549

11. **Chitac, I., Michielsens, E., & Radu-Lefebvre, M.** (2025). Gender, institutions, and entrepreneurial behaviour: Cross-country comparative insights. *International Small Business Journal*. https://doi.org/10.1177/02662426251318609

12. **Cutolo, D., & Kenney, M.** (2021). Platform-dependent entrepreneurs: Power asymmetries, risks, and strategies. *Academy of Management Perspectives*, 35(4), 584–605. https://doi.org/10.5465/amp.2019.0103

13. **DiMaggio, P. J.** (1988). Interest and agency in institutional theory. In L. G. Zucker (Ed.), *Institutional patterns and organizations* (pp. 3–21). Ballinger.

14. **Edmondson, A.** (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383. https://doi.org/10.2307/2666999

15. **Elia, G., Margherita, A., & Passiante, G. (2020).** Digital entrepreneurship ecosystem: How digital technologies and collective intelligence are reshaping the entrepreneurial process. Technological Forecasting and Social Change, 150, Article 119791. https://doi.org/10.1016/j.techfore.2019.119791

16. **Floris, M., & Palmas, G.** (2025). Intersectionality and migrant women entrepreneurs in family businesses. *Gender Issues*, 42, Article 26. https://doi.org/10.1007/s12147-025-09372-w

17. **Gadomska-Lila, K., & Ścibior-Butrym, A.** (2025). Gendered barriers in Baltic entrepreneurial ecosystems. *Journal of Management and Financial Sciences*, 52, Article 6. https://doi.org/10.33119/JMFS.2024.52.6

18. **Ghouse, S. M.** (2025). Generative AI and women entrepreneurs: Overcoming barriers to digital growth. *International Journal of Innovation Studies*. https://doi.org/10.1016/j.ijis.2025.100200

19. **Giorbelidze, M., & Jibladze, N.** (2025). Psychological safety and resilience among women entrepreneurs in Georgia. *Journal of Entrepreneurship in Emerging Economies*. https://doi.org/10.1108/JEEE-02-2025-0057

20. **Hellmann, T., Mostipan, I., & Vulkan, N.** (2025). Entrepreneurial fundraising strategies and the gender gap: Theory and evidence from equity crowdfunding. *Management Science, 72*(4), 3016–3039. https://doi.org/10.1287/mnsc.2024.06658

21. **Hu, L., Filipescu, D. A., & Pergelova, A**. (2024). Understanding SMEs' internationalization through digital platforms: The role of knowledge sharing and consumer education. *International Marketing Review, 41*(5), 1044–1073. https://doi.org/10.1108/IMR-09-2023-0252

22. **Huang, Y., Zhang, J., Xu, Y., Yuan, Y., Zhang, M., & Huang, L.** (2025). Digital entrepreneurial ecosystems and female entrepreneurial activity. *Humanities and Social Sciences Communications*, 12, Article 162. https://www.nature.com/articles/s41599-024-04345-y?error=cookies_not_supported&code=c4b5bd8b-965e-48c4-b6f7-7e8397b02043

23. **Işık, C., Ongan, S., Günlü, E., Aydın, R., & İmamoğlu, İ. K.** (2025). Women's entrepreneurship and institutional quality in transition economies. *Sustainable Development*. https://doi.org/10.1002/sd.70045

24. **James, A., Mensah, J., & Sambasivan, M.** (2025). Opportunities or threats: Impact of digital engagement on marginalized women entrepreneurs. *Gender, Work & Organization*. Advance online publication. https://doi.org/10.1111/gwao.70029

25. **Kataeva, Z., Durrani, N., Izekenova, Z., & Rakhimzhanova, A. (2023).** *Evolution of gender research in the social sciences in post-Soviet countries: A bibliometric analysis*. *Scientometrics, 128*(3), 1639–1666. https://doi.org/10.1007/s11192-022-04619-9

26. **Keshelava, D., Lobjanidze, M., Surguladze, T., Shubitidze, E., Tskhomelidze, E., Skhiladze, E., Andghuladze, T., & Mkervalidze, S. (2023).** *Gender and entrepreneurship in Georgia: Institutional barriers and opportunities*. ISET Policy Institute. **https://iset.ge/en/publications**

27. **Komysheva, O., Williams, T., & Shepherd, D. A.** (2026). Digital bricolage and entrepreneurial resilience under crisis conditions. *Proceedings of the Hawaii International Conference on System Sciences*.

28. **Lim, D.-J., Kim, N., Kang, J., & Cho, K.** (2024). A contingent value of bricolage strategy on SMEs' organizational resilience: Lessons from the COVID-19 pandemic. *Humanities and Social Sciences Communications, 11*, Article 263. https://doi.org/10.1057/s41599-024-02771-6

29. **Mačiukaitė-Žvinienė, S., & Skliaustas, R. (2025).** *Global Entrepreneurship Monitor 2024/2025: National entrepreneurship assessment for Lithuania*. Global Entrepreneurship Research Association; Vilnius University Business School. https://www.gemconsortium.org/report/gem-lithuania-2024-2025

30. **Mažuolė, J.** (2025). Gendered career trajectories and entrepreneurial legitimacy in Lithuania. Doctoral dissertation, Kaunas University of Technology.

31. **McAdam, M., Crowley, C., & Harrison, R. T. (2019).** *"To boldly go where no [man] has gone before" - Institutional voids and the development of women's digital entrepreneurship.* Technological Forecasting and Social Change, 146, 912–922. https://doi.org/10.1016/j.techfore.2018.07.051

32. **Menshikov, V., Kokina, I., & Lavrinenko, O.** (2024). Startup ecosystems in the Baltic states. *Regional Studies, Regional Science*, 11(1), 215–233. https://doi.org/10.1080/21681376.2024.2310445

33. **Ng, S., & Fu, X.** (2025). Female entrepreneurship and economic development: An inverted U-shaped relationship. *Small Business Economics*. https://doi.org/10.1007/s41959-024-00120-x

34. **North, D. C.** (1990). *Institutions, institutional change and economic performance*. Cambridge University Press. https://doi.org/10.1017/CBO9780511808678

35. **Otis, N. G., Cao, R., Koning, R., & Pan, X.** (2024). *Global evidence on gender gaps and generative AI* (Harvard Business School Working Paper No. 25-023). Harvard Business School. https://www.hbs.edu/ris/Publication%20Files/25023_52957d6c-0378-4796-99fa-aab684b3b2f8.pdf

36. **Pergelova, A., Manolova, T., Simeonova-Ganeva, R., & Yordanova, D. (2019).** Democratizing entrepreneurship? Digital technologies and the internationalization of female-led SMEs. Journal of Small Business Management, 57(1), 14–39. https://doi.org/10.1111/jsbm.12494

37. **Salamzadeh, A., Dana, L.-P., Ghaffari Feyzabadi, J., Hadizadeh, M., & Eslahi Fatmesari, H. (2024).** Digital technology as a disentangling force for women entrepreneurs. *World, 5*(2), 346–364. https://doi.org/10.3390/world5020019

38. **Singh, M., Dhir, S., & Mishra, H.** (2024). Synthesizing research in entrepreneurial bootstrapping and bricolage: A bibliometric mapping and TCCM analysis. *Management Review Quarterly, 74*, 487–520. https://doi.org/10.1007/s11301-022-00308-2

39. **Skica, T., Piątkowski, M. J., Abdić, A., & Lazović-Pita, L.** (2025). Institutional determinants of entrepreneurship in the EU. *Journal of Entrepreneurship, Management and Innovation*, 21(3), 77–100. https://doi.org/10.7341/20252134

40. **Sorgner, A., Bode, E., & Krieger-Boden, C.** (2024). Necessity- and opportunity-based female entrepreneurship across countries. *Technovation*, 132, 102101. https://doi.org/10.1016/j.technovation.2024.102101

41. **Sussan, F., & Acs, Z. J.** (2017). The digital entrepreneurial ecosystem. *Small Business Economics*, 49(1), 55–73. https://doi.org/10.1007/s11187-017-9867-5

42. **St-Onge, A., & Stevenson, L.** (2023). *National assessment of women's entrepreneurship development in Georgia*. UN Women; International Labour Organization.https://georgia.unwomen.org/en/digital-library/publications/2023/05/national-assessment-of-womens-entrepreneurship-development-in-georgia

43. **Wu, J., & Si, S.** (2019). *An exploratory cross-country analysis of female entrepreneurship: Gendered institutions perspective*. Entrepreneurship Research Journal.

    DOI:10.1515/erj-2018-0019

44. **Żur, A., & Markiewicz, E.** (2025). Psychological safety and adaptation among women entrepreneurs in crisis contexts. *Gender, Work & Organization*. https://doi.org/10.1111/gwao.12968

*Used **Claude (Anthropic, 2026) to help with reference formatting**, **KTU's visual library (AI search tool integrated in that platform, to check peer-reviewed articles** and **Research Rabbit AI to explore and cross-check related research papers connected to the research aim.**
**The final form of content and source selections were reviewed and adjusted manually.

Appendices

Appendix 1. Research Interview Questions

Appendix 1 presents the interview guide used in this study. The interviews were semi-structured, which means that the researcher followed a general set of questions while also allowing participants to elaborate on their experiences and provide additional details. Follow-up questions were asked when necessary in order to better understand participants' answers.

The interview questions were designed to address the research questions of the study.

Research Questions:

RQ1: How do women entrepreneurs in Lithuania and Georgia use digital and AI-enabled tools in their business activities?

RQ2: How do digital and AI-enabled tools help women entrepreneurs overcome institutional and cultural barriers?

RQ3: How do digital tools support the internationalisation of women-led businesses?

RQ4: What capabilities and skills do women entrepreneurs develop through the use of digital and AI technologies?

Section 1 - Entrepreneurial Background

Purpose: to understand the participants' entrepreneurial journey and business context.

1. Can you tell me about your entrepreneurial journey and how your business started?

2. What motivated you to start your own business?

3. What type of business do you run and what products or services do you offer?

4. How long have you been operating your business?

5. Who are your main customers?

6. How did you get financial investment for the business?

Section 2 - Use of Digital and AI Tools (RQ1)

Purpose: to explore how entrepreneurs use digital and AI tools in their businesses.

6. Can you walk me through a typical workday? Where does AI or digital tech 'sit' in your routine?

7. How did you first start using these digital or AI tools in your business?

8. Which digital tools have been the most useful for your business and why?

Section 3 – Barriers and Challenges (RQ2)

Purpose: to understand barriers faced by women entrepreneurs.

10. What challenges did you face when starting or growing your business?

11. Have you experienced any difficulties related to regulations, bureaucracy, or institutional support?

12. Do you think being a woman entrepreneur influenced your experience in business?

Section 4 - Digital Strategies and Adaptation (RQ2)

Purpose: to explore how technology helps entrepreneurs adapt to challenges.

13. How have digital tools helped you solve problems or overcome business challenges?

14. Can you describe a specific situation where technology helped your business operate more efficiently?

15. Do digital tools help you reduce dependence on local institutional systems?

Section 5 - Internationalisation (RQ3)

Purpose: to explore how entrepreneurs reach international markets.

16. Does your business operate internationally or have customers from other countries?

17. What role do digital platforms play in reaching international customers?

18. What challenges have you faced when expanding your business internationally?

Section 6 - Capabilities and Learning (RQ4)

Purpose: to understand capability development and learning processes.

19. What skills and/or personality traits have been most important for growing your business?

20. What ability have you gained while managing your busying via digital tools?

21. How did you learn to use digital or AI tools in your work?

22. What advice would you give to other women entrepreneurs who want to use digital tools in their businesses?

Appendix 2. Interview Quotes

Code 1: Suggested Support Needs and Future Solutions

> "I think there should be more practical education for entrepreneurs about digital tools and AI, because many people still do not understand how to use these technologies effectively in business." (GE_INT02)

> "If there were more financial support programs specifically for women entrepreneurs working with digital businesses, it would help many people become more confident about starting." (GE_INT05)

> "What would help most is access to experienced mentors who understand both technology and business, because when you are building something digital, you often feel lost between those two worlds." (GE_INT11)

> "I think startups need more support in sales and international communication, because creating the product is one thing, but entering foreign markets is completely different." (GE_INT12)

> "There should be more networking spaces where young entrepreneurs can meet people from technology, marketing, and business backgrounds together." (GE_INT09)

> "In Lithuania, there are support systems, but many early-stage entrepreneurs still do not know how to access them or feel that the process is too bureaucratic." (LT_INT03)

> "I believe universities should cooperate more with startups and digital businesses, because students need real practical experience and entrepreneurs need fresh talent." (LT_INT05)

> "It would help if there were more affordable training opportunities focused specifically on AI implementation for small businesses, not only large corporations." (LT_INT07)

> "Sometimes entrepreneurs do not even need large investments at the beginning. They need guidance, strategic consultations, and someone who can help them avoid expensive mistakes." (LT_INT08)

> "I think governments should focus more on supporting internationalisation, because small businesses from countries like Lithuania or Georgia cannot scale only through local markets." (LT_INT11)

> "Access to affordable specialists is still a major issue. Many startups cannot hire experienced developers, marketers, or consultants during the early stages." (GE_INT14)

> "There should be more programs that support women in technology-related entrepreneurship, because many women still hesitate to enter these industries despite having strong ideas." (LT_INT09)

Code 2: Business Background and Motivation

> “I noticed that companies had difficulty not only with technical hiring, but also with finding people who fit the culture of the team, and that inspired me to build a product that combines psychology and AI for recruitment.” (GE_INT11)

> “After becoming a mother, I started thinking about technologies that could create meaningful experiences for children and parents, which later became the foundation of my business.” (LT_INT08)

> “I always wanted to create something independently and build my own company instead of working only for someone else.” (GE_INT12)

> “My professional experience in HR and management showed me how inefficient many processes still were, and I saw technology as a way to improve them.” (GE_INT13)

> “The business started from a very personal need. I could not gain enough practical experience in my field, so I began posting my own work online and slowly attracting clients.” (GE_INT14)

> “I worked for years in the private sector and technology was always integrated into my work, so creating a SaaS product felt like a natural next step.” (GE_INT13)

> “At first, it was not even about building a company. It was more about testing an idea and seeing whether people actually needed this type of solution.” (LT_INT04)

> “My previous startup failed completely, but that experience taught me more than any university could have taught me about entrepreneurship and resilience.” (GE_INT12)

> “I wanted to build a business that would allow me to combine creativity with independence, because traditional employment did not feel suitable for me anymore.” (LT_INT06)

> “The motivation came from seeing how difficult it was for small businesses to access affordable digital solutions, especially in our local market.” (LT_INT02)

> “We realized that SaaS products and AI solutions would become much more important in the future, so we decided to start building early.” (GE_INT13)

> “At the beginning, the business was simply a Facebook page where I shared my projects, but over time it developed into a professional service.” (GE_INT14)

Code 3: Digital Tools Used

“I mainly used Canva for organizing ideas, planning tasks, and visualizing concepts before presenting them to developers.” (GE_INT11)

“We used HubSpot as our CRM system after testing several alternatives, because it helped us manage communication and customer relationships more efficiently.” (GE_INT12)

“Platforms like Skedda helped us automate bookings and coworking management without needing to build an expensive custom system from scratch.” (GE_INT12)

“I actively use LinkedIn to expand my network internationally and connect with potential collaborators and future clients.” (GE_INT11)

“Google Drive was one of the first tools we used when testing our startup concept, especially for collecting and organizing video resumes.” (GE_INT12)

“We relied heavily on Monday.com and Miro to organize projects, tasks, and workflows, especially because creative work can easily become chaotic without structure.” (LT_INT07)

“Digital platforms made it possible for us to manage projects remotely and continue operations regardless of where team members were physically located.” (GE_INT13)

“I use AI tools like ChatGPT and Gemini for text editing, research, comparing materials, and summarizing technical information quickly.” (GE_INT14)

“Social media platforms such as Facebook and Instagram were essential for visibility and attracting initial customers during the early stages of the business.” (GE_INT14)

“We integrated BPM systems and digital internal management systems very early, which allowed projects and workflows to continue smoothly even during travel or lockdowns.” (GE_INT13)

“The booking system and payment integrations reduced a lot of manual administrative work and made the customer experience much smoother.” (LT_INT04)

“Digital communication tools allowed us to collaborate with international clients and maintain projects across different countries without needing physical offices.” (LT_INT10)

Code 4: AI for Automation and Efficiency

“AI automatically reads resumes, extracts important information, and fills out forms, which saves recruiters a significant amount of manual work.” (GE_INT13)

“What previously took me hours of comparing materials and specifications can now be summarized by AI in minutes.” (GE_INT14)

“We built AI into the recruitment process so the system can match candidates with vacancies and provide relevance scores automatically.” (GE_INT11)

“AI tools save an enormous amount of time because they quickly organize and summarize information that would otherwise require long manual analysis.” (LT_INT08)

“I use ChatGPT and Gemini to improve official texts and emails, especially because they help structure and correct my writing professionally.” (GE_INT14)

“The AI system helps us sort candidates faster and identify potential matches before the HR team manually reviews them.” (GE_INT13)

“For startups with limited budgets, AI tools are extremely valuable because they reduce the need to hire additional people during the early stages.” (GE_INT11)

“I used AI to analyze competitors’ social media strategies and narrow down which approaches were actually effective in the market.” (GE_INT14)

“Digital automation allowed us to manage bookings, workflows, and operational processes much more efficiently without increasing staff.” (GE_INT12)

“AI became useful not for replacing human decisions, but for helping organize information and simplifying the decision-making process.” (LT_INT07)

“The system can automatically go through databases, identify suitable candidates, and send relevant next-step links without fully manual intervention.” (GE_INT11)

“Even free AI tools can provide meaningful support for research, planning, communication, and operational efficiency in small businesses.” (LT_INT05)

Code 5: AI for Strategic Decision-Making

“Before making important business decisions, I sometimes compare my own ideas with AI-generated analysis to see different perspectives.” (GE_INT12)

“AI helped me analyze competitors’ advertisements and identify which marketing strategies were performing best in the Georgian market.” (GE_INT14)

“We are integrating AI into analytics so companies can receive automatic insights and recommendations based on their business data.” (GE_INT13)

“I used AI tools to research international markets and better understand customer behavior before considering expansion abroad.” (LT_INT08)

“AI helps simplify complex information very quickly, which makes strategic planning much faster than traditional manual research.” (LT_INT07)

“When planning a new website and social media strategy, I used AI to identify current trends and understand what audiences respond to most.” (GE_INT14)

“I do not fully trust AI to make decisions for me, but it is extremely useful for organizing information and identifying possible directions.” (GE_INT12)

“AI-supported analytics can help small businesses make more data-driven decisions even without large teams or consultants.” (GE_INT13)

“I often use AI for preliminary research before entering a new market because it helps reduce uncertainty and saves time.” (LT_INT10)

“The combination of personal experience, human advice, and AI-generated insights creates the strongest foundation for decision-making.” (GE_INT12)

“AI became valuable for identifying patterns, summarizing information, and helping evaluate different strategic alternatives more efficiently.” (LT_INT05)

“Digital tools and AI helped us better understand customer expectations and market tendencies before implementing major changes.” (LT_INT03)

Code 6: Institutional and Gender-Related Barriers

“Sometimes people first judge your appearance or age before they take your business seriously, especially when you are a young female founder.” (GE_INT11)

“In Georgia, I felt more cultural pressure and skepticism from clients, while international partners treated me much more equally.” (GE_INT11)

“Many investors initially believed that companies in Georgia would never trust SaaS products with sensitive data, which became one of the biggest barriers at the beginning.” (GE_INT13)

“The construction and design field is still heavily male-dominated, and many craftsmen initially assume that a woman does not understand technical work.” (GE_INT14)

“At first, banks and large organizations were afraid to use cloud-based HR systems because they did not trust digital infrastructure.” (GE_INT13)

“I often felt that I had to prove my competence more strongly because I was a woman working in technology-related entrepreneurship.” (LT_INT07)

“Communication with developers was difficult because I had no technical background, and I had to learn their language and processes while building the startup.” (GE_INT12)

“The biggest institutional barrier for me was bureaucracy and administrative tasks that were completely unrelated to my actual profession.” (GE_INT14)

“As a young entrepreneur, I sometimes felt that people looked down on me before even understanding the value of the business idea.” (GE_INT11)

“There are still industries where women are not fully taken seriously until they demonstrate expertise repeatedly.” (LT_INT09)

“One of the biggest challenges was gaining trust from clients who were unfamiliar with digital products and AI-based solutions.” (GE_INT13)

“The lack of affordable professional support during the early stages made entrepreneurship much more difficult, especially when trying to manage everything independently.” (LT_INT05)

Code 7: Cultural and Gender-Related Barriers

“People sometimes judged me based on my age and appearance before taking my business seriously, especially as a young female founder.” (GE_INT11)

“In Georgia, I experienced much more skepticism from clients compared to international markets, where communication felt more equal and professional.” (GE_INT11)

“The construction field is still very male-dominated, and many craftsmen initially assume that a woman does not understand technical details.” (GE_INT14)

“Some startup environments still unconsciously look down on younger entrepreneurs, especially when they are women.” (GE_INT11)

“When I spoke professionally and demonstrated technical knowledge, attitudes toward me immediately changed.” (GE_INT14)

“I think women in technology-related entrepreneurship still have to prove themselves more strongly in order to gain the same level of trust.” (LT_INT09)

“The local market was culturally slower to trust SaaS systems and digital management compared to international markets.” (GE_INT13)

“In Uzbekistan, we discovered that relationship-building and trust worked very differently from Georgia, and contracts took much longer to finalize.” (GE_INT13)

“At the beginning, it was difficult for local audiences to understand the concept of coworking because it was still unfamiliar in Batumi.” (GE_INT12)

“I sometimes felt discomfort working in environments where most team members and developers were male.” (GE_INT11)

“Men in my profession often underestimated me initially, but after working together, many changed their attitude completely.” (GE_INT14)

“Different countries required very different communication styles and expectations, especially when working with clients internationally.” (LT_INT10)

Code 8: internationalisation and Market Expansion

“From the very beginning, we were thinking about entering the American market and started conducting customer discovery interviews there early on.” (GE_INT11)

“Our first international success was in Uzbekistan, where we now serve a growing number of organizations despite cultural and operational challenges.” (GE_INT13)

“Digital business models make it possible to work with clients from any country without being limited by local geography.” (GE_INT11)

“International expansion turned out to be much more complex than we originally expected, especially because every market has different cultural expectations and operational requirements.” (GE_INT13)

“LinkedIn became one of the main tools for trying to connect with international clients and foreign business networks.” (GE_INT11)

“I have completed projects in Germany, Greece, Italy, Lithuania, and the United States, which helped me gain confidence working internationally.” (GE_INT14)

“In Europe, clients paid much more attention to certifications and data security standards before considering cooperation.” (GE_INT13)

“Working internationally required understanding local materials, suppliers, regulations, and communication styles, which was often very challenging.” (GE_INT14)

“The biggest international barrier for me was language and adapting to different market expectations in each country.” (GE_INT14)

“We realized that entering foreign markets requires not only a digital product, but also local support teams and local relationship-building.” (GE_INT13)

“Digital tools and remote communication made it possible to manage projects across countries without opening physical offices immediately.” (LT_INT10)

“Small local markets like Lithuania and Georgia naturally push entrepreneurs toward internationalization because growth opportunities are limited domestically.”

(LT_INT05)

Code9: Financial Challenges and Financial Adaptation Strategies

“At the beginning, we were building everything entirely with personal finances because we wanted to prove the product worked before seeking investment.” (GE_INT11)

“One of the biggest challenges was not having enough budget for marketing and visibility during the early stages of the business.” (GE_INT14)

“Digital tools helped reduce costs significantly because many useful platforms and AI tools have free or affordable versions.” (GE_INT11)

“For startups, automation and AI are some of the biggest ways to save money because they reduce the need for additional employees.” (LT_INT08)

“I learned very early that part of every project’s income had to remain inside the business for equipment upgrades and future investments.” (GE_INT14)

“We decided not to seek investment immediately because we wanted to first validate the product and gain real customers.” (GE_INT12)

“Affordable digital platforms allowed us to avoid expensive custom development during the initial stages.” (GE_INT12)

“Financial uncertainty forced us to become much more strategic and flexible in how we approached growth and expansion.” (LT_INT07)

“AI tools helped reduce consulting and administrative costs because they could provide quick summaries, comparisons, and planning support.” (GE_INT14)

“At first, investors in Georgia were skeptical about SaaS business models and did not believe companies would trust cloud-based systems.” (GE_INT13)

“The ability to work remotely and digitally reduced operational expenses and made international collaboration more financially realistic.” (LT_INT10)

“Limited financial resources often pushed entrepreneurs to become more creative and resourceful in solving problems.” (LT_INT05)

Code 10: Digital Adaptation Strategies and Digital Coping Solutions

“Digital tools allowed us to organize workflows, communication, and project management much more efficiently, especially during remote work periods.” (GE_INT13)

“Platforms like Canva helped me visualize ideas and communicate concepts even without having a technical background.” (GE_INT11)

“Social media became one of the main ways to build visibility and attract customers during the early stages of the business.” (GE_INT14)

“Using booking systems and digital automation reduced a large amount of manual administrative work.” (GE_INT12)

“AI tools helped me process information faster and simplify research that would otherwise take hours manually.” (GE_INT14)

“Digital business models made it possible to communicate with international clients and manage projects remotely.” (LT_INT10)

“We integrated BPM systems very early, which allowed all employees to stay connected to projects regardless of physical location.” (GE_INT13)

“Digital platforms gave small businesses opportunities that previously were available only to larger companies.” (LT_INT05)

“The use of CRM systems and workflow tools helped us become much more organized and structured as the company grew.” (GE_INT12)

“AI became useful for editing texts, comparing materials, summarizing specifications, and improving communication efficiency.” (GE_INT14)

“Remote collaboration tools helped us continue operations smoothly even during lockdowns and periods of uncertainty.” (GE_INT13)

“Digital tools reduced dependence on local markets because entrepreneurs could reach clients, partners, and audiences internationally.” (LT_INT08)

Code 11: Current Coping Solutions and Adaptation Strategies

“From the very beginning, we were conducting customer discovery interviews in the American market because we wanted to understand whether there was real demand for our product before fully launching internationally.” (GE_INT11)

“LinkedIn became one of the main tools for trying to reach international clients and expand our network beyond Georgia, especially because local networking opportunities were limited.” (GE_INT11)

“We realized that entering foreign markets requires much more than just having a digital product. You need local relationship-building, local communication, and eventually local staff who understand the culture and business environment.” (GE_INT13)

“Because our product is digital, we were able to provide services internationally without immediately opening physical offices, which reduced costs and made expansion more realistic for a growing company.” (GE_INT13)

“I actively use international competition platforms and networking spaces because they help increase visibility abroad and create opportunities that would be difficult to access locally.” (GE_INT14)

“Foreigners and expats became our main target audience during the early stages because the local market was still unfamiliar with coworking culture and digital startup ecosystems.” (GE_INT12)

“We had to adapt our communication style and expectations depending on the country, because business culture and the speed of decision-making were very different across markets.” (GE_INT13)

“AI tools and digital research platforms helped me better understand trends, customer preferences, and visual expectations in international markets before entering them.” (GE_INT14)

“Partnerships, networking, and participation in international communities became one of the strongest ways to create opportunities for expansion and collaboration.” (LT_INT05)

“We intentionally focused on strengthening the product locally first, because we believed that international expansion would only be sustainable once the product was stable and validated.” (GE_INT13)

“Remote communication tools and digital project management systems allowed us to continue collaborating with international clients efficiently regardless of physical location.” (LT_INT10)

“Completing projects abroad helped build credibility and confidence, and after successful international collaborations it became much easier to attract additional foreign clients.” (GE_INT14)

“Instead of investing immediately into expensive infrastructure abroad, we used affordable digital systems and platforms that allowed us to test markets gradually and reduce financial risks.” (GE_INT12)

“Understanding local regulations, administrative systems, and cultural expectations became one of the most important survival strategies when working internationally.” (GE_INT14)

“For businesses from smaller countries like Georgia and Lithuania, internationalization often becomes necessary quite early because the local market alone cannot support long-term growth.” (LT_INT11)

Code 12: Digital Tools Overcoming Barriers

> “Digital tools helped me overcome one of my biggest early barriers, which was visibility, because without social media and online platforms it would have been almost impossible to attract clients independently.” (GE_INT14)

> “AI tools helped simplify extremely technical or time-consuming tasks, especially when comparing materials, analyzing information, or preparing professional communication.” (GE_INT14)

> “Because our company was fully digitized from the beginning, we were able to continue operations smoothly during lockdowns and remote working periods.” (GE_INT13)

> “Digital systems allowed us to manage workflows, projects, and communication remotely, which removed many operational limitations connected to geography.” (GE_INT13)

> “Platforms like LinkedIn made it much easier to connect with international clients and professionals outside the local market.” (GE_INT11)

> “Without digital platforms, our coworking concept would have been much harder to manage because booking systems and automation reduced a large amount of manual administrative work.” (GE_INT12)

> “AI helped reduce financial barriers because many tasks that would normally require specialists or consultants could be handled much faster and more affordably.” (LT_INT08)

> “Digital tools allowed small businesses to compete more effectively with larger companies by improving organization, visibility, and access to information.” (LT_INT05)

> “Remote collaboration technologies made it possible to continue managing international projects even while working from different countries.” (LT_INT10)

> “I used AI to analyze competitors, identify market trends, and narrow down useful information much faster than manual research would allow.” (GE_INT14)

> “Digital tools reduced dependence on local institutions and specialists because many administrative, organizational, and communication tasks could be solved independently online.” (GE_INT14)

> “The integration of AI into recruitment and analytics helped reduce manual work and improved operational efficiency inside the company.” (GE_INT13)

> “Using CRM systems, project management platforms, and AI tools helped us structure the business more professionally during growth.” (GE_INT12)

“Free or low-cost digital tools became extremely important for startups because they allowed entrepreneurs to access professional-level solutions without major financial investment.” (GE_INT11)

“Technology helped overcome not only practical barriers, but also psychological barriers, because entrepreneurs felt more independent and capable of solving problems quickly.” (LT_INT07)

Code 13.1 Entrepreneurial Capabilities, Learning, and Personal Traits

“The desire to build something independently and create my own company was one of the strongest motivations that kept me moving forward despite difficulties.” (GE_INT11)

“My failed startup taught me more practical skills, resilience, and adaptability than formal education ever could.” (GE_INT12)

“One of the most important entrepreneurial skills is the ability to continue even after failure and not allow setbacks to stop you.” (GE_INT13)

“I learned that entrepreneurship requires constant adaptation because markets, technologies, and customer expectations are always changing.” (GE_INT14)

“The ability to listen carefully to customers and understand their needs became one of the most valuable business skills for me.” (GE_INT12)

“Digital tools helped me become much more organized and systematic, because naturally I am a very creative and chaotic person.” (LT_INT07)

“Entrepreneurship taught me how to communicate with very different types of people, including developers, clients, investors, and international partners.” (GE_INT12)

“I realized that flexibility and the ability to pivot quickly are essential for survival when the market does not respond as expected.” (GE_INT12)

“One of the biggest lessons was understanding that building a product is not enough; sales, communication, and networking are equally important.” (GE_INT11)

“AI and digital tools became part of my learning process because they helped me access information, compare ideas, and solve problems much faster.” (GE_INT14)

“I learned that international business requires cultural awareness and communication skills just as much as technical or financial knowledge.” (GE_INT13)

“Over time, I became much more confident in decision-making because entrepreneurship forced me to solve problems independently.” (LT_INT05)

“The experience of managing uncertainty and responsibility helped me grow personally as well as professionally.” (LT_INT10)

“Trusting the team and giving people responsibility became one of the most important leadership lessons for me as an entrepreneur.” (GE_INT13)

“Entrepreneurship taught me discipline, persistence, and the importance of continuous self-learning in rapidly changing digital environments.” (LT_INT08)

Code 13.2. Most Frequently Mentioned Personal Traits

“I never give up. For me, there is no such thing as an unattainable goal.” (GE_INT13)

“The desire and motivation to build something of my own is what still drives me today.” (GE_INT11)

“Warmth and the ability to truly listen to people helped me much more than aggressive sales techniques.” (GE_INT12)

“I am extremely goal-oriented and once I start something, I cannot leave it unfinished.” (GE_INT13)

“Persistence is both my greatest strength and sometimes my greatest weakness, because I cannot stop until I solve the problem.” (GE_INT14)

“Creativity helped me survive difficult moments and find solutions even when situations felt like failures.” (GE_INT12)

“I learned to become more systematic and disciplined because entrepreneurship forced me to organize myself better.” (LT_INT07)

“Adaptability became one of the most important traits because every market and every project required different approaches.” (LT_INT10)

“Trust in people and trust in the team became a very important part of building the business successfully.” (GE_INT13)

“Resilience is essential because entrepreneurship constantly brings uncertainty, pressure, and unexpected setbacks.” (LT_INT05)