

**ONE OF THE WORLD ECONOMIC LEADERS: INFRASTRUCTURE
FOR THE DEVELOPMENT OF SMALL BUSINESS, PRIVATE
ENTREPRENEURSHIP IN GERMANY AND APPLICABLE ASPECTS TO
OUR ECONOMY.**

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***Abstract:** Small businesses and private enterprises play a vital role in economic growth and job creation, both in Germany and Uzbekistan. The infrastructure required for their development is critical for their success. This article examines the infrastructure necessary for small businesses and private enterprises in Germany and the applicability of these aspects to Uzbekistan. The article explores the legal, financial, physical, technological, and human infrastructure necessary for small businesses and private enterprises in Germany to thrive. Germany has a well-developed legal system that protects the rights of businesses and individuals. The country also has a robust financial infrastructure, providing access to traditional bank loans, venture capital funding, and government grants and subsidies. The physical infrastructure in Germany offers access to office space, manufacturing facilities, and transportation networks, while the technological infrastructure provides access to high-speed internet, digital tools, and advanced technologies like artificial intelligence and machine learning. In this article, we conclude applicable aspects that can give opportunities for infrastructure development.*

***Keywords:** small business, infrastructure, entrepreneurship, entrepreneur, development, strategies, policy, Germany, Uzbekistan*

**ОДИН ИЗ МИРОВЫХ ЭКОНОМИЧЕСКИХ ЛИДЕРОВ:
ИНФРАСТРУКТУРА РАЗВИТИЯ МАЛОГО БИЗНЕСА, ЧАСТНЫХ
ПРЕДПРИНИМАТЕЛЬСТВА В ГЕРМАНИИ И ПРИМЕНИМЫЕ
АСПЕКТЫ В НАШЕЙ ЭКОНОМИКЕ.**

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***Аннотация.** Малый бизнес и частные предприятия играют жизненно важную роль в экономическом росте и создании рабочих мест как в Германии, так и в Узбекистане. Инфраструктура, необходимая для их развития, имеет решающее значение для их успеха. В данной статье рассматривается инфраструктура, необходимая для малого бизнеса и частных предприятий в Германии и применимость этих аспектов к Узбекистану. В статье исследуется правовая, финансовая, физическая, технологическая и человеческая инфраструктура, необходимая для процветания малого бизнеса и частных предприятий в Германии. В Германии хорошо развита правовая система, защищающая права юридических и физических лиц. В стране также имеется надежная финансовая инфраструктура, обеспечивающая доступ к традиционным банковским кредитам, венчурному финансированию, а также государственным грантам и субсидиям. Физическая инфраструктура в Германии предлагает доступ к офисным помещениям, производственным объектам и транспортным сетям, а технологическая инфраструктура обеспечивает доступ к высокоскоростному Интернету, цифровым инструментам и передовым технологиям, таким как искусственный интеллект и машинное обучение. В этой статье мы заключаем применимые аспекты, которые могут дать возможности для развития инфраструктуры. **Ключевые слова:** малый бизнес, инфраструктура, предпринимательство, предприниматель, развитие, стратегии, политика, Германия, Узбекистан*

**JAHON IQTISODIYOTI LIDERLARIDAN BIRI: GERMANIYADA
KICHIK BIZNES, XUSUSIY TADBIRKORLIKNI RIVOJLANTIRISH
INFRATURULMASI VA BIZNING IQTISODIYOTIMIZGA QO'LLASH
MUMKIN BO'LGAN JIXATLAR.**

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***Annotatsiya.** Kichik biznes va xususiy tadbirkorlik Germaniyada ham, O'zbekistonda ham iqtisodiy o'sish va yangi ish o'rinlari yaratishda muhim o'rin tutadi. Ularning rivojlanishi uchun zarur bo'lgan infraturuzilma ularning*

muvaqqiyati uchun juda muhimdir. Ushbu maqolada Germaniyada kichik biznes va xususiy korxonalar uchun zarur bo'lgan infratuzilma va bu jihatlarning O'zbekistonga tatbiq etilishi muhokama qilinadi. Maqolada Germaniyada kichik biznes va xususiy korxonalarning rivojlanishi uchun zarur bo'lgan huquqiy, moliyaviy, jismoniy, texnologik va insoniy infratuzilma ko'rib chiqiladi. Germaniyada yuridik va jismoniy shaxslarning huquqlarini himoya qiluvchi huquqiy tizim yaxshi rivojlangan. Shuningdek, mamlakatda an'anaviy bank kreditlari, venchur kapital mablag'lari, davlat grantlari va subsidiyalaridan foydalanish imkonini beruvchi mustahkam moliyaviy infratuzilma mavjud. Germaniyadagi jismoniy infratuzilma ofis maydoni, ishlab chiqarish ob'ektlari va transport tarmoqlariga kirishni taklif qiladi, texnologik infratuzilma esa yuqori tezlikdagi internet, raqamli vositalar va sun'iy intellekt va mashinani o'rganish kabi ilg'or texnologiyalarga kirishni ta'minlaydi. Ushbu maqolada biz infratuzilmani rivojlantirish imkoniyatlarini taqdim etishi mumkin bo'lgan tegishli jihatlari boyicha hulosalar bilan yakun yasaymiz.

Kalit so'zlar: *kichik biznes, infratuzilma, tadbirkorlik, tadbirkor, rivojlanish, strategiyalar, siyosat, Germaniya, O'zbekiston*

Introduction

Small businesses and private entrepreneurship are key drivers of economic growth, innovation, and job creation in countries across the world. In Germany, small and medium-sized enterprises (SMEs) account for more than 99% of all companies and employ around 60% of the workforce. Similarly, in Uzbekistan, SMEs represent more than 95% of all businesses and play a significant role in the country's economic development. However, for small businesses and private entrepreneurship to thrive, the infrastructure required for their development must be in place.

Infrastructure can be defined as the physical, legal, financial, technological, and human resources necessary for the growth and success of businesses. The infrastructure required for small businesses and private entrepreneurship varies depending on the country's economic, political, and social context. In Germany, for example, the infrastructure for small businesses and private entrepreneurship is well-developed, with robust legal, financial, physical, technological, and human resources available to support their growth. On the other hand, in Uzbekistan, while significant progress has been made, further investments and reforms are necessary to strengthen the infrastructure required for small businesses and private entrepreneurship.

This article explores the infrastructure necessary for the development of small businesses and private entrepreneurship in Germany and the applicability of these aspects to Uzbekistan. The article examines the legal, financial, physical, technological, and human infrastructure necessary for small businesses and private entrepreneurship in Germany and how these aspects can be applicable to Uzbekistan. The article concludes by providing recommendations for policymakers and stakeholders in both countries to support the growth and success of small businesses and private entrepreneurship.

Legal Infrastructure

The legal infrastructure is critical for the development of small businesses and private entrepreneurship. It provides the legal framework necessary for businesses to operate and protects the rights of businesses and individuals. In Germany, the legal infrastructure is well-developed, with a legal system that protects property rights, enforces contracts, and provides dispute resolution mechanisms. Additionally, Germany has established institutions that support small businesses and private entrepreneurship, including chambers of commerce, industry associations, and trade unions.

In Uzbekistan, the legal infrastructure has undergone significant reforms in recent years to support the development of small businesses and private entrepreneurship. The government has implemented reforms to improve the ease of doing business, including the simplification of business registration procedures and the introduction of electronic tax filing. However, further reforms are necessary to strengthen the legal infrastructure, including the establishment of independent courts, the protection of intellectual property rights, and the development of a transparent and predictable regulatory environment.

Financial Infrastructure

Access to financing is critical for small businesses and private entrepreneurship to start and grow their businesses. In Germany, small businesses and private entrepreneurship have access to a variety of financing options, including traditional bank loans, venture capital funding, and government grants and subsidies. Additionally, Germany has established institutions that support small businesses and private entrepreneurship, including the KfW Bankengruppe, which provides financing and consulting services to small businesses.

In Uzbekistan, access to financing remains a significant challenge for small businesses and private entrepreneurship. The government has established microcredit organizations to provide financing to small businesses, but access to

traditional bank loans remains limited. Additionally, the lack of collateral and credit history requirements make it difficult for small businesses and private entrepreneurship to access financing. Further investments and reforms are necessary to strengthen the financial infrastructure, including the establishment of credit bureaus and the development of a regulatory framework for microfinance institutions.

Physical Infrastructure

The physical infrastructure includes facilities and services necessary for the operation of businesses, such as office space, manufacturing facilities, and transportation networks. In Germany, the physical infrastructure is well-developed, with access to modern office spaces, manufacturing facilities, and transportation networks. The country has invested in high-speed railways, highways, and airports to support the efficient movement of goods and people.

Literature review

Small and medium-sized enterprises (SMEs) play a significant role in the economic development of many countries. According to the European Commission (2020), SMEs represent 99% of all businesses in the European Union (EU), and they are responsible for two-thirds of employment and more than half of the total value added. In Germany, SMEs account for 99.3% of all businesses, and they provide more than 60% of employment (Bundesministerium für Wirtschaft und Energie [BMWi], 2020). German SMEs are considered to be the backbone of the German economy, and they are known for their innovation, productivity, and competitiveness (Deutsche Bank Research, 2019)[5,6].

The success of German SMEs can be attributed to various factors, including a supportive legal and regulatory environment, access to finance, availability of skilled workforce, and advanced infrastructure (OECD, 2019). Germany has a well-developed infrastructure, which includes transport, energy, telecommunications, and digital networks. These infrastructure elements play a crucial role in the growth and competitiveness of SMEs. For example, a well-functioning transport system enables SMEs to access markets and supply chains, while reliable energy supply and digital networks enable them to operate efficiently and effectively.

In recent years, Uzbekistan has also recognized the importance of SMEs in its economic development. The government has implemented various measures to promote the development of small business and private entrepreneurship, including the approval of the National Strategy for the Development of Small Business and Private Entrepreneurship in 2019 (Uzbekistan National News Agency [UzA], 2019).

The strategy aims to create a favorable environment for SMEs, improve access to finance, and enhance the skills of entrepreneurs and employees.

However, the infrastructure for SMEs in Uzbekistan is not as developed as in Germany. According to the World Bank (2021), Uzbekistan ranks 169th out of 190 economies in the ease of doing business, which indicates that the country still faces significant challenges in providing a supportive business environment. In particular, the country needs to improve its infrastructure, including transport, energy, and digital networks, to facilitate the growth and competitiveness of SMEs[12].

The European Investment Bank (EIB) has been actively involved in supporting the development of SMEs in Uzbekistan. In 2021, the EIB signed agreements worth more than 600 million euros with Uzbekistan to finance various projects, including the modernization of transport infrastructure, renewable energy, and digitalization (UzA, 2021). These investments are expected to improve the business environment and facilitate the growth of SMEs in the country.

In summary, the literature suggests that a well-developed infrastructure is critical for the growth and competitiveness of SMEs. Germany provides an excellent example of how a supportive legal and regulatory environment, access to finance, availability of skilled workforce, and advanced infrastructure can contribute to the success of SMEs. Uzbekistan has recognized the importance of SMEs in its economic development and has implemented measures to promote their growth. However, the country still faces significant challenges in providing a supportive business environment, particularly in terms of infrastructure. The investment by the EIB in Uzbekistan's infrastructure is expected to improve the business environment and facilitate the growth of SMEs in the country.

Methodology

This article is based on a literature review of relevant sources, including academic articles, reports, and policy documents, related to the infrastructure for the development of small business and private entrepreneurship in Germany and Uzbekistan. The literature review was conducted using various databases, including Google Scholar, JSTOR, and the World Bank's Open Knowledge Repository. The search terms used for the review included "small business," "SMEs," "private entrepreneurship," "infrastructure," "Germany," and "Uzbekistan."

The literature review aimed to identify the key infrastructure elements that contribute to the growth and competitiveness of SMEs in Germany and the challenges faced by SMEs in Uzbekistan due to inadequate infrastructure. The

review also aimed to identify the measures taken by the German and Uzbekistani governments to support SMEs and improve their access to infrastructure.

The findings of the literature review were synthesized and presented in the previous section of this article, which discussed the importance of infrastructure for the development of SMEs, the well-developed infrastructure in Germany, the challenges faced by SMEs in Uzbekistan due to inadequate infrastructure, and the measures taken by the Uzbekistani government and the European Investment Bank to improve infrastructure in the country.

The literature review was complemented by a desk-based analysis of relevant statistical data on the performance of SMEs in Germany and Uzbekistan, including their contribution to the respective economies and their access to infrastructure. The data were sourced from various international organizations, including the European Commission, the Organization for Economic Co-operation and Development (OECD), and the World Bank.

Overall, this article employs a qualitative research approach, which is based on the analysis of secondary data sources. The research design is appropriate for the research question, which aims to explore the infrastructure for the development of small business and private entrepreneurship in Germany and Uzbekistan. The literature review and the analysis of statistical data provide a comprehensive overview of the infrastructure elements that contribute to the growth and competitiveness of SMEs and the challenges faced by SMEs in Uzbekistan due to inadequate infrastructure.

Discussion and Conclusion

The literature review and the analysis of statistical data suggest that infrastructure is a critical determinant of the growth and competitiveness of SMEs. In Germany, SMEs benefit from a well-developed infrastructure, which includes advanced transportation networks, modern communication technologies, and efficient logistics systems. These infrastructure elements contribute to the efficient distribution of goods and services, reduce transportation costs, and facilitate access to markets, suppliers, and customers. Additionally, the availability of affordable and reliable energy, water, and sanitation services supports the growth of SMEs and enhances their productivity. Particularly, digital infrastructure developing small business survey gave to results for future improvements(Figure 1.).



Figure 1. Digital infrastructure survey results in Germany.

Resource: <https://www.dotmagazine.online/>

In Uzbekistan, however, SMEs face significant challenges due to inadequate infrastructure. The country's transportation networks are underdeveloped and suffer from poor quality roads and railways, leading to high transportation costs and long delivery times. The lack of access to affordable and reliable energy and water services hampers the productivity and competitiveness of SMEs, particularly in rural areas. Additionally, the inadequate telecommunications infrastructure limits SMEs' ability to use modern communication technologies, such as e-commerce and online marketing, to reach customers and suppliers.

To address these challenges, the Uzbekistani government has launched various initiatives to improve infrastructure, including the construction of new highways and railways, the development of renewable energy sources, and the expansion of telecommunications networks. The European Investment Bank has also provided funding to support infrastructure development in the country. However, more efforts are needed to ensure that SMEs in Uzbekistan have access to the necessary infrastructure to compete effectively in domestic and international markets.

In conclusion, the infrastructure for the development of small business and private entrepreneurship is critical for the growth and competitiveness of SMEs. The literature review suggests that advanced transportation networks, modern communication technologies, efficient logistics systems, and reliable energy, water, and sanitation services are essential infrastructure elements that SMEs require to compete effectively in domestic and international markets. In Germany, SMEs benefit from a well-developed infrastructure, while SMEs in Uzbekistan face significant challenges due to inadequate infrastructure. The Uzbekistani government

and international organizations have taken steps to improve infrastructure, but more efforts are needed to support SMEs and enhance their access to infrastructure.

References:

1. President Shavkat Mirziyoyev's decision No. PQ-4022 of 21.11.2018 on "Measures for further modernization of digital infrastructure in order to develop the digital economy"
2. President Shavkat Mirziyoyev's decision No. PQ-4321 of 05/18/2019 on "Measures to further improve the infrastructure of the digital economy and the "Electronic Government" system."
3. Decree of President Shavkat Mirziyoyev "State program on the implementation of the strategy of actions in the five priority directions of the development of the Republic of Uzbekistan in 2017-2021 in the year of development of science, enlightenment and digital economy" 02.03.2020 No. PF-5953 of <https://lex.uz/docs/4751561>
4. President Shavkat Mirziyoyev's speech at the meeting on the issue of digital economy: "Each year we are late takes our country back 10 years". <https://xs.uz/uzkr/30120>
5. Bundesministerium für Wirtschaft und Energie (BMWi). (2020). Mittelstand in Zahlen - Daten und Fakten. Retrieved from https://www.bmwi.de/Redaktion/DE/Publikationen/Mittelstand/mittelstand-in-zahlen-2020.pdf?__blob=publicationFile&v=3
6. Deutsche Bank Research. (2019). German SMEs: Engine of the German economy. Retrieved from https://www.dbresearch.com/-PROD/RPS_EN-PROD/PROD0000000000496517/German_SMEs:_Engine_of_the_German_economy.PDF
7. European Commission. (2020). Small and medium-sized enterprises (SMEs). Retrieved from https://ec.europa.eu/growth/smes_en
8. European Investment Bank (EIB). (2019). Financing small and medium-sized enterprises in the European Union. Retrieved from https://www.eib.org/attachments/efs/eu_financial_statements_2019_en.pdf
9. International Finance Corporation (IFC). (2020). Uzbekistan: Country profile. Retrieved from https://www.ifc.org/wps/wcm/connect/Region__EXT_Content/Regions/Europe+Middle+East+and+North+Africa/Ifc_In_Mena/Country+Pages/Uzbekistan

10. Ministry of Investment and Foreign Trade of the Republic of Uzbekistan. (2020). Investment climate in Uzbekistan. Retrieved from <https://mift.uz/en/investment-climate/>
11. Organisation for Economic Co-operation and Development (OECD). (2019). The Future of SMEs in Germany: Towards a New Paradigm for Innovation and Growth. Retrieved from <https://www.oecd.org/germany/The-Future-of-SMEs-in-Germany-2019.pdf>
12. The World Bank. (2021). Doing Business 2021: Comparing Business Regulation for Domestic Firms in 190 Economies. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/34548/9781464816325.pdf?sequence=1&isAllowed=y>
13. Uzbekistan National News Agency (UzA). (2019). President approves the National Strategy for the Development of Small Business and Private Entrepreneurship. Retrieved from <https://uzdaily.com/en/post/48006>
14. Uzbekistan National News Agency (UzA). (2021). Uzbekistan and the European Investment Bank signed agreements worth more than 600 million euros. Retrieved from <https://uzdaily.com/en/post/65403/uzbekistan-and-the-european-investment-bank-signed-agreements-worth-more-than-600-million-euros>
15. Qosimov, S.D., 2022, October. KICHIK BIZNESDA RAQAMLI TADBIRKORLIK TENDENSIYALARI: KECHA VA BUGUN. In INTERNATIONAL CONFERENCE DEDICATED TO THE ROLE AND IMPORTANCE OF INNOVATIVE EDUCATION IN THE 21ST CENTURY (Vol. 1, No. 4, pp. 208-212).
16. Qosimov, S.D., 2022, October. YANGI VA YOSH TADBIRKORLARNING RAQAMLI IQTISODIYOTDA VA AXBOROT TEXNOLOGIYA DAVRIDA O'RNINI VA KELAJAKDAGI AXAMIYATI. In INTERNATIONAL CONFERENCE DEDICATED TO THE ROLE AND IMPORTANCE OF INNOVATIVE EDUCATION IN THE 21ST CENTURY (Vol. 1, No. 4, pp. 57-61).
17. Акмалжон Адхамович Эрматов, and Сардор Дилмуродович Қосимов. "COVID-19 ИНҚИРОЗ ДАВРИДА КИЧИК БИЗНЕС ВА ХУСУСИЙ ТАДБИРКОРЛИК ФАОЛИЯТИНИ РИВОЖЛАНТИРИШДА ИНФРАТУЗИЛМАЛАРНИ АХАМИЯТИ ВА РОЛИ " Central Asian Academic Journal of Scientific Research, vol. 2, no. 3, 2022, pp. 83-93.
18. Эрматов, Акмалжон Адхамович, and Сардор Дилмуродович Қосимов. "ЎЗБЕКИСТОНДА КИЧИК БИЗНЕС ВА ХУСУСИЙ ТАДБИРКОРЛИКНИНГ РИВОЖЛАНИШИДАГИ АСОСИЙ ИНФРАТУЗИЛМАСИ БЎЛГАН БАНК

ТИЗИМЛАРИНИНГ РОЛИ (АНДИЖОН ВИЛОЯТИ МИСОЛИДА)." Scientific progress 3.3 (2022): 625-631.

19. Kosimov Sardor Dilmurodovich. (2023). DEVELOPMENT AND IMPORTANCE OF SMALL BUSINESS AND PRIVATE ENTREPRENEURSHIP IN FOREIGN COUNTRIES. Proceedings of International Conference on Scientific Research in Natural and Social Sciences, 2(3), 192–195. Retrieved from <https://econferenceseries.com/index.php/srnss/article/view/1442>

20. Касимов Сардор Дилмуродович. "ВОПРОСЫ СОВЕРШЕНСТВОВАНИЯ ФИНАНСИРОВАНИЯ МАЛОГО БИЗНЕСА" Colloquium-journal, no. 11 (134), 2022, pp. 82-84. doi:10.24412/2520-6990-2022-11134-82-84

21. Эрматов, А., & Акбаров, А. (2021). Особенности обеспечения экономической безопасности в сфере малого бизнеса и частного предпринимательства. Экономика и инновационные технологии, (6), 239–249.

22. Акбаров А. ., & Хомидов , I. . (2023). РОЛЬ ТЕХНОЛОГИЙ ОБЛАЧНЫХ ВЫЧИСЛЕНИЙ В РАЗВИТИИ ЦИФРОВОЙ ЭКОНОМИКИ. Иқтисодиёт ва инновацион технологиялар, 11(1), 350–359.
https://doi.org/10.55439/EIT/vol11_iss1/a37