



AI Applications for Small & Medium Sized Enterprises



August 2024

Global Research Group, Jackson School of International Studies

Research Fellows

Fern Hinrix

Jasjot Kaur Sanghera

Tin Pak

Vaishnavi Pankaj

Upajna Sindhu Palepu

Safaa Turner-Rahman

Azra Yildiz

Senior Research Fellow

Max S. Zuber

Faculty Lead

Jessica L. Beyer

Contact: Jessica L. Beyer, jlbeyer@uw.edu

Highlights

The following analysis was generated using the organization's unique data, insight, and access to these businesses. It underscores the need for inclusive economic development strategies that address the specific barriers faced by marginalized groups, including refugees with disabilities, to foster sustainable growth and resilience in the local economy.

To learn more about our work in Türkiye and to read other publications, click [here](#).

We sincerely thank all the businesses that participated in these surveys.

This Snapshot was researched and authored by the Building Markets team, including Mohannad Altay (MEAL and Program Officer), Nawar Maari (Program Services Senior Coordinator), and Allison J. Anderson (Research and Impact Advisor). Data analysis was conducted by Zonglong Chen (Data Analysis Statistician).

Building Markets supports refugee and host community-owned small business growth by providing the resources and expertise they need to overcome market barriers, boost capacity, and connect with new opportunities.

This project is a gift of the United States.



Table of Contents

EXECUTIVE SUMMARY	3
RISK CONSIDERATIONS	4
BIAS AND HALLUCINATION RISKS	4
LIMITED LANGUAGE FUNCTIONALITY RISKS	4
FINANCIAL RISKS	5
ORGANIZATIONAL RISKS	5
TECHNOLOGICAL RISKS	6
SECURITY AND PRIVACY RISKS	6
SOCIO-POLITICAL AND ECONOMIC CONTEXT RISKS	7
FUNDER RISKS	8
ASSESSMENT OF GENERATIVE AI TOOLS	9
APPROACH	9
FINDINGS	11
TOOL RECOMMENDATIONS	12
USE CASES	22
APPROACH	22
FINDINGS	22
TRENDS	23
LITERATURE REVIEW	26
POTENTIAL RESEARCH QUESTIONS	28
APPENDIX 1: LITERATURE REVIEW SUMMARY	29
BIBLIOGRAPHY	31

Executive Summary

The objectives of this report are to: (1) assess the potential risks associated with AI adoption for marginalized small businesses, (2) critically evaluate current AI applications relevant to supporting marginalized small businesses, (3) identify best practices and highlight case studies demonstrating successful AI implementations for small businesses, and (4) conduct a thorough literature review in order to understand the discourse about marginalized small business use of generative AI. Ultimately, we aim to provide Building Markets with actionable recommendations for AI applications and assessment of future generative AI tools that suit SMEs and Building Markets.

To assess the potential risks associated with AI adoption, the report outlines seven major categories of potential risks to SMEs from the implementation of AI applications: bias and hallucination, limited language functionality, financial, organizational, technological, socio-political and economic context, and risks related to funder rules. To generate this list, we examined 20 different generative AI tools and compiled data about generative AI. Based on these risks, we recommend that when adopting AI technologies, SMEs uphold existing security features, invest in supplementary security measures, and develop and maintain a comprehensive plan for integrating AI into their businesses.

In order to provide a thorough report on the current relevant AI applications, we also evaluated 40 different applications. These applications were grouped into four categories based on their function—writing, translation, search, and customer relations management (CRM)—and tested for performance. Each tool was tested using consistent inputs and evaluated on its performance on given tasks. From this, we make the following tool recommendations: JasperAI for writing, Google Translate for translation, ChatGPT for search, and HubSpot for CRM. Additionally, we recommend four additional tools based on distinctive features of each product and a risk analysis: WhatsApp Business, Zoho, Wix, and Microsoft Translator.

We further identified and evaluated 25 SMEs around the world that are using AI applications in their businesses. In most cases, SMEs are benefiting from AI use, and it seems that SMEs around the world are trending towards utilizing AI in their businesses. However, there appears to be a general lack of research being done on SME use of generative AI, as most research and case studies we found focused on large enterprises. This lack of research also means that the long-term impacts of AI use by SMEs is relatively unknown and, in light of this, we recommend follow-up research in 2-3 years.

The literature about AI use in SMEs can be split into three main themes: established frameworks to oversee AI models, the ethics of AI and whether AI models are serving the needs of SMEs and marginalized groups, and the social sustainability of AI use within businesses. However, there are many gaps in the research. Future research that would advance Building Market's work with SMEs could tackle the following questions:

1. Does having a preexisting digitized business model prior to the adoption of AI impact business outcomes for SMEs using generative AI tools?
2. Is AI cost-effective and does it increase productivity for SMEs? Are there differences in impact within the initial phases of use and in the long term?
3. What resources assist SMEs in using generative AI tools to expand productivity and benefit, particularly marginalized small businesses?
4. Because SMEs are often unable to afford the closed source enterprise-level AI tools with more rigorous privacy and security practices, how can SMEs integrate the use of generative AI into business practices while also protecting their data and maintaining rigorous privacy standards?
5. Do the costs and risks associated with AI vary based on the method of deployment--such as whether an SME chooses to run it on its own local systems, where it stores data, whether it uses a cloud computing software service, what kind of security measures are in place, etc.?

Risk Considerations

We examined potential risks to SMEs that are using free or low-cost generative AI, especially risks impacting marginalized communities. Our aim was to produce a list of potential risks that Building Markets should consider when assessing generative AI tools in their work and the work of any partners. We highlight here potential bias and hallucination risks, limited language functionality risks, financial risks, organizational risks, technological risks, socio-political and economic context risks, and risks related to funder rules. To generate this list, we examined 20 different generative AI tools, compiled data about generative AI, and engaged in a literature review.

To mitigate controllable risks such as security and privacy risks, SMEs should consider existing security features when evaluating an AI application, such as access controls, and maintain them rigorously. Investing in supplementary security measures, such as firewalls, intrusion detection systems, and anti-virus software is advisable, as they can easily be deployed on commercial software. Additionally, anonymizing Personally Identifiable Information (PII) in AI applications could further mitigate privacy risks (Alhashimy, 2024). SMEs should delineate a precise use case for each AI tool used and develop a comprehensive plan for implementation that takes into account compatibility with existing IT infrastructure and addresses any skill gaps within the organization. Demonstration of commitment from management is imperative to overcoming any internal resistance, along with proper guidance, thorough training, and robust support to facilitate a successful adoption process.

An important factor to mention is that there is a research gap in case studies that document how each of the risks we identified materialize in the day-to-day use of generative AI tools by organizations such as SMEs. As a result, there may be unknown risks not covered in our research. In addition, generative AI is constantly evolving and, as such, new risks may emerge even within the next months and some of the risks we list¹ here may become more pressing.

Bias and Hallucination Risks

LLMs, which are trained on extensive datasets, can produce biased or incorrect outputs, leading to potential misinformation or "hallucinations"—fabricated but seemingly plausible information. This poses a significant risk for businesses, especially those run by Syrian refugees or other vulnerable groups, as such inaccuracies could damage their reputation and operations.

In addition, studies that have tested GPTs have found word association bias. In this case, word association bias frequently associates Muslim and Arab communities with terrorism, weapons, and violence (Abid et al., 2021; Mhatre, 2023). Because our SMEs are predominantly run by Syrian refugees and a significant portion export products to Arab countries, AI tools being used to develop marketing campaigns or for other content creation purposes may be less serviceable in catering to this particular demographic. Generated content could instead reinforce harmful stereotypes or drive marketing strategies that are less effective at reaching the companies' consumer-base and hurt their profitability as a result.

Limited Language Functionality Risks

Language support is also a critical factor. While some tools support Arabic and/or Turkish, many do not. Language barriers are a significant challenge for businesses entering the Turkish market, and tools with robust language capabilities are particularly valuable. Tools that lack adequate language support represent a notable downside for small business owners who may not be fluent in Turkish or English.

¹ The list and document can be made available to interested stakeholders upon request.

Based on our review of models, we found that many do not have Arabic functionality. Models that cannot interface in Arabic could have limited usability and practicality for our target SMEs. If the majority of employees cannot operate an AI system due to the language barrier, the company would not benefit from AI's potential to optimize their efficiency, productivity and overall growth.

Financial Risks

Because SMEs operate with more limited budgets and ready capital than large enterprise companies, investing in untested generative AI tools poses significant financial risk. The financial implications of integrating AI technology into a business is varied and far-reaching. Beyond the price of the technology itself, there may be external costs such as specialized hardware, security services, or time spent on training employees. To ensure successful integration, companies often seek the support of third-party developers or AI consultants. These experts can help integrate the software into their existing data ecosystem or tailor the technology to their business's specific needs. Additionally, organizations may need to experiment with multiple different programs before finding the most optimal one (Aarstad & Saidl, 2024).

Contact-based pricing is a method that an AI company sets after evaluating an organization's size or usage needs. This pricing method can be a risk for SMEs as it prevents immediate accessibility to evaluate long term budget impacts. The unknown price tag might raise flags regarding fair pricing and what standard AI functions are included in your package in comparison to other companies. This uncertainty may be a risk for the long-term, but it might provide a position for SMEs to negotiate subscription prices.

For SMEs, the lack of a short-term return on investment (ROI) makes the possibility of unsuccessful adoption a significant financial risk. A Deloitte survey found that 94% of business leaders believed AI adoption to be crucial to success in the coming years, but that the ROI would be delayed (Mittal et al., 2022). This finding aligns with current research, which suggests that the benefits of implementing AI may only materialize in the long-term—and SMEs may have difficulty waiting for benefits.

Organizational Risks

SMEs also face internal organizational risks when adopting generative AI tools because employees may have limited technological competency and SMEs may not have the resources or in-house expertise to train employees to use AI tools effectively. A multiple-case study conducted by researchers at the Copenhagen Business School, investigated SMEs' reluctance to adopt AI solutions. A recurring theme found across cases was a lack of expertise with AI, as multiple interviewees felt they did not have sufficient experience or the required knowledge to operate AI tools, with some even lacking a basic understanding of what AI is (Aarstad & Saidl, 2024).

Lack of training and competency can generate organizational resistance to the use of generative AI tools. Internal motivation on all levels is crucial to overcoming the inevitable challenges of AI integration. Employees may not have confidence in AI solutions without thorough education of what AI is, how it functions, and its benefits. This resistance can also be driven by inadequate direction from management or unclear use cases. For instance, in some cases of unsuccessful adoption, businesses invest either time or money into AI tools solely to keep up with competitors without identifying a clear use case for their company (Aarstad & Saidl, 2024). In such instances, the AI may fail to address the company's specific needs and result in operational inefficiencies or financial losses. Literature also indicates management plays a critical role in executing AI initiatives, especially in SMEs. According to a study investigating the challenges of AI implementation in SMEs, leaders should clearly define the use case for an AI tool and provide sufficient education, training and support to employees (Oldemeyer et al., 2024).

Another risk is related to accessibility and ease of use, particularly concerning user prompts. Many tools require precise prompting to generate clear and effective outputs. Tools with less-defined templates or more general chat features may produce inadequate results without high-quality prompts, potentially impacting critical functions such as bid responses or legal documentation.

Technological Risks

All generative AI tools are not equal when it comes to risk and a key element to determining risk is whether a tool runs on a “closed-source” or “open-source” system. Most models offered by well-established tech companies, such as OpenAI’s ChatGPT, are closed-source and tend to be more expensive. In comparison, open-source software is free and available for public use. However, there are different ways to deploy open and closed-source AI in a business setting, and the risks of doing so vary based on the type of deployment.

Open-source AI systems can be used off-the-shelf; however, the accessibility of their source code allows them to be customizable to specific business needs. Still, the installation, configuration, and customization of open-source AI can often require the technical expertise of developers. Therefore, it may be a more suitable option for companies with in-house developers or the resources to hire developers. Open-source AI systems are also generally built by a small group of developers who undertake it as a hobby, so structures for support may be informal and inconsistent. Users may have to rely on the online developer community for solutions, risking inconsistent maintenance that can disrupt day-to-day operations.

Closed-source AI systems typically offer free and paid versions of their models with a variable price range, offering monthly or annual payment plans. Applications like Claude and ChatGPT represent general purpose AI tools that are useful for basic tasks involving text or image generation, summarizing, outlining, or data analysis. However, these models often require prompt engineering to generate high-quality outputs, and they may still lack the contextual awareness necessary for specific business needs. For more specialized tasks, closed-source software-as-a-service (SaaS) platforms with AI features may be a more effective. Some SaaS platforms have more complex systems that allow users to access multiple different functions all on one platform and are typically better for business use.

However, SMEs may not have the technological proficiency to navigate complicated user models with high learning curves, bringing additional costs in time and resources to train personnel on usage. For resource-constrained SMEs, these costs may outweigh productivity gains from such models and lead to short-term net losses. A high learning curve also limits scalability. Ongoing training for new employees would reduce outputs for businesses that are growing or facing high turnover rates.

Security and Privacy Risks

The proliferation of AI in business settings has coincided with a surge in data breaches and ransomware attacks. A survey conducted with 150 IT security leaders found that 77% of them reported breaches to their AI systems (Sack, 2024). SMEs are being increasingly targeted by cybercriminals, and the financial and reputational damage of a data breach can have an outsized impact on SMEs, making the use of any AI application a security risk. It should be noted that the cost of an AI tool on its own also does not inherently guarantee or discount an AI tool’s robust security capability. Contrastingly, open-source software can allow for strict data security if deployed on-premise or through a private cloud. However, the costs of obtaining the necessary hardware, renting private cloud services, and establishing firewalls on both the hardware and cloud can be high.

When using any AI application, there are a few different privacy considerations to keep in mind as related security threats can affect businesses of any size. Users should be conscious of how data is stored, if data is used to train proprietary models, and whether or not the company engages in third-party information sharing. Regulatory standards listed in a company’s privacy policy can be helpful to evaluate their commitment to data privacy. It is important to note that while some organizations demonstrate compliance, others obtain formal certifications for standards, which means that they have been audited by an accredited independent third-party to prove that they are fully adhering to a particular standard (Edwards, 2024).

For SMEs based in Türkiye, we have identified the General Data Protection Regulation (GDPR) and ISO/IEC 27001 to be the most relevant to consider when assessing risk. Although Syrian and Turkish citizens are not covered by the GDPR, companies may apply the GDPR to all data or use it as a way to structure company practices. In addition, the Turkish Kişisel Verileri Koruma Kanunu privacy law (KVKK) is very similar to the GDPR. AI tools that are GDPR and KVKK-compliant enables EU-based and other users to request the deletion of their data, obligating the company to fulfill the request. It is crucial to understand that compliance does not fully restrict companies from using data, including personally identifiable information (PII), to train the AI models or be shared with third parties; however, it does require explicit consent to do so (Sharma, 2024).

ISO/IEC 27001 is an international standard that provides a comprehensive checklist for establishing information security management systems. It was jointly published by the International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC), and aligns closely with the GDPR. Although compliance is optional, penalties for GDPR violations can be reduced if an organization complies with ISO 27001 (Beaumont, 2024). ISO/IEC 27701 and ISO/IEC 27018 are extensions of ISO/IEC 27001 that focus on best practices for privacy management and PII stored in public clouds, respectively. The latter requires PII to be encrypted during data storage and transmission, as well as a schedule for the deletion of any PII that no longer needs to be stored (Sharron, 2024; Alliantist Ltd., n.d.).

Socio-Political and Economic Context Risks

While geopolitical risks and intercommunal tensions within Türkiye are external to generative AI tool use, they impact the overall success of SMEs and make the need for accurate translation tools greater. In the case of Syrian refugee run SMEs in Türkiye, there are significant geopolitical tensions in the region that impact the climate that Syrian refugees live and work in while in Türkiye.

In the case of SMEs, bias is a consumer-end risk, meaning it can affect consumers' choice of business solicitation. According to a World Refugee & Migration Council Research Report (2021), on April 29, 2011, the Turkish government adopted an "Open-Door Policy" for Syrian refugees seeking asylum. Over the years Türkiye hosted more than three million refugees, not including undocumented persons. In 2016, an attempted coup d'état disrupted the economy in Türkiye, leading to a long term economic recession. The economy only became worse in 2017, when inflation caused by an exchange rate shock permeated the country, sowing its seeds for years to come. During 2017, the Turkish government helped naturalize 150,000 Syrian refugees. In 2018, the Turkish government launched a program dedicated to helping Syrian refugees enter the labor market and become self-sustaining. With this, an estimated 1.4 million Syrians were employed in 2019. Consequently, resentment by the Turkish populace grew because the perception was that while aid was being extended to Syrian refugees, the government was not making significant efforts to aid Turkish citizens during the economic crisis at a time unemployment was on the rise. As a result, Turkish nationalism increased and the conception of "Turkishness" excluded any Arab features or cultural norms, and associated anything "Arab" with being against Turkish values.

Many Arab businesses in Türkiye adorn their business signs with Turkish, English, and Arabic writing, welcoming customers of varying backgrounds for solicitation. However, the growing nationalist sentiment in Türkiye has made Arab-owned businesses primary targets for hate crimes. An article written by Al Jazeera (2024) documents riots in Kayseri, Hatay, and other cities in Türkiye against Syrian refugees that damaged Syrian-owned property, housing, and businesses.

Establishing a business in a country dealing with these divisions possesses a risk for business safety and consumer engagement. This in turn limits business opportunities and creates difficulties forming corporate alliances.

Funder Risks

While generative AI has many benefits, due to inherent risks some funders may not allow the use of generative AI tools within their organizations and this could extend to funding recipients and other partners. While USAID contracted ChatGPT Enterprise to assist the agency internally in August 2024 (Heilweil, 2024b), in only January 2024 USAID was warning employees from entering data into publicly available sources such as ChatGPT's free to use service (Heilweil, 20214a). Other US government agencies have also forbidden the use of generative AI internally because of the potential risks, such as the Social Security Administration, the Department of Veterans Affairs, the Agriculture Department, and the Department of Energy (Heilweil, 2024a). It is unclear whether this is a trend that will continue or not and how it may play out for those receiving government funding.

Assessment of Generative AI Tools

We investigated AI tools designed to optimize and streamline essential daily operations for small businesses, particularly those run by Syrian refugees within Building Markets' network. The primary tasks we needed these tools to perform aligned with standard small business operations that would be typical of these SMEs and included multilingual web search, bid writing, marketing content writing and editing, text translation, and customer service capabilities. To identify and evaluate the most suitable tools, we developed a comprehensive set of criteria focusing on security, accessibility, cost, and multilingual capabilities, with detailed subcomponents for each category.

In light of the potential risks of generative AI tools outlined in the previous section, security was one of our top priorities, especially given the vulnerability of Syrian refugee-run businesses in Türkiye. We paid close attention to how these tools handle and protect personal data, understanding that robust data protection is critical for safeguarding privacy, building trust, complying with regulations, and empowering these businesses to grow and integrate into new markets.

Accessibility, cost, and language capacity were also crucial factors, recognizing that these small businesses vary widely in their technological and financial capabilities as well as language proficiency. If not properly vetted or understood, AI tools could potentially cause more harm than good, which could be particularly detrimental to the vulnerable populations Building Markets serves.

A complete list of all tools and their assessment can be found in the Excel file: "Spreadsheet 2 - Tools Assessment."

Approach

We initiated a comprehensive search to identify and gather relevant tools using the following parameters: security, accessibility, cost, and language capacity. When assessing **security**, we examined the transparency of data collection, sharing, and usage of data; the data protection measures implemented; and the security compliances and certifications that each tool possessed. In addition, we ranked risk levels for data security as follows:

- **Critical Risk**
 - Encryption: No encryption or weak, outdated encryption methods.
 - Access Controls: No or very weak authentication mechanisms, no access controls.
 - Compliance: Non-compliance with major privacy regulations (e.g., GDPR).
 - Architecture: No zero-trust architecture, lack of security frameworks.
 - Monitoring & Response: No monitoring, logging, or incident response plans.
- **High Risk**
 - Encryption: Inadequate encryption that is not aligned with current standards.
 - Access Controls: Basic authentication, weak access control mechanisms.
 - Compliance: Partial compliance with some privacy regulations.
 - Architecture: No zero-trust architecture; some basic security frameworks might exist but are insufficient.
 - Monitoring & Response: Minimal monitoring and logging; no dedicated incident response plan.
- **Moderate Risk**
 - Encryption: Basic encryption methods are in place but may not be end-to-end.
 - Access Controls: Standard authentication with some access control mechanisms.
 - Compliance: Compliance with most relevant regulations but not comprehensive.
 - Architecture: No zero-trust architecture; security frameworks are applied inconsistently.
 - Monitoring & Response: Basic monitoring and logging; some incident response procedures are in place but not robust.

- Low Risk
 - Encryption: Strong encryption methods, but may not be applied end-to-end.
 - Access Controls: Multi-factor authentication and strong access control policies.
 - Compliance: Full compliance with major privacy regulations (e.g., GDPR).
 - Architecture: Some elements of zero-trust architecture are in place, but not fully implemented.
 - Monitoring & Response: Regular monitoring and logging; incident response plans are well-defined.
- Minimal Risk
 - Encryption: End-to-end encryption using the latest standards.
 - Access Controls: Multi-factor authentication with strict access control policies.
 - Compliance: Comprehensive compliance with all relevant regulations and industry standards.
 - Architecture: Fully implemented zero-trust architecture.
 - Monitoring & Response: Continuous monitoring, comprehensive logging, and a proactive incident response plan.

When assessing **accessibility**, we examined the tool's ease of use, especially for individuals with limited technical skills; the user experience and interface design; and the customization and integration options. To assess cost, we focused on cost-effectiveness and suitability for small businesses—including the types of packages available for purchase (e.g., yearly billing). Finally, to understand **language** capacity, we looked at the level of support a tool had for Arabic and/or Turkish language and the availability of an Arabic and/or Turkish interface.

During the evaluation process, we documented the features offered by each tool, with particular attention to those most beneficial for the target small businesses. Key details were recorded and categorized according to the outlined criteria. We further categorized tools based on their suitability for different scales of operation:

- Enterprise Grade: Software designed for large organizations, featuring robust security, extensive features, seamless integration, and external support.
- Lower Enterprise Grade: Software not specifically designed for large organizations but still suitable, offering security, features, integration, and support, though less comprehensively.
- Lower Grade: Software designed for personal or small business use, with limited security, fewer features, minimal integration, and little external support.

After providing an overview of each tool, we conducted evaluations of each tool based on their performance in key tasks: translation, bid writing, and business email writing. These evaluations involved using a consistent input, with minor adjustments to account for any limitations or variations in input requirements. Tools were assessed based on their effectiveness in performing the tasks and their suitability for use by small businesses, then ranked by which would be most suitable for each task. Our evaluations were further supported by additional assessments found in academic literature (Çetin & Duran, 2024; Almahasees, 2023).

All of this data can be found in the spreadsheet titled: “**Spreadsheet 2 - Tools Assessment.**”

Findings

In total, we evaluated **40 tools** and among them discovered **18 writing tools** with one of these tools specifically built for bid writing, one dedicated solely to editing, and one focused on general marketing content. We also uncovered **ten translation tools**. Of these translation tools nine were text translation tools, eight were document translation tools, five were image translation tools, one was a web translation tool, and one could be used for both document and website translations. We found **four multilingual search tools** and **eight customer relations management tools**.

Among the 40 tools we evaluated, 26 were classified at the enterprise level, four at the lower enterprise level, and ten at the lower level. Regarding data security risk, 18 tools were categorized as having minimal risk, four as low risk, five as moderate risk, four as high risk, and nine as critical risk.

A general trend observed across the majority of tools was that personal data collected was frequently shared with third-party vendors, business affiliates, and law enforcement. However, some tools, such as Google Translate, explicitly stated that they do not share user data with third-party providers. Additionally, there was notable overlap in the capabilities of the selected tools; for instance, nine of the writing tools also provided machine translation through templates or LLM-based chat features. Particularly, Google Gemini, Text.Cortex and OpenAI's ChatGPT stood out for their ability to perform translation, bid writing, and search tasks.

Nearly all the tools met our threshold for effective performance, showing the ability to handle user tasks and produce good outputs with minimal user intervention. While only some tools excelled in every required task, their performance in specific areas was considered viable.

Large enterprise-grade tools generally performed better in tests and offered advanced features, including support for Arabic and/or Turkish languages, robust data protection measures, and enhanced capabilities. They were typically classified as having low or minimal data security risks. However, these tools often came with a higher cost and, despite their broader language options, still needed more support for Arabic and/or Turkish. The majority of the enterprise-grade tools have clear security compliances and certifications, such as adherence to the General Data Protection Regulation (GDPR) and International Organization for Standardization (ISO), and employ multiple security measures, including single sign-on and encryption for both data at rest and data in transit.

In contrast, lower-grade tools generally offered fewer features, lacked comprehensive language support for Arabic and/or Turkish, and had limited data protection measures. These tools were typically classified as having high or critical data security risks. These tools generally required more user effort and were less capable than their enterprise-grade counterparts. Nevertheless, they presented a more cost-effective alternative.

Specifically for bid writing, most dedicated tools were designed for large enterprises with established teams experienced in bid responses, with costs often starting at \$10,000 and above. These tools were deemed unsuitable for Building Market's target demographic. As such, for more general writing tasks moving forward, we explored tools that offered customizable input and output options, which could also be adapted for bid writing.

Most tools we evaluated operate as Software as a Service (SaaS) models, often using a Large Language Model (LLM) such as GPT and Claude, and are generally closed-source. However, tools, including Weglot, Microsoft Translation, and DeepL, either use an open-source model or incorporate open-source components.

Regarding risks for SMEs, in addition to those outlined in the previous section, Microsoft and Yandex had issues related to data privacy breaches, while Google Cloud faced problems with data sharing and improper wording.

Tool Recommendations

Amongst the tools we evaluated, we identified the following tools as good prospects for the SMEs Building Markets supports: JasperAI for writing, Google Translate for translation, ChatGPT for search, and HubSpot for Customer Relationship Management. In addition, WhatsApp Business, Zoho, Wix, and Microsoft Translator are also worth considering.

Writing Tool Recommendation: JasperAI

For Building Market's target population of Syrian refugee-run SMEs, bid writing and other business or marketing-related writing tasks may be challenging and unfamiliar. For the few small businesses interested in pursuing procurement opportunities or expanding their client base, initiating these tasks can be difficult, often leading to results that are not viable (Ucak et al., 2017). The introduction of AI-powered writing tools can significantly streamline the process of creating bid responses and marketing materials, including emails. After evaluating 19 potential AI writing tools, we recommend JasperAI, a Large Language Model-based tool, as the most effective option for this purpose.

Approach

When investigating AI-powered writing tools, our primary focus was identifying software that could generate content for business needs, specifically professional bid responses and general marketing efforts. We began by focusing on AI tools with features specifically designed for bid writing. Once we identified software capable of handling bid response tasks, we evaluated its effectiveness in general marketing applications, highlighting notable features and functions. We also emphasized ease of use, particularly for users who may not be highly experienced with technology. As outlined above, in addition to evaluating core functions, we applied broader criteria to assess each tool for security, accessibility, cost, and language capacity.

To test and evaluate the selected writing tools for bid writing and business email creation (our general marketing efforts test), we generated a small business background and, for bid responses specifically, a sample Tender using ChatGPT. We used consistent input with minor adjustments to account for variations or limitations in input requirements. Tools were assessed, graded, and ranked based on their performance in bid writing and business email writing.

In the case of bid writing, we evaluated whether the output was formatted like a bid response or could serve as a template, the extent to which it could be adjusted and customized, and how effectively it addressed the requirements outlined by the bid. We also considered whether any shortcomings in the output might have resulted from user input rather than the AI's capabilities.

In the case of business email writing, we assessed whether the output was formatted like a cold email and if it provided options for customization. We also evaluated the email's professionalism, formality, personalization, engagement, clarity, and conciseness. Additionally, we checked for key elements of a cold marketing email, including the value proposition, social proof, contact information, and a call to action. Any deficiencies in the output were noted regarding whether they were due to user input or the AI's performance.

Recommendation

After evaluation, we found that JasperAI was the clear frontrunner out of the 19 tools. We outline both JasperAI's benefits and risks here. Despite its limitations and potential risks, JasperAI stands out as a robust and user-friendly AI writing tool that is well-suited for Building Market's target demographics. Its comprehensive features provide valuable support for SMEs seeking to establish themselves in the Turkish business landscape. JasperAI's versatility as a SaaS platform allows it to function effectively both as a standalone solution and as part of a broader AI technology ecosystem. Its tools can significantly enhance the efficiency and quality of business communications, contributing to a smoother market entry for SMEs. Given its strengths and potential benefits, we recommend JasperAI as a valuable resource for small businesses aiming to leverage AI for growth and integration into new markets.

In terms of security, as an enterprise-grade software with minimal data security risks, JasperAI adheres to multiple data protection and privacy regulations. It is supported by a robust security architecture designed to ensure the highest levels of data integrity and protection. For instance, JasperAI employs a comprehensive suite of data security measures, including, notably, Single Sign-On (SSO), data encryption, Intrusion Detection Systems (IDS), Intrusion Prevention Systems (IPS), access monitoring, and regular data backups (Jasper, 2023). JasperAI's data security measures protect sensitive information and prevent cyberthreats, which is crucial for Building Market's primary target of Syrian refugee-run businesses in Türkiye. These measures also ensure business continuity and build trust, allowing these businesses to operate securely and focus on growth.

While JasperAI does not have specific security risks directly associated with its platform, there are general security considerations to be mindful of. Although JasperAI implements a broad array of security measures, some, such as Single Sign-On (SSO), are available only with the enterprise package. Additionally, as JasperAI is based on a LLM, there are inherent risks of generating hallucinations, false information, and biases due to the diverse training data used for LLMs (McCoy, 2021). This can be particularly concerning for businesses run by Syrian refugees or other vulnerable groups, as the inclusion of harmful or inaccurate information could potentially harm their reputation and operations in the long run.

JasperAI complies with major regulatory standards, including the General Data Protection Regulation (GDPR), the California Consumer Privacy Act (CCPA), and the Payment Card Industry Data Security Standard (PCI DSS). Additionally, JasperAI has earned System and Organization Controls (SOC) two certification, which aligns with the cybersecurity framework established by the American Institute of Certified Public Accountants (AICPA) (Jasper, 2023). This compliance assures that small businesses can trust their data is handled securely and in accordance with international standards. The SOC 2 certification further reinforces JasperAI's commitment to robust cybersecurity practices, providing additional confidence in data protection and privacy.

JasperAI maintains data transparency in its collection of personal user data, which includes information such as email addresses, names, phone numbers, addresses, and usage data. Their privacy policy clearly details how this data is used and shared, noting that it may be shared with service providers, business partners, and in compliance with legal obligations (Jasper, 2024). Importantly, JasperAI does not use user data to train its AI models, a practice particularly relevant for AI tools based on Large Language Models. This level of data transparency and clear communication about data practices helps build trust with small businesses by ensuring they are fully informed about how their data is handled. Additionally, the assurance that user data is not used to train AI models addresses privacy concerns, providing these businesses with greater confidence in the security of their information.

JasperAI is a highly user-friendly and versatile tool, offering various capabilities including business writing, bid writing, and text-only translation. JasperAI is accessible, featuring an intuitive interface that enhances the user experience. It also offers a comprehensive help center and support page, along with a demo and tutorials available through the Jasper Learn Academy, providing valuable resources for users seeking additional assistance in mastering the platform (Jasper, n.d.h). JasperAI's user-friendly interface and comprehensive learning resources make it accessible for small businesses, even those unfamiliar with AI.

This ease of use allows them to quickly adopt and effectively utilize the platform, enhancing their productivity and chances of success.

JasperAI has solutions specifically marketed towards various industries and offers an extensive library of over 50 templates and 500 prompts for diverse tasks, including proposal writing, marketing content, and small business functions (Jasper, n.d.a; Jasper, n.d.b). The platform also provides customization options through a brand voice and company knowledge style guide, allowing for tailored outputs (Jasper, n.d.c). Additionally, it includes a general chat function to further enhance usability and support.

As a software-as-a-service (SaaS) platform, JasperAI is accessible through its web interface and dedicated mobile applications for both iOS and Android. While the platform also supports a desktop application, this is not provided directly by the company. Additionally, JasperAI offers a browser extension and integrates with various tools such as Microsoft Word, Google Suite, Zapier, and Surfer SEO, among others (Jasper, n.d.e). JasperAI's multi-platform accessibility and broad range of integrations enable small businesses to seamlessly access marketing content tools and incorporate them into their existing technological systems, streamlining operations and enhancing efficiency.

However, although JasperAI offers features and tools relevant to small business operations, their accuracy and effectiveness can vary, sometimes resulting in mediocre responses. Many tools and templates require user input and prompting, particularly when using the general chat feature. This can be problematic, as effective prompting is not always intuitive and may require a learning curve, especially for first-time users or those with limited AI experience (Kendall, 2023). Improper use or inadequate prompting may lead to outputs that do not meet expectations, potentially placing small businesses in a worse position than before, with the downsides outweighing the benefits of the AI. Regarding customization, features such as the company knowledge hub and style guide are available only with the more expensive Pro and Enterprise packages, aligning with the tiered approach seen in their security measures.

JasperAI offers a mid-range pricing structure, with intermediate and advanced packages available at \$49 to \$69 per month (Jasper, n.d.g). Custom pricing is provided for their enterprise package to accommodate larger or specialized needs. This package is accessed by contacting the provider directly. Although JasperAI is not as expensive as some tools we reviewed, it is still considered mid-range in price and slightly more costly than other options. This could pose a risk for small businesses that may struggle to afford the higher-priced packages or face the possibility of investing in an AI tool that may not deliver sufficient benefits and could end up being a financial burden (Aarstad and Saidl, 2019). This concern is particularly relevant for JasperAI, as some assurances regarding high levels of security and advanced features are limited to the more expensive plans.

JasperAI supports over 30 languages for both input and output, as well as across its interface (Jasper, n.d.f), but it does not offer Arabic support for input, output, or the interface. Its support for Turkish is somewhat better, with Turkish output available, but the platform remains limited to a select few languages, with English being the primary one. This limitation is particularly significant for Syrian refugee SME owners, who often speak both English and Arabic, and occasionally Turkish (Ucak et al., 2017). Language remains a major barrier to integrating these SMEs into the Turkish market, and the absence of Arabic support and the limited Turkish capacity could hinder their ability to effectively utilize JasperAI.

Translation Tool Recommendation: Google Translate

For the Building Market's target population of Syrian refugee-run SMEs, language is often cited as the biggest obstacle to entering the Turkish business market. While a decent percentage of small business owners have some conversational ability in Turkish, they are typically not fluent or proficient enough to effectively support their business operations (Ucak et al., 2017). Since language is the first barrier that SMEs must overcome to achieve greater success, it is crucial for them to have a tool that can help break down this barrier without requiring them to master the language fully. With the advent of AI, small businesses can now instantly translate documents, text, and images at little to no cost — a significant advantage compared to hiring a human translator. After evaluating ten AI-powered translation tools, we recommend Google Translate, a natural machine translation based, as the most effective option for this purpose.

Approach

When investigating AI-powered translation tools, our primary focus was on identifying software capable of handling a variety of formats commonly used by SMEs. This includes text-based, document-based like .PDF and .DOCX, and image-based formats such as .JPG and .PNG. We were also interested in additional capabilities, such as batch document translation—the ability to translate a large number of documents in one action—as well as website translation. While these features were considered, they were not prioritized in our evaluation. As a result, software lacking these advanced capabilities were not excluded from our overall findings.

We began by doing a general search for AI tools which were specifically designed for translation. We noted the formats that each tool was able to support, as well as any notable features and functions. In addition, we also emphasized ease of use, particularly for users who may not be highly experienced with technology. Once we identified tools specific to translation, we moved on to identifying AI software which, although not geared specifically towards translation, was capable of translating on either one or multiple of our desired formats. Notably, these more general tools, such as ChatGPT or Google Gemini, were those that included a general Large Language Model based chat feature.

In addition to the criteria laid out above, to test and evaluate the selected translation tools, we used a section of a simple children's book story available in both Turkish and English. The text was provided in three formats: text-based, document-based (.PDF), and image-based (.PNG) for both languages. For each test, we opted for a Turkish-to-English translation. We input the Turkish version for each format—or the available formats if not all were supported—and compared the translated results to the original English version. Tools were assessed, graded, and ranked based on the following criteria:

- Grammar: The accuracy and consistency of grammar, including the presence of any errors.
- Spelling/Terminology: The accuracy of spelling and the preservation of correct terminology.
- Style: The extent to which consistency in tone, formality, and overall voice was maintained.
- Formatting: The degree to which the original formatting was preserved.

Recommendation

After our evaluation of translation tools, we found that Google Translate was among the best tools out of the ten we tested. Despite some limitations, Google Translate is a valuable tool for Building Market's target demographic due to its cost-effectiveness and user-friendly design. It offers robust data security, including encryption and adherence to major data protection regulations. The tool supports translations across text, documents, images, and websites, and is affordable with a free standard service and a reasonably priced API option. Google Translate's ability to handle 243 languages, including Arabic, Turkish, and English, meets the needs of businesses targeting diverse markets. It performs well with general translations but can struggle with complex or nuanced texts. Overall, due to its accessibility, security, and affordability, we recommend Google Translate as a valuable tool for small businesses looking to leverage AI to break into new foreign markets and overcome language barriers.

As a lower enterprise-grade tool with minimal data security risks, Google Translate adheres to multiple data protection and privacy regulations. It is supported by a robust security architecture integrated within the larger Google Cloud system, designed to ensure high levels of data integrity and protection. Google Translate uses encryption for data at rest and in transit, two-factor authentication, regular security audits, data loss prevention, and 24/7 security monitoring, among other practices (Google, n.d.j; Google, 2022; Google, n.d.h; Google, n.d.o; Google, n.d.a). Furthermore, Google Translate utilizes Neural Machine Translation (NMT), which employs an artificial neural network trained on examples of translations to predict the most likely sequence of words. This approach generally makes NMT systems, such as Google's, safer and less prone to biases or exposure of sensitive information. This is beneficial for SMEs as it reduces the risk of privacy issues and minimizes the inclusion of biased language or inaccuracies within the translated text (Mirela, 2024). By mitigating these risks, it helps prevent the potential for producing harmful translated material that could damage the business's reputation.

Google Translate and Google Cloud adhere to key regulatory standards, including the General Data Protection Regulation (GDPR), the California Consumer Privacy Act (CCPA), the Federal Risk and Authorization Management Program (FedRAMP), and the Payment Card Industry Data Security Standard (PCI DSS) (Google, n.d.d; Google, n.d.e). Google Cloud also holds multiple International Organization for Standardization (ISO) certifications—ISO 9001:2015 for quality management, ISO 27001 for information security, and ISO 27017 and 27018 for cloud security and privacy (ISO, 2015; ISO, 2022; ISO, 2019). Additionally, Google has achieved System and Organization Controls (SOC) 1, 2, and 3 certifications, reflecting compliance with cybersecurity standards established by the American Institute of Certified Public Accountants (AICPA). These certifications and regulatory adherences ensure robust data protection and compliance, which is particularly important for SMEs that manage sensitive information. The high standards of data management and security provided by Google Translate and Google Cloud foster trust and reliability in their technological solutions.

Google Translate does not collect user data during its use. However, the broader Google Cloud platform does collect personal information, such as account details—names, email addresses, phone numbers, and billing information—provided by users when managing their Google Cloud accounts, as well as service usage data including logs, metadata, and usage statistics (Google, n.d.b; Google, n.d.l). Google is highly transparent about its data collection practices and specifies that it does not share or sell customer data to third parties, nor does it use personal data for advertising purposes or to train its AI models (Google, n.d.n). This transparency regarding data collection and usage provides assurance to small businesses, ensuring that their data is managed with high standards of privacy and security. Google's commitment to not selling data or using it for advertising further enhances trust and confidence in using their platform.

Although Google Translate employs a range of data security measures to protect user data, there have been instances of accidental sharing of information due to certain terms of use. For instance, phrases such as “you give Google a worldwide license to use, host, store, reproduce—such content” have raised issues regarding data privacy (Rodriquez, 2024). These terms can pose risks, especially for vulnerable populations like Building Market's target audience, potentially exposing them to identity theft and fraud. Such risks could further exacerbate their already precarious situations, where obtaining assistance may be challenging.

Google Translate is highly user-friendly and accessible, offering translation capabilities across text, document, image, and website-based formats. It also features a simple and intuitive interface that enhances the user experience. It also offers a comprehensive help center and community page to assist with those who may at first struggle with using the software (Google, n.d.k). For businesses and users who would like to use Google Translate Application Programming Interface (API) option but find it challenging to do so, there are tutorials available to assist with implementation (Google, n.d.i).

Although Google Translate is accessible across various platforms and browsers, it lacks integration capabilities with other tools. This may be a limitation for businesses seeking to incorporate translation services into their broader AI and service tool ecosystems. Notably, Google Translate does not support batch translation, which can be cumbersome for businesses needing to translate large volumes of documents simultaneously. Additionally, while it offers website translation, this feature is restricted to translating current webpages in a browser (Google, n.d.m). It does not support translating an entire website or domain via an HTML file, which would be beneficial for SMEs aiming to expand into international markets.

Google Translate isn't specifically targeted at SMEs, but it has the capability to translate a wide range of formats—including text, documents, images, websites, and real-time conversations—makes it an invaluable tool for small businesses seeking a quick and efficient alternative to human translation. The tool's respectable translation quality and effective retention of formatting, particularly for documents and images, significantly enhance its utility for translating SME-related content, including marketing materials, bid responses, news articles, and financial and legal documentation. Furthermore, the Google Translate API allows for personalized customization of translation through custom use cases and domains, adding the opportunity for localization of any translation (Google, n.d.f).

Google Translate is a primarily web-based service, but it is accessible through a number of platforms, including its web interface as well as mobile applications for both iOS and Android. While the platform also supports a desktop application, this is not provided directly by the company. Additionally, Google Translate offers a browser extension. Google Translate's multi-platform accessibility allows small businesses to easily access translation services, including real-time translation, which streamlines operations and improves efficiency.

The standard Google Translate service, with all its features, is available for free. However, the API option incurs additional costs, which are structured based on a character-based package with monthly billing. Overall, this service is quite inexpensive compared to the other tools we assessed (Google, n.d.c). This is particularly beneficial for SMEs that either cannot afford or prefer to avoid the high costs of human translators or more expensive services. Google Translate provides a cost-effective alternative with quality outputs, making it an attractive option for businesses seeking economical translation solutions.

Currently, Google Translate supports 243 languages at various levels (Turovsky, 2015). For Building Market's target population, the tool offers interfaces in Arabic, Turkish, and English and provides translation capabilities in these languages for text, documents, and images, as well as website translation. While Google Translate excels compared to other low-cost NMT-based translation services, it does have limitations in capturing nuances that human translators or more specialized services can provide. A 2024 study by Öğr Cetin and Öğr Duran evaluated several translation services, including Google Translate, Bing Microsoft Translator, DeepL, and ChatGPT, for Turkish-to-English translations across various document types such as legal, medical, and educational texts (Cetin & Duran, 2024). The study found that while Google Translate generally performs well with straightforward text, it struggles with style and cultural nuances in more complex texts. It often misses context, specialized terminology, and subtleties within these documents, leading to recommendations for its use in simpler, more direct translations. This finding is supported by other research, which highlights that Google Translate's output, although generally reliable, falls short with complex and highly specialized texts (Aguilar, 2024). Additionally, it tends to perform less effectively when translating English into languages that are more dissimilar to English (Zhu et al., 2024; Aguilar, 2024). For SMEs, particularly those in Building Market's target demographic, these limitations mean that the translation quality of their documents may not always meet the required standards for accuracy and appropriateness, which is a crucial downside needing to be considered. In our evaluation, Google Translate performed exceptionally well, effectively maintaining grammar, accurate spelling (with only a minor error), style—specifically tone, formality, and overall voice—and formatting with minimal, if any, error. Ultimately, the service ranked first out of the 18 tools tested, including those with translation capabilities among our selected writing tools. In tests documented in other academic literature, Google Translate continues to perform well.

A 2023 study by Zakaryia Almahasees, which evaluated Arabic translation across various media types including UN documentation, Arab League documentation, and news articles, found that Google Translate outperformed other services. It excelled in producing fluent outputs and maintaining minor fidelity compared to its competitors (Almahassas, 2023).

Search Tool Recommendation: ChatGPT

For Building Market's target population of Syrian refugee-run SMEs, searching for information can be time-consuming. AI search tools help expedite this process by quickly collecting data from across the web to produce simplified extractions of information. Furthermore, AI search engines are increasingly personalized, with search results being tailored through user preferences and behaviors. These tools provide SMEs a large competitive advantage by increasing their business's data analytics without a proportionate increase spent in acquiring human capital and infrastructure. After evaluating four multilingual search tools, we recommend ChatGPT.

Approach

When investigating AI-powered search tools, our primary focus was identifying software that could collect information and data for business needs. We began by focusing on AI tools with features specifically designed for searching. Once we identified this software, we evaluated its effectiveness in general search queries, highlighting notable features and functions. We also emphasized ease of use, particularly for users who may not be highly experienced with technology as well as our general criteria such as security standards. Tools were graded based on their accuracy, or how accurate/relevant search results were, the user interface and ease of use, and customizability, specifically, whether there were options for users to make changes to the search engine.

Recommendation

After our evaluation, we found that OpenAI's ChatGPT was among the best tools we tested, making it our recommended choice for small businesses. In evaluating AI search tools for Syrian refugee-run SMEs, ChatGPT emerged as the top recommendation due to its high accessibility and strong security measures, such as its user-friendly UI and UX and adherence to various security certificate standards. However, concerns include data ownership, limitations in accessibility due to country bans, and the need for precise prompts to ensure quality results. Despite these downsides, ChatGPT provides significant benefits for SMEs, enabling efficient data analytics without substantial investment in human capital or infrastructure at a relatively affordable cost for an SME.

OpenAI implements robust security measures, including data encryption both at rest using AES-256 and during transit with TLS 1.2+ (OpenAI Security Portal, n.d.). To further safeguard accounts, users have access to Single Sign-On (SSO) and Multi-Factor Authentication (MFA). For organizational accounts with multiple users, access controls and service restrictions can be tailored to specific user roles. OpenAI also employs a top-tier Web Application Firewall (WAF) to monitor and secure web traffic, detect irregularities, and enforce rules that support our reliability standards. Email security is reinforced through Domain-based Message Authentication, Reporting, and Conformance (DMARC), which prevents unauthorized parties from impersonating OpenAI's domain. Additionally, OpenAI's infrastructure is protected by a combination of traditional firewalls and Cilium Network Policies, ensuring a high level of security for both employees and offices. ChatGPT adheres to key regulatory standards, including SOC 2, SOC 3, GDPR, CCPA, and CSA Star. ChatGPT is highly transparent about its data collection practices and specifies that it does not share or sell customer data to third parties for marketing or advertising purposes. Data from users may be used to train its AI models. However, users can opt out of AI training through the privacy portal (OpenAI Security Portal, n.d.). This transparency regarding data collection and usage assures small businesses, ensuring that their data is managed with high privacy and security standards.

Google's commitment to not selling data or using it for advertising further enhances trust and confidence in using their platform.

The trade-off is that ChatGPT holds the rights to all information provided in the inputs—such as personal information, file uploads, contact information—and collects both the user's account-level information as well as conversation history (OpenAI Security Portal, n.d.). This includes records such as email address, device, IP address, and location, as well as any public or private information users use in their ChatGPT prompts. Additionally, although OpenAI does not share user data with third parties for marketing or advertising, it does share data with vendors and service providers for site maintenance and operation.

The user-friendly interface and intuitive design of ChatGPT make it especially accessible for individuals with limited experience in AI technology. Its straightforward layout and integrated chat feature enable users to complete tasks efficiently without requiring advanced knowledge or extensive prompt engineering. The platform delivers quality output for basic tasks and is easily accessible via web browsers or mobile devices on iOS and Android, making it ideal for small businesses seeking to integrate AI into their operations without significant technical expertise or reliance on desktop computers.

However, there are some accessibility drawbacks. ChatGPT requires the user to give careful and specific prompts to provide optimal results, which may be difficult for less experienced users. In addition, it is limited in producing industry-specific content without precise human input, which, depending on the type of business, may lower effectiveness. Output quality depends on user input, requiring careful and specific prompts for optimal results, and the word count feature is often inaccurate. Also, ChatGPT produces new answers for all questions, meaning that no one response is provided again for an identical inquiry. This could produce inconsistencies in its service to businesses, particularly for SMEs with lower technological expertise or for whom language may mean consistency in output would be more helpful.

ChatGPT does a good job answering general questions and developing ideas such as marketing or branding strategies. It is great at simplifying or expanding on information and data provided to it. It helps users solve basic problems, from coding to using other applications.

ChatGPT offers several pricing tiers: the Free plan at \$0, the Plus plan at \$20 per month, the Team plan at \$30 per month (or \$25 per month when billed annually), and the Enterprise plan with custom pricing (Pricing, n.d.).

ChatGPT supports 84 languages as of 2023, including Arabic and Turkish (ChatGPT Language Capabilities, 2024). However, it is worth noting that ChatGPT is banned in some countries, including Italy, and is not in use by some organizations including major businesses and some US federal agencies (15 Countries That Banned ChatGPT, 2023). Along these lines, like all LLMs, ChatGPT's training data means that answers could have bias that is harmful to minority run SMEs.

Customer Relationship Management Tool Recommendation: HubSpot

AI-powered Customer Relationship Management (CRMS) tools help to enhance the customer experience for businesses while providing critical data analysis regarding customer behavior. For instance, CRMs automate certain tasks, such as sending out follow-up emails to customers and collecting data. Its data analysis functions help businesses find market trends and predict customer behavior to help improve the personalization and targeting of their services.

After analyzing eight customer relations management tools, we recommend HubSpot. AI-powered CRM tools like HubSpot enhance customer experience and optimize operations through automation and data analysis for businesses. HubSpot stands out as a top choice, particularly its free plan, which provides a variety of services for small businesses seeking to streamline their processes and improve customer engagement at no cost. That said, if businesses seek greater functionality and services through professional or enterprise plans, they should consider the complexity of HubSpot pricing arrangements for these plans and the high starter charge. Overall, HubSpot's data transparency, variety of services, and Turkish and Arabic capacities make it a compelling option for businesses aiming to leverage AI to drive growth and efficiency.

Approach

When investigating AI-powered CRM tools, our primary focus was identifying software that could automate customer services for businesses. Once we identified this software, we evaluated its effectiveness in assisting businesses in customer relations, highlighting notable features and functions. We also emphasized ease of use, particularly for users who may not be highly experienced with technology. We evaluated CRM tools based on the customization ability, the ability to integrate the tool with other software and applications, and the level of automation.

Recommendation

We found that HubSpot was among the best tools out of the tools we tested, making it our recommended choice for use by small businesses. HubSpot follows industry best practices like the OWASP Top 10 and the CIS Critical Security Controls and Threat Intelligence (Inc, H, n.d.). Content and lead data are secured with standard Secure Sockets Layer systems on all HubSpot-hosted content. Let users sign in to HubSpot using single sign-on credentials. Users may use two-factor authentication (2FA) when logging in, which requires verification using a second device to access the account. There are password-protected website pages and landing pages, giving users the ability to control who can see the content on a specific page. Restricts access to specific HubSpot-hosted web pages, landing pages, and blog content by requiring visitors to log in with a username and password.

HubSpot adheres to key regulatory standards, including the SOC 2 Type II, SOC 3, GDPR, CCPA, and TRUSTe (Inc, H, n.d.). HubSpot is highly transparent about its data collection practices and specifies that it does not share or sell customer data to third parties for marketing or advertising purposes (Inc, H, n.d.). Data about how products and services are being used across the customer base may be published. When they share statistical information externally in this way, the data will be aggregated, and we will not identify individual users or customers.

However, HubSpot uses customer data for machine learning that supports certain products and development of features and functionality with the Subscription Service and similar products and services. It also collects personal information (names, positions, etc.), as well as automated information (IP address, browser type, click rates, etc.). HubSpot shares data with third-party vendors and partners to improve the functionality and efficiency of its services.

HubSpot offers resources and support for users who need assistance with accessibility. This includes documentation on how to use accessibility features and customer support options to help users with specific accessibility needs. HubSpot strives to comply with the Web Content Accessibility Guidelines (WCAG) 2.1, the globally recognized standard for web accessibility. Its free plan offers customer contact management, meeting scheduling, and email scheduling, which are considerable services at no charge. It can integrate with a large number of other applications and websites, including Zoom, Gmail, Slack, and Facebook Ads (HubSpot CRM Review 2024: Features, Pricing, Pros & Cons, 2024).

Although there is a free option that includes many functions, the professional and enterprise subscription may be too expensive for smaller SMEs. Additionally, the pricing plan is complicated as there is no set price for professional and enterprise accounts, only a starter price. Further, HubSpot lacks templates and pre-built examples for users to navigate through their services and functions (HubSpot CRM Review 2024: Features, Pricing, Pros & Cons, 2024).

HubSpot's live chat automatically connects customers to the right people on your team, routes customer inquiries to your services team, and passes leads to the sales team (Streamline Your Entire Business with a Free CRM, n.d.). It helps businesses streamline email sending by creating AI-generated templates. It has an automated scheduling function that streamlines setting up meetings between customers and staff. The platform also includes automated marketing features, allowing businesses to save time creating and publishing marketing materials, including emails.

HubSpot offers a free plan that includes customer contact management, meeting scheduling, and email scheduling, with a limit of 5 users (HubSpot, & Inc, H, n.d.). The Starter plan is available for \$20 per user per month, while the Professional plan starts at \$800 per month, and the Enterprise plan begins at \$3,600 per month. The free plan offers a great deal of functions that other complimentary services don't provide. That said, the professional and enterprise plans may not be worth the high cost, especially for smaller-sized SMEs who do not require the scalability that these plans offer.

HubSpot supports Turkish and Arabic (HubSpot language offerings, n.d.).

Additional Tools

A few other tools also stood out and are worthy of consideration for reasons outside our standard criteria. We found the most practical application with the best user interface for Türkiye-based businesses to be WhatsApp Business. WhatsApp Business is easily accessible by Middle Eastern consumers as WhatsApp functions as a primary platform of communication in Türkiye. Although it uses contact-based pricing which can hinder its accessibility to small businesses, it is the most universally accepted and practically implemented tool for SMEs in Türkiye, especially for tourism because of its widespread use.

Zoho, a marketing and management-based AI system, also may be a tool worth considering as it functions in Turkish, Arabic, and English. The interface also encrypts inputs and outputs, meaning data remains safe and cannot be leaked to external parties. Zoho provides all the tools necessary to automate and functionalize a starting SME.

Wix is a prompt-engineered website builder that has language capabilities in Arabic and English. This AI system is mostly affordable and abides by numerous compliance certifications. It achieves many of the desired standards while also providing a useful service.

Finally, while we recommend Google Translate, Microsoft Translator offers the unique feature that a user can talk and translate in real time. The best use of this AI system is accessible via mobile app, and it accurately translates spoken conversations with a split screen facing both speakers for real time conversational ease.

Use Cases

Our aim was to identify tools in use by organizations sharing similar characteristics to Building Markets' targets. We identified small businesses, both globally and with a particular focus on small businesses in Türkiye, that are currently using generative or other AI-based tools.

A complete list of all use cases and associated data can be found in the Excel file: "Spreadsheet 3 - Use Cases."

Approach

Using Building Market's definition of SMEs (less than 250 employees) and estimating company size via LinkedIn, we identified 25 use cases using the following methods. First, we examined the websites of the organizations AI for Good, Partnership of AI, NetHope, and USAID looking for examples of SMEs using AI. This method yielded no use cases.

Second, we reviewed the list of AI businesses that have either partnered with the Turkish Artificial Intelligence Initiative (TRAI) or have been listed in articles discussing AI providers based in Türkiye and explored testimonials and customer success stories from the websites of these AI businesses to find examples. This method was particularly fruitful and yielded 11 use cases.

Third, we utilized the Google search engine to search the terms "small business" "AI" "Türkiye" "SME" and "use cases," and searched the same terms in Google News to find various online materials. This method was successful and yielded seven use cases.

Finally, we searched major news sources for examples using similar search terms, including: New York Times, The Wall Street Journal, The Economist, The Washington Post, Forbes, and Wired as well as Turkish publications (via translation) including Hürriyet and Habertürk. This method was successful and yielded seven use cases.

Findings

We identified 25 examples of SMEs using generative or other forms of AI. We found that identified SMEs are using AI for gains in operational efficiency and market expansion—improvements applicable to a wide variety of industries. Identified industries included food products, education, marketing, and even window cleaning. Common AI applications by these businesses include AI-created or aided marketing and advertising, automated data analysis, customer service chatbots and AI-powered responses, as well as generative AI for daily operational tasks such as email writing. AI applications were found in both online and in-person storefronts of small businesses, although online storefronts were more common, with 22 out of 25 businesses identified having an online storefront. SME use of AI was also present in many locations worldwide. We identified SMEs based in countries such as Brazil, Japan, and New Zealand, with 12 located in the United States. Two of these SMEs were or are currently based in Türkiye. However, we were unable to identify whether these two businesses were Syrian refugee owned or run.

One use case that demonstrates a common application of AI in SMEs is Henry's House of Coffee, a small family-owned coffee roaster located in San Francisco, California. This SME used AI within the area of marketing and advertising to increase sales and improve operational efficiency. AI-powered search engine optimization tools wrote product descriptions that performed well in internet searches (Crenshaw, 2024). AI tools then analyzed this performance to guide more effective marketing and customer service strategies. This allowed the business to operate faster and gain additional data-backed insights into customer value (Crenshaw, 2024). Like most of the use cases we identified, Henry's House of Coffee uses an online storefront to reach customers. This digitized business model allows for the use of AI to analyze data relating to sales and website visits. This case represents a common AI implementation strategy in our research findings of SMEs incorporating AI into existing online business interfaces, and may be especially helpful for Building Market's programming supporting marginalized businesses trying to reach customers through e-commerce and digital marketing.

Another interesting use case we found was the use of AI by Bilkom, a computer and electronics manufacturer in Istanbul. Bilkom used Vispera Storesense, an image recognition software, for boosting operational efficiency. Vispera Storesense notified salespeople at Bilkom of in-store execution challenges through mobile notifications so that they could find solutions and fix these problems easily. Vispera Storesense also monitored the on-shelf availability of products and notified the sales team when products were sold out. Additionally, Vispera Storesense helped boost Bilkom's planogram (a visual representation of how products or services are displayed in a store) compliance by ensuring that their retail shelves aligned with their planograms. Overall, the use of AI helped boost productivity by 80%, increased on-shelf availability by 14%, and increased planogram compliance by 23% at Bilkom's in-person storefront (Vispera, n.d.a). Bilkom is a useful case for consideration for two reasons. First, Bilkom is located in Istanbul and was one of two businesses we found in our research that was based in Türkiye. Second, Bilkom was one of six use cases we encountered that had an in-person storefront. While our research found AI used more commonly in online businesses, the use of the Vispera Storesense software by Bilkom to help better their business shows how effective AI can be for in-person storefronts as well. The successful use of AI in this case study would have positive implications for businesses within Building Market's target demographics without digitized storefronts.

One particularly interesting example of small businesses using AI was small farms globally using an AI-powered tool, Plantix. While this use case is structured differently from others we identified and does not name specific small businesses, we chose to include it in the research findings because of the wide demonstrated use of this tool by small farms and the unique application in agriculture. Plantix uses AI to identify diseases in common plants and offer advice for basic treatment (Madslien, 2017). This free tool available in multiple languages was found to affect a widely reported improvement in farming (Plantix, n.d.). An especially unique feature about Plantix is its application to non-digital industries; farmers only need a smartphone to use the app. The easy-to-use features and interface of this application is indicated by the very high download rates across the world for several years (Schiller, 2017). This use case demonstrates a successful and sustained use case of AI by SMEs which may be used as an example or model for Building Markets programming.

Trends

While we were able to identify a wide variety of small businesses using AI, there were also notable gaps and unreliability in the research material. While AI is a trending topic in the business world, most of the conversation at this time is focused on large businesses. Information on SMEs, while present, was much less available. We were unable to find cases demonstrating the use of AI specifically for finding tender opportunities and submitting bids, a key aspect of Building Market's programming. Additionally, many identified use cases were sourced from undated websites and online materials, leaving the potential that the information is no longer accurate. Use cases were also often identified with only one source, as few SMEs have websites detailing their use of generative or other forms of AI. As an alternative we found customer testimonials on websites of AI tools to be a helpful source for identifying use cases. However, the nature of these testimonials lends itself to an overly promotional tone and lack of criticism, which does not give a full picture of what AI implementation in these SMEs looks like. While there is still value in our findings, it is important to recognize this lack of information and credibility when drawing conclusions on the impact of AI use on SMEs.

The vast majority of SMEs we identified are in the initial stage of incorporating AI into their small businesses, or have yet to pursue AI but have plans to do so in the future. Many owners and leaders at SMEs expressed that they see AI as an essential tool for small businesses to keep up with a digitalizing economy, even if there's not a clear sense of how to do so. Implementation of AI included many different tools, applications, and strategies. In our findings, many use cases demonstrated a successful implementation, at least in the short time AI had been used.

Particularly for SMEs with fewer personnel and lack of expertise in certain areas, owners and leaders expressed that AI filled in those gaps and facilitated business growth that otherwise would not have been possible. However, these impacts are still at an initial stage, and long-term impacts are generally unknown. We recommend a second iteration of this research to be conducted in 2-3 years, in the prediction that additional time will yield more reliable and abundant information on the most successful long-term strategies for AI implementation in SMEs.

Our research also revealed a trend towards digitalization in SMEs utilizing or looking to utilize AI. Most identified SMEs had a company website and online storefront, allowing for digitized marketing, customer service, and sales data, three common application areas of AI we identified. As this is the information available to us in online research, it is possible many SMEs without an online presence could be using AI in different ways, or not at all. For businesses to use AI in the capacity we observed, however, it appears beneficial to first have digitized materials or sales mechanisms, such as an online order site, in order to apply AI to these areas. Based on these observations, it may be helpful for Building Markets to consider emphasizing a wider range of digitization efforts in programming for SMEs, including AI as an additional tool for businesses with established digital interfaces. This is also a question for comprehensive future research on SMEs with both digital and non-digital business models implementing AI.

Based on our observations, the main positive impacts of utilizing AI in SMEs are increased efficiency in day-to-day business operations, and expansion of the business's market, often through customer service or marketing improvements. However, several negative impacts or concerns around use of AI were also identified, including the production of incorrect information from chatbots, lack of data security in some AI tools, and concerns that AI will lead to decreased employment in the future. However, many SMEs appear to be pursuing the use of AI despite these concerns, believing that the positives outweigh the negatives at this point in time. This is another area for potential future research as the negative impacts of AI on SMEs becomes clearer with additional studies and published information.

Literature Review

The literature review centers on work regarding artificial intelligence (AI), small and medium enterprises (SMEs), and AI in the Middle East. We focused on generative and other AI-based tools that can be used for marginalized small businesses in the Middle East, while also looking at obstacles that could threaten the ethics of systems and methods used. **The Excel file “Spreadsheet 4 - Key Literature” is an annotated bibliography of key articles.**

Following exploration of materials Building Markets provided, we used Google Scholar and JSTOR research databases to find academic and research articles, as well as information on various organizations, AI policies, and obstacles with the use of AI within businesses. We also explored the citations and bibliographies of articles leading to more specific information. The key search parameters are based on general phrases such as, “AI used for SMEs,” or more specific keywords used for instance, “Public participation methods used within AI to advance the work of SMEs.” The search parameters have remained fairly general in order to get various perspectives on AI usage within SMEs.

Three main themes have emerged from the literature review on AI used for SMEs: (1) frameworks that are established within businesses to monitor AI models, (2) the ethics of AI and whether AI models are being used to meet the needs of SMEs and marginalized individuals, and (3) the social sustainability of AI use within businesses.

The debates and various conversations surrounding business frameworks that are established to monitor AI models tend to lean towards the need to reform and reestablish such frameworks. Much of the research conducted highlights the necessity for transparency and public participation to allow for ethical AI models to be created for specific needs of communities. The transparency extends to substantive and procedural, conveying that substantive transparency is necessary in government AI systems and procedural transparency should be used to establish better practices with AI monitoring systems (Zick et al., 2024). Furthermore, by encouraging transparency within business frameworks, AI technologies could be aimed towards social good and aimed towards positive societal impacts (Barenblat & Gosselink, 2024). Alongside transparency, increased regulations and effective policies are debates consistently brought up within AI research in order to monitor business frameworks. First and foremost, AI researchers believe industry stakeholders should begin with defining the problem and build the regulation themselves (Atlantic Council, 2024). Another suggestion to reestablish business models is by integrating social science experts to create adequate frameworks for SMEs. Since generative AI can be too broad for business, both social and technical approaches are recommended to be researched in conjunction with one another in order for AI development and accountability (Oduro & Kneese, 2024). Another view of frameworks being established to monitor AI models within businesses is by looking at productivity and effectiveness of the technology to ensure SMEs are benefitting from it. Research revealed specific AI systems that have been used, specifically for SMEs, to reestablish the framework used within business models. Specific technology has caused SMEs to entirely reshape their business models, however they have shown to improve productivity and be cost-effective (Potluri & Vajjhala, 2018). While various regulations can be implemented and frameworks be reestablished, each business and region will have its own unique set of barriers leading to the debate that different societies should have their own systems (Atlantic Council, 2024). This could lead to a unique framework focused on specific obstacles that interfere with businesses and SMEs in particular.

Another recurring theme in the literature focuses on the ethics of AI and if AI models are being used to meet the needs of SMEs and marginalized individuals. Research conducted showcased the historical oppressive roots that data collection has, which leads to the belief that monitoring AI practices is a necessity to allow its ethical nature. This is particularly abundant in rural areas where BIPOC and marginalized communities may live in and be exploited for data (Hendrix & McNealy, 2024). Another obstacle that tends to arise when looking at the intentionality of AI adoption by businesses is the ethical nature of collaboration on the technologies.

Literature Review

The literature review centers on work regarding artificial intelligence (AI), small and medium enterprises (SMEs), and AI in the Middle East. We focused on generative and other AI-based tools that can be used for marginalized small businesses in the Middle East, while also looking at obstacles that could threaten the ethics of systems and methods used. **The Excel file “Spreadsheet 4 - Key Literature” is an annotated bibliography of key articles.**

Following exploration of materials Building Markets provided, we used Google Scholar and JSTOR research databases to find academic and research articles, as well as information on various organizations, AI policies, and obstacles with the use of AI within businesses. We also explored the citations and bibliographies of articles leading to more specific information. The key search parameters are based on general phrases such as, “AI used for SMEs,” or more specific keywords used for instance, “Public participation methods used within AI to advance the work of SMEs.” The search parameters have remained fairly general in order to get various perspectives on AI usage within SMEs.

Three main themes have emerged from the literature review on AI used for SMEs: (1) frameworks that are established within businesses to monitor AI models, (2) the ethics of AI and whether AI models are being used to meet the needs of SMEs and marginalized individuals, and (3) the social sustainability of AI use within businesses.

The debates and various conversations surrounding business frameworks that are established to monitor AI models tend to lean towards the need to reform and reestablish such frameworks. Much of the research conducted highlights the necessity for transparency and public participation to allow for ethical AI models to be created for specific needs of communities. The transparency extends to substantive and procedural, conveying that substantive transparency is necessary in government AI systems and procedural transparency should be used to establish better practices with AI monitoring systems (Zick et al., 2024). Furthermore, by encouraging transparency within business frameworks, AI technologies could be aimed towards social good and aimed towards positive societal impacts (Barenblat & Gosselink, 2024). Alongside transparency, increased regulations and effective policies are debates consistently brought up within AI research in order to monitor business frameworks. First and foremost, AI researchers believe industry stakeholders should begin with defining the problem and build the regulation themselves (Atlantic Council, 2024). Another suggestion to reestablish business models is by integrating social science experts to create adequate frameworks for SMEs. Since generative AI can be too broad for business, both social and technical approaches are recommended to be researched in conjunction with one another in order for AI development and accountability (Oduro & Kneese, 2024). Another view of frameworks being established to monitor AI models within businesses is by looking at productivity and effectiveness of the technology to ensure SMEs are benefitting from it. Research revealed specific AI systems that have been used, specifically for SMEs, to reestablish the framework used within business models. Specific technology has caused SMEs to entirely reshape their business models, however they have shown to improve productivity and be cost-effective (Potluri & Vajjhala, 2018). While various regulations can be implemented and frameworks be reestablished, each business and region will have its own unique set of barriers leading to the debate that different societies should have their own systems (Atlantic Council, 2024). This could lead to a unique framework focused on specific obstacles that interfere with businesses and SMEs in particular.

Another recurring theme in the literature focuses on the ethics of AI and if AI models are being used to meet the needs of SMEs and marginalized individuals. Research conducted showcased the historical oppressive roots that data collection has, which leads to the belief that monitoring AI practices is a necessity to allow its ethical nature. This is particularly abundant in rural areas where BIPOC and marginalized communities may live in and be exploited for data (Hendrix & McNealy, 2024). Another obstacle that tends to arise when looking at the intentionality of AI adoption by businesses is the ethical nature of collaboration on the technologies.

Research has shown that AI integration lacks public participation and transparency, and teams dedicated to research about AI don't have consistent goals (Groves, 2023). By focusing on specific goals and redesigning collaboration efforts, the ethical nature of AI adoption would be centered on specific objectives. Another concern when looking into AI within SMEs is how working hours would be impacted. Research showed that while generative AI increases productivity, most professions can expect 40% of their working hours to be impacted by the integration of AI. This shows the need to define the issues that could occur with AI integration and the need to create accurate regulations (Atlantic Council, 2024). Despite this, studies have indicated that with increased productivity with AI, there may also be an increase of wages, positively impacting low-pay workers and SMEs in particular (Acemoglu, 2024). Research also highlighted the need to integrate social science into AI governance in order to look at both social and technical approaches together. This also conveys that social science research could address the use of AI for the public and decrease harms within society, while allowing for transparency with the public (Oduro & Kneese, 2024). Along with social science, the main concern businesses tend to have is to enhance their staff skills development with training in order to create more innovation. This is especially crucial within rural communities where individuals are dependent on their jobs and don't have resources to receive training elsewhere (Dowell et al., 2024). Within Türkiye specifically, since the starting of the war in Syria in 2011, there has been an increased influx of Syrian refugees entering the country. Within these migration efforts, Syrian refugees also account for 10,000 companies within Türkiye and have positively impacted the business market in employment and stability. Businesses have indicated that their main obstacle is lack of training in areas of marketing, customer service, and import-export laws (Ucak et al., 2017). With specific goals intended to help SMEs and marginalized communities, AI adoption can increase over the years while still having ethical standards.

A third theme is sustainability, particularly social sustainability. Research that was conducted, specifically when looking at small and medium enterprises within Türkiye, acknowledged the need for social sustainability to avoid exploiting resources. Articles looked into the rise of digitalization alongside businesses, as well as the harmful effects of inaccurate assessments of SMEs leading to improper prioritization. Inaccuracies such as these can lead to the exploitation of natural resources, revealing the need for monitored digitization to increase sustainability (Incekara et al., 2023). Sustainability practices within businesses have been introduced within Türkiye as well, with research stating Türkiye is ahead of the EU with production of sustainable products. However, the belief of sustainable practices not being profitable is still prevalent, demonstrating the need to introduce sustainability into business models to increase the use of such practices (Kumbali et al., 2022). In areas such as the UAE, SMEs contribute to the large majority of the economy which leads the government to put a great emphasis on creating an ecosystem that fosters competition and investment while also focused on social sustainability and consumer needs (Sharma, 2023). With an intended focus on social sustainability, the avoidance of natural resources being exploited can be encouraged while emphasizing consumer and worker needs.

In research into organizations that focus on SMEs and marginalized businesses integration of AI into their processes, research has shown that marginalized groups should be directly involved in conversations of AI inclusion, as well as reforms of AI models in businesses. Research showed that constant data collection created a power imbalance, emphasizing the need for an equitable framework for AI models (Mcnealy, 2023). Specific organizations, such as the Atlantic Council, implement programs targeted towards marginalized groups to give them space to enter spaces that lack marginalized voices. For instance, the WIn fellowship that is created by the Atlantic Council and Georgetown University, is directed towards women in the Middle East and North Africa, and is aimed at increasing women's economic participation. In a workshop conducted by the fellowship, discussing AI innovation into the SME industry in the UAE, speakers emphasized the unrepresentative data that is rooted within AI research, as well as AI models. The talk conveyed the need to integrate marginalized groups into such research, to improve business practices and allow AI to benefit SMEs in accurate ways.

Appendix 1 summarizes these findings.

Potential Research Questions

As outlined in the literature review and in the proceeding sections of this report, theoretical, empirical, and applied discussions of SME use of generative AI are still in their infancy. While this is due to the emergent nature of the technology, it points to many research areas that should be explored in order to understand how best to support SMEs in adopting AI tools. Five questions that have emerged from our research that Building Markets might explore are:

1. Does having a preexisting digitized business model prior to the adoption of AI impact business outcomes for SMEs using generative AI tools?
2. Is AI cost-effective and does it increase productivity for SMEs? Are there differences in impact within the initial phases of use and in the long term?
3. What resources assist SMEs in using generative AI tools to expand productivity and benefit, particularly marginalized small businesses?
4. Because SMEs are often unable to afford the closed source enterprise-level AI tools with more rigorous privacy and security practices, how can SMEs integrate the use of generative AI into business practices while also protecting their data and maintaining rigorous privacy standards?
5. Do the costs and risks associated with AI vary based on the method of deployment--such as whether an SME chooses to run it on its own local systems, where it stores data, whether it uses a cloud computing software service, what kind of security measures are in place, etc.?

Appendix 1: Literature Review Summary

Frameworks that are established within businesses to monitor AI models

- AI models, especially generative AI, can result in productivity improvements; however, such gains will not be useful without a reorientation of generative AI models to focus on marginal productivity of specific workers (Acemoglu, 2024).
- Sustainability efforts in businesses should be integrated while simultaneously developing ethical frameworks for AI models (Kumbali et al., 2022).
- Recommended the gathering of industry stakeholders and experts to define problems and build regulations. Furthermore, business frameworks should be developed themselves in order to monitor AI models (Atlantic Council, 2024).
- Different societies should have their own AI systems in order to serve current users in the area and prioritize specific needs (Atlantic Council, 2024).
- Provide a transparent landscape for social entrepreneurs in order to apply AI for social good (Barenblat & Gosselink, 2024).
- It is fundamental to close all loopholes when defining AI, however it is difficult to sweep all systems that need additional oversight, which is why public transparency is a necessary component (Zick et al., 2024).
- Generative AI is too broad for businesses which is why social and technical dimensions of AI assessment needs to be looked at together. Federal hiring efforts should also invest in humanities and social science experts to create adequate frameworks for SMEs (Oduro & Kneese, 2024).
- Due to potential AI-related harms, especially with power imbalances in data collection, a non-binding framework such as the blueprint created by the White House for an AI Bill of Rights could create good security surrounding the technologies. However, effective policy is also needed in order to allow for job creation, building infrastructure, and economic sustainability (McNealy, 2023).
- In order for businesses to increase AI adoption, there is a necessity for organization change to accommodate AI technologies. While there are benefits with increased productivity, existing businesses need a smooth integration of AI where workers are retrained and systems are upgraded (Dinlerso et al., 2024).

Ethics of AI

- By allowing AI integration for SMEs in rural areas, AI users wish to enhance their staff skills development and create more innovation. Businesses are also focusing on using AI to reduce carbon emissions and greenhouse gasses showcasing that AI is used for specific needs for SMEs (Dowell et al., 2024).
- Macro effects of AI technologies allow for improvement within the economy in various factors impacting businesses. The use of AI, specifically generative AI, leads to productivity improvements with new tasks and products while adding to productivity growth (Acemoglu, 2024).
- AI can impact wages and inequality with automation efforts and help low-pay workers, in turn positively impact SMEs (Acemoglu, 2024).
- While AI is seen to be beneficial in the business sectors, there is a clear lack of public participation methods to guarantee transparency with AI technologies. This also shows that there is a need for further trailing and testing of public participation approaches out in the open (Groves, 2023).

- Findings showed that there is a lack of ethical collaborative development of standards of practices, showcasing a need to create a better team that allows for sharing of research and learnings (Groves, 2023).
- Since 99% of all businesses in the EU and Turkey are SMEs, there must be accurate assessment conducted to create an accurate selection of technologies. In addition to the integration of AI, elements of sustainability should be integrated so natural resources aren't exploited (Incekara et al., 2023).
- Generative AI can be disruptive with 40% of working hours to be affected. Businesses should gather industry stakeholders in order to define the issues with AI technology and create accurate regulations (Atlantic Council, 2024).
- Nonprofits and consumers need to use AI as a means rather than an end by deployed the use of artificial intelligence for specific impacts, especially in addressing societal impact (Barenblat & Gosselink, 2024).
- No expert audit is perfect, which is why public transparency is a necessary component for deploying effective and ethical AI systems (Zick et al., 2024).
- There are risks that generative AI can bring, including data mixing with commands that tell LLMs what to do, in turn causing the system to be vulnerable. There is an increased risk of prompt-injection attacks and security risks that need to be acknowledged (Schneier, 2024).
- The historical roots of data collection have targeted rural areas, which tend to have larger populations of marginalized communities. Since these environments are data rich, there is history with colonialism and water injustice. Water justice and AI innovation needs to confront the deeper history of colonial water laws that might be present in contemporary times (Hendrix, 2024).
- Solely having technical approaches for businesses using AI cannot address AI's benefits and harms within society. Transparency is needed for the public, however it is not achievable by simply socio technical experts (Oduro & Kneese, 2024).
- Since the start of the war in Syria in 2011, the numbers of Syrian refugees within Turkey has increased. Alongside their population growth, Syrian refugees account for 10,000 companies within Turkey and have helped create jobs and keep stable businesses running (Ucak et al., 2017).

Social sustainability of AI use within businesses

- The majority of businesses in the EU and Turkey are SMEs, however oftentimes there are inaccurate assessments of SMEs creating improper prioritization and selection technologies (Incekara et al., 2023).
- Social sustainability focuses on protection and development of social resources (Kumbali et al., 2022).
- According to the research, SMEs make up 90% of businesses worldwide, however they also cause 70% of the global pollution. With an emphasis on social sustainability, there would be an increased focus on general issues such as raising health standards and centered on social justice issues (Kumbali et al., 2022).
- With SMEs contributing to a large majority of the economy in the UAE, the government is focusing on creating an ecosystem that fosters investment and competition with a focus on social sustainability and consumer needs (Sharma, 2023).

Bibliography

- Aarstad, A., & Saidl, M. (2019). Barriers to Adopting AI Technology in SMEs: A Multiple-Case Study on Perceived Barriers Discouraging Nordic Small and Medium-sized Enterprises to Adopt Artificial Intelligence-Based Solutions [Master's thesis, Copenhagen Business School]. Copenhagen Business School Research Portal. <https://research.cbs.dk/en/studentProjects/barriers-to-adopting-ai-technology-in-smes-a-multiple-case-study->
- Acemoglu, D. (2024). The Simple Macroeconomics of AI. National Bureau of Economic Research. https://www.nber.org/system/files/working_papers/w32487/w32487.pdf
- Aguilar, R. (2024, June 11). How Accurate is Google Translate?. Weglot. <https://www.weglot.com/blog/how-accurate-is-google-translate#:~:text=A%202021%20study%20conducted%20by,for%2082.5%25%20of%20the%20translations.>
- Al Jazeera Media Network. (2024, July 2). Protests and Arrests as Anti-Syrian Riots Rock Turkey. Al Jazeera. <https://www.aljazeera.com/news/2024/7/2/protests-and-arrests-as-anti-syrian-riots-rock-turkey>
- Alhashimy, A. (2024, May 6). Data Governance for AI: Best Practices for SMEs. ProfileTree Web Design and Digital Marketing. <https://profiletree.com/data-governance-for-ai-best-practices-for-smes/>
- Alliantist Ltd. (n.d.). Understanding ISO 27018:2020. ISMS.online. <https://www.isms.online/iso-27018/#:~:text=ISO%2FIEC%2027018%20is%20the,for%20public%20cloud%20service%20providers>
- Almahasees, Z. M. (2023). A Synchronic Assessment of Google Translate, Microsoft Translator and Reverso in English<>Arabic Translation. 3rd International Conference on Language and Education. Retrieved August 18, 2024, from <https://conferences.cihanuniversity.edu.iq/index.php/LANGEDU/LANGEDU-23>
- Aquino, S. (2021, December 16). How transcription app Otter.ai has proven indispensable to one deaf woman in this mask-dominant era. Forbes. <https://www.forbes.com/sites/stevenaquino/2021/12/16/how-transcription-app-otterai-has-proven-indispensable-to-one-deaf-woman-in-this-mask-dominant-era/>
- Baabdullah, A. M., Alalwan, A. A., Slade, E. L., Raman, R., & Khatatneh, K. F. (2021). SMEs and artificial intelligence (AI): Antecedents and consequences of AI-based B2B practices. Industrial Marketing Management, 98, 255–270. <https://doi.org/10.1016/j.indmarman.2021.09.003>
- Barenblat, K. & Gosselink, B. H. (2024). Mapping the Landscape of AI-Powered Nonprofits. SSIR. Retrieved August 19, 2024, from <https://ssir.org/articles/entry/ai-powered-nonprofits-landscape>
- Beaumont, J. A. J. (2024, May 10). The Cost of ISO & GDPR Non-Compliance. Bulletproof. <https://www.bulletproof.co.uk/blog/the-cost-of-non-compliance>
- Benchaita, S. (2024). Data Suggests Growth in Enterprise Adoption of AI is Due to Widespread Deployment by Early Adopters. IBM Newsroom. Retrieved August 19, 2024, from <https://newsroom.ibm.com/2024-01-10-Data-Suggests-Growth-in-Enterprise-Adoption-of-AI-is-Due-to-Widespread-Deployment-by-Early-Adopters>
- Blouin, L. (2023, March 6). AI's Mysterious “Black Box” Problem, Explained. umdearborn.edu. <https://umdearborn.edu/news/ais-mysterious-black-box-problem-explained>
- Cetin, Ö., & Duran, Ö. (2024). A Comparative Analysis of the Performance of ChatGPT, DeepL, Google Translate and a Human Translator in Community Based Settings. Amasya Üniversitesi Sosyal Bilimler Dergisi. Retrieved August 18, 2024, from <https://dergipark.org.tr/en/pub/asobid/issue/85618/1427643>
- Chatfuel. (n.d.a). Customer story: Interaksi. Chatfuel. <https://chatfuel.com/customer-stories/interaksi>
- Chatfuel. (n.d.b). Customer story: Ultima School. Chatfuel. <https://chatfuel.com/customer-stories/ultima-school>
- Cloudflare. (n.d.). What is a large language model (LLM)?. Cloudflare Learning Center. [https://www.cloudflare.com/learning/ai/what-is-large-language-model/#:~:text=Large%20language%20models%20\(LLMs\)%20are,massive%20data%20sets%20of%20language.](https://www.cloudflare.com/learning/ai/what-is-large-language-model/#:~:text=Large%20language%20models%20(LLMs)%20are,massive%20data%20sets%20of%20language.)

- Çoban Kumbalı, H., İncekara, M., & Sarıkaya, M. (2022). KOBİ'LERDE ÇEVRESEL VE SOSYAL SÜRDÜRÜLEBİLİRLİK: AVRUPA BİRLİĞİ ÜLKELERİ VE TÜRKİYE KARŞILAŞTIRMASI. Kafkas Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 13(26), 789–823. <https://doi.org/10.36543/kauibfd.2022.033>
- Crenshaw, J. (2024, May 2). Enhancing Entrepreneurship: AI's Big Impact on Small Business. Technology | U.S. Chamber of Commerce. <https://www.uschamber.com/technology/enhancing-entrepreneurship-ai-big-impact-on-small-business>
- Dhandapani, S. (2024). Michigan small businesses begin to experiment with artificial intelligence. Bridge Michigan. <https://www.bridgemi.com/business-watch/michigan-small-businesses-begin-experiment-artificial-intelligence>
- Diab, N. (2022). The Effects of Artificial Intelligence (AI) on the Future Jobs Within the Governmental Organizations in Istanbul-Turkey, İstanbul Sabahattin Zaim University <https://openaccess.izu.edu.tr/xmlui/bitstream/handle/20.500.12436/4712/735879.pdf?sequence=1&isAllowed=y>
- Dinlersoz, E., Dogan, C., & Zolas., N. (2024) Starting up AI, U.S. Census Bureau <https://www2.census.gov/library/working-papers/2024/adrm/ces/CES-WP-24-09.pdf>
- Dowell, D. D. (n.d.). AI Adoption by Rural SMEs: Exploring Current Trends. Regional Studies Association: Regions. <https://orca.cardiff.ac.uk/id/eprint/168554/1/Regions%20AI%20Paper.pdf>
- Edwards, M. (2024, August 8). The Ultimate Guide to ISO 27001. ISMS.online. <https://www.isms.online/iso-27001/#iso-270012022-requirements-controls>
- Ember, S. (2024, August 18). How A.I. Can Help Start Small Businesses. New York Times. <https://www.nytimes.com/2024/08/18/business/economy/ai-business-startups.html>
- Ember, S. (2024, June 17). Can A. I. Answer the Needs of Smaller Businesses? Some Push to Find Out. New York Times. <https://www.nytimes.com/2024/06/17/business/economy/artificial-intelligence-small-business.html>
- Erdoğan, M. M., Kirişçi, K., & Uysal, G. (2021, September). Improving Syrian refugee inclusion in the Turkish economy. World Refugee & Migration Council. <https://wrmcouncil.org/wp-content/uploads/2021/09/Turkey-Syrian-Refugees-WRMC-final.pdf>
- European Union. (2024, July 3). CE Marking – Obtaining the Certificate, EU Requirements. Your Europe. https://europa.eu/youreurope/business/product-requirements/labels-markings/ce-marking/index_en.htm
- Funelas, R. (2024, January 31). ChatGPT Language Capabilities. Tomedes. <https://www.tomedes.com/translator-hub/chatgpt-language-capabilities>
- Google. (n.d.a). Cloud Data Loss Prevention. Google Cloud. <https://cloud.google.com/security/products/dlp?hl=en>
- Google. (n.d.b). Cloud Translation Data Usage FAQ. Google Cloud. <https://cloud.google.com/translate/data-usage>
- Google. (n.d.c). Cloud Translation Pricing. Google Cloud. <https://cloud.google.com/translate/pricing>
- Google. (n.d.d). Compliance Resource Center. Google Cloud. <https://cloud.google.com/compliance?hl=en>
- Google. (n.d.e). Compliance Offerings. Google Cloud. <https://cloud.google.com/security/compliance/offerings>
- Google. (n.d.f). Custom Translations Overview. Google Cloud. <https://cloud.google.com/translate/docs/advanced/custom-translations#:~:text=Cloud%20Translation%20provides%20two%20solutions,of%20supported%20languages%2C%20and%20pricing>
- Google. (n.d.h). Encryption at Rest. Google Cloud. <https://cloud.google.com/docs/security/encryption/default-encryption>
- Google. (n.d.i). Google Cloud Translation Tutorials. Google Cloud. <https://cloud.google.com/translate/docs/tutorials>

Google. (n.d.j). Google Security Overview. Google Cloud. <https://cloud.google.com/docs/security/overview/whitepaper>

Google. (n.d.k). Google Translate Help Center. Google Translate Help. <https://support.google.com/translate/?hl=en&sjid=9816961571299942287-NC#topic=7011755>

Google. (n.d.l). Privacy Resource Center. Google Cloud. <https://cloud.google.com/privacy?hl=en>

Google. (n.d.m). Translate Documents & Websites. Google Translate Help. <https://support.google.com/translate/answer/2534559?hl=en&co=GENIE.Platform%3DDesktop>

Google. (n.d.n). Transparency & Data Protection. Google Cloud. <https://cloud.google.com/transparency?hl=en>

Google. (n.d.o). Turn On 2-Step Verification. Google Account Help. <https://support.google.com/accounts/answer/185839?hl=en&co=GENIE.Platform%3DDesktop>

Google. (n.d.p). What is Cloud Computing?. Google. <https://cloud.google.com/learn/what-is-cloud-computing>

Groves, L. (2023, December 12). Going public. Ada Lovelace Institute. <https://www.adalovelaceinstitute.org/report/going-public-participation-ai/>

Heilweil, R. (2024a). "More federal agencies join in temporarily blocking or banning ChatGPT." FedScoop. January 9, <https://fedscoop.com/more-federal-agencies-join-in-temporarily-blocking-or-banning-chatgpt/>

Heilweil, R. (2024b). "OpenAI reveals first federal agency customer for ChatGPT Enterprise." August 19, <https://fedscoop.com/openai-chatgpt-enterprise-usaid/>

Hendrix, J. (2024, May 12). What We're Talking About When We Talk About Rural AI. Tech Policy Press. <https://techpolicy.press/what-were-talking-about-when-we-talk-about-rural-ai>

HubSpot. (n.d.a). Marketing Software Pricing. HubSpot. <https://www.hubspot.com/pricing/marketing/enterprise>

HubSpot. (n.d.b). HubSpot Security Program. Hubspot. <https://legal.hubspot.com/security>

HubSpot. (n.d.c). Streamline Your Entire Business with a Free CRM. HubSpot. <https://www.hubspot.com/products/crm>

Hubspot. (n.d.d) HubSpot language offerings. HubSpot. <https://knowledge.hubspot.com/help-and-resources/hubspot-language-offerings>

Ijaz, S. (2023, July 6). 15 Countries That Banned ChatGPT. Yahoo. <https://finance.yahoo.com/news/15-countries-banned-chatgpt-204342617.html>

İncekara, M., Çoban Kumbalı, H., & Sarıkaya, M. (2023). THE TRANSFORMATION PROCESS OF TURKISH SMES IN TERMS OF DIGITALIZATION AND SUSTAINABILITY. Uluslararası İktisadi ve İdari İncelemeler Dergisi, 41, 1–15. <https://doi.org/10.18092/ulikidince.1133377>

International Organization for Standardization. (2015a). Information technology — Security techniques — Code of practice for information security controls based on ISO/IEC 27002 for cloud services (ISO Standard No. 27017:2015). <https://www.iso.org/standard/43757.html>

International Organization for Standardization. (2015b). Quality management systems — Requirements (ISO Standard No. 9001:2015). <https://www.iso.org/standard/62085.html>

International Organization for Standardization. (2019). Information technology — Security techniques — Code of practice for protection of personally identifiable information (PII) in public clouds acting as PII processors (ISO Standard No. 27018:2019). <https://www.iso.org/standard/76559.html>

International Organization for Standardization. (2022). Information security, cybersecurity and privacy protection — Information security management systems — Requirements (ISO Standard No. 27001:2022). <https://www.iso.org/standard/27001>

Jamal, T. (2022, December 5). What is an API and How Does It Work? APIs for Beginners. freeCodeCamp.org. <https://www.freecodecamp.org/news/how-apis-work/>

Jasper. (2023, December 15). Jasper Compliance Portal. Jasper Security. <https://security.jasper.ai/>

Jasper. (2024, April 2). Privacy Policy. Jasper Legal Center.
https://legal.jasper.ai/?_gl=1*1mwewsa*_gcl_aw*R0NMLjE3MTk2NzIxOTkuQ2p3S0NBanc0ZiZ6QmhCVkVpd0FURUhGVmxidlBkWk0yRVJCTC0yRHpMaGp3Z1p0NTh3X3ZqM05KLWQyVUF5eVNSaDNpeiV1b1pCcFV4b0NPVWNRQXZEX0J3RQ.*_gcl_au*MTMzODkwMzYyNC4xNzE5MzQwMTUz#privacy

Jasper. (n.d.a). 50+ AI Templates. JasperAI. <https://www.jasper.ai/templates>

Jasper. (n.d.b). AI Prompt Library. JasperAI. <https://www.jasper.ai/prompts>

Jasper. (n.d.c). Jasper Brand Voice. JasperAI. <https://www.jasper.ai/products/brand-voice>

Jasper. (n.d.e). Jasper Integrations. JasperAI. <https://www.jasper.ai/integrations>

Jasper (n.d.f). Language Translation. JasperAI. <https://www.jasper.ai/languages>

Jasper. (n.d.g). Plans & Pricing. JasperAI. <https://www.jasper.ai/pricing>

Jasper. (n.d.h). Welcome to Course Pathways. Jasper Academy. <https://jasper-academy.ai/paths>

Jordan, B. (2023, December 21). What is the Difference Between Hardware vs. Software?. SourceForge Learn. <https://sourceforge.net/learn/what-is-the-difference-between-hardware-vs-software/>

Kendall, Leif. (2023, July 7). The danger and limitations of AI writing tools. Procopywriters.
<https://www.procopywriters.co.uk/2023/07/the-dangers-and-limitations-of-ai-writing-tools/>

Lewis, G. (2024, February 23). How four small businesses are getting a bang for their AI buck. Raconteur.
<https://www.raconteur.net/technology/four-ai-case-studies>

Madslie, J. (2017, October 12). “Tell me phone, what’s destroying my crops?” BBC News.
<https://www.bbc.com/news/business-41580890>

McCoy, J. (2021, August 26). What Are the Risks of AI Writing? 5 Dangers To Avoid (At All Costs!). HyperwriteAI Blog. <https://blog.hyperwriteai.com/what-are-the-risks-of-ai-writing/>

McKinsey & Company. (2020). Future of Work: Turkey’s Talent Transformation in the Digital Era.
https://www.mckinsey.com/tr/~/_media/mckinsey/locations/europe%20and%20middle%20east/turkey/our%20insights/future%20of%20work%20turkey/future-of-work-mckinsey-turkey-full-report.pdf

McNealy, J. (2023, October 16). We Need A Policy Agenda for Rural AI. Tech Policy Press.
<https://techpolicy.press/we-need-a-policy-agenda-for-rural-ai>

Medina, J. (2021, July 2). 4 Effective Ways Small Businesses Can Leverage AI. U.S. Chamber of Commerce.
<https://www.uschamber.com/co/run/technology/artificial-intelligence-small-business-applications>

Mirela. (2024, June 27). NMT vs LLM: Discussing the differences. POEditor Blog.
<https://poeditor.com/blog/nmt-vs-llm/>

Mittal, N., Ammanath, B., & Saif, I. (2022, October). Fueling the AI transformation: Four key actions powering widespread value from AI, right now. Deloitte.
<https://www2.deloitte.com/content/dam/Deloitte/us/Documents/deloitte-analytics/us-ai-institute-state-of-ai-fifth-edition.pdf>

Motalebi, N., & Verity, A. (2023). Generative AI for Humanitarians. United Nations Office for the Coordination of Humanitarian Affairs. Retrieved August 18, 2024, from
<https://app.box.com/s/ybwizbcdxknn2cw8td08hcnl5hc1cl2e>

Notion. (n.d.). Notion for Teams and Businesses. Notion. <https://www.notion.so/teams>

Oduro, S., & Kneese, T. (2024, May). AI Governance Needs Sociotechnical Expertise. Data and Society.
https://datasociety.net/wp-content/uploads/2024/05/DS_AI_Governance_Policy_Brief.pdf

Oldemeyer, L., Jede, A., & Teuteberg, F. (2024). Investigation of Artificial Intelligence in SMEs: A Systematic Review of the State of the Art and the Main Implementation Challenges. Management Review Quarterly.
<https://doi.org/10.1007/s11301-024-00405-4>

OpenAI (n.d.a). Managing your work in the API platform with Projects. OpenAI Help Center.
<https://help.openai.com/en/articles/9186755-managing-your-work-in-the-api-platform-with-projects>

OpenAI. (n.d.b). Pricing. OpenAI. <https://openai.com/api/pricing/>

OpenAI. (n.d.c) OpenAI Security Portal | Powered by SafeBase. OpenAI. <https://trust.openai.com/>

- Otis, N. G., Clarke, R. P., Delecourt, S., Holtz, D., & Koning, R. (2023, December 21). The Uneven Impact of Generative AI on Entrepreneurial Performance. <https://doi.org/10.31219/osf.io/hdipk>
- Perry, R. (2024, August 14). HubSpot CRM Review 2024: Features, Pricing, Pros & Cons. MarketWatch - Guides. <https://www.marketwatch.com/guides/business/hubspot-review/>
- Potluri, R. M., & Vajjhala, N. R. (2018, May) A Study on Application of Web 3.0 Technologies in Small and Medium Enterprises of India. Journal of Asian Finance Economics and Business 5(2):73-79. https://www.researchgate.net/publication/325648401_A_Study_on_Application_of_Web_3_0_Technologies_in_Small_and_Medium_Enterprises_of_India
- Priyadarshini, S. (Host). (2024, February 27). The future of phones (No 36) [Audio podcast episode]. In Our mobile world. nature india. <https://www.nature.com/articles/d44151-024-00025-7>
- Repetto, J.P. (2024, March 1). Integrating AI innovations into the SME industry in the UAE. Atlantic Council. <https://www.atlanticcouncil.org/commentary/event-recap/integrating-ai-innovations-into-the-sme-industry-in-the-uae/>
- Rodriguez, H. (2024, August 9). The data security issues around public machine Translation — A Translator perspective. Excel Translations. <https://exceltranslations.com/data-security-public-machine-translation/>
- Sack, D. (2024, March 6). Hiddenlayer AI Threat Landscape Report Finds That 77% of Companies Identified Breaches to Their AI in the Past Year. PR Newswire: press release distribution, targeting, monitoring and marketing. <https://www.prnewswire.com/news-releases/hiddenlayer-ai-threat-landscape-report-finds-that-77-of-companies-identified-breaches-to-their-ai-in-the-past-year-302080705.html>
- Sahbaz, U. (2024, July 9). Can AI Developed in Turkey Sell Houses in Spain? Medium. <https://ussalsahbaz.medium.com/can-ai-developed-in-turkey-sell-houses-in-spain-06cd6bf7d250>
- Salesforce. (n.d.a). PaySauce unites teams on Salesforce for more seamless growth. Salesforce. <https://www.salesforce.com/au/customer-success-stories/paysauce/>
- Salesforce. (n.d.b). Wonolo agents decrease handle times 20% with AI-generated replies. Salesforce. <https://www.salesforce.com/customer-stories/wonolo-decreases-handle-time-ai-replies/>
- Schiller, B. (2017, September 21). Machine Learning Helps Small Farmers Identify Plant Pests and Diseases. Fast Company. <https://www.fastcompany.com/40468146/machine-learning-helps-small-farmers-identify-plant-pests-and-diseases>
- Schneier, B. (2024, May 9). LLMs' Data-Control Path Insecurity. Communications of the ACM. <https://cacm.acm.org/opinion/llms-data-control-path-insecurity/>
- Sharma, A. (2023, April 6). SME numbers in the UAE exceeded half a million by the end of 2022. The National. <https://www.thenationalnews.com/business/economy/2023/04/06/sme-numbers-in-the-uae-exceeded-half-a-million-by-the-end-of-2022/>
- Sharma, R. (2024, July 31). Personal Data and PII: A Guide to Data Privacy under GDPR. Protecto. <https://www.protecto.ai/blog/personal-data-and-pii-a-guide-to-data-privacy-under-gdpr#:~:text=GDPR%20requires%20organizations%20to%20protect,trust%20with%20users%20and%20customers>
- Sharron, M. (2024, May 31). ISO 27701 – The Standard for Privacy Information Management. ISMS.online. <https://www.isms.online/iso-27701/#iso-27701-vs-iso-27001-what-are-the-differences>
- Smartly.io. (n.d.a) Jawwy Automates Creative Production and Delivery to Relevant Audiences. SMARTLY. <https://www.smartly.io/case/jawwy>
- Smartly.io. (n.d.b) LUISAVIAROMA increases ROAS on TikTok using image templates for Shopping Ads. SMARTLY. <https://www.smartly.io/case/luisaviaroma-increases-roas>
- Smartly.io. (n.d.c). Makuake and Septeni Increase Revenue with Smartly Image Templates. SMARTLY. <https://www.smartly.io/case/makuake>

Stanford Social Innovation Review. (n.d.). Introducing AI-Powered Nonprofits. Retrieved August 19, 2024, from <https://ssir.org/introducing-ai-powered-nonprofits>

State of California - Department of Justice. (2024, March 13). California Consumer Privacy Act (CCPA). Office of the Attorney General. <https://www.oag.ca.gov/privacy/ccpa>

Turovsky, B. (2015, July 29). See the World in Your Language with Google Translate. Google The Keyword. <https://blog.google/products/translate/see-world-in-your-language-with-google/>

Ucak, S., Holt J., & Raman K. (2017). Another Side to the Story: A market assessment of Syrian SMEs in Turkey - Türkiye | ReliefWeb. (2017, June 23). <https://reliefweb.int/report/turkey/another-side-story-market-assessment-syrian-smes-turkey>

Urack, S., Holt, J., & Raman, K. (2017). Another Side to the Story: A Market Assessment of Syrian SMEs in Turkey. Building Markets. https://buildingmarkets.org/sites/default/files/pdm_reports/another_side_to_the_story_a_market_assessment_of_syrian_smes_in_turkey.pdf

Vaughan, A. (2024, January 2). On-Premise vs Cloud Software (2024). TechnologyAdvice. <https://technologyadvice.com/blog/information-technology/key-considerations-for-evaluating-cloud-vs-on-premise-software/>

Vispera. (n.d.a). How Bilkom doubled sales in consumer electronics by improving on-shelf-availability. Vispera. <https://vispera.co/how-bilkom-doubled-sales-in-consumer-electronics-by-improving-on-shelf-availability/>

Vispera. (n.d.b). Vispera helped Mercury 360 to increase must have availability by 20% in tobacco category. Vispera. <https://vispera.co/vispera-helped-mercury-360-to-increase-must-have-availability-by-20-in-tobacco-category/>

Winter, D. (2024, June 6). Moving from Etsy to Shopify: An Ecommerce Migration Story. Shopify. <https://www.shopify.com/blog/211686281-moving-from-etsy-to-shopify>

Wolford, B. (Ed.). (2023, September 14). What is GDPR, the EU's new Data Protection Law? GDPR.EU. <https://gdpr.eu/what-is-gdpr/>

Zhu, W., Liu, H., Dong, Q., Xu, J., Huang, S., Kong, L., Chen, J., & Li, L. (2023, April 10). Multilingual Machine Translation with Large Language Models: Empirical Results and Analysis. arXiv.org. <https://arxiv.org/abs/2304.04675>

Zick, T., Kortz, M., Eaves, D., & Doshi-Velez, F. (2024). AI Procurement Checklists: Revisiting Implementation in the Age of AI Governance (No. arXiv:2404.14660). arXiv. <http://arxiv.org/abs/2404.14660>

How We Work:

Building Markets addresses inequality worldwide by advancing inclusive economies that work for all. We do this by opening opportunities for small business owners — who fuel more than 70% of the world's jobs — to transform their lives and communities. Since 2004, Building Markets has combined its deep local knowledge, comprehensive data, and global networks to build confidence and strength in more than 29,825 small business owners affected by marginalization. From securing \$1.42 billion in contracts or loans to creating over 75,262 full-time jobs in places where they're needed most, Building Markets is elevating small businesses as engines of enduring social impact and economic growth.

In Türkiye, Building Markets has built a unique network of 3,397 Syrian-owned SMEs. Verified businesses access services that increase their visibility, improve performance, and connect them to new opportunities. Since 2017, our programs in Türkiye have led to SMEs winning over \$57 million in new contracts and capital.

Are you a small business operating in Türkiye?

INCREASE VISIBILITY



Get verified and create a
Unique profile on our
Business directory

ACCESS TRAINING



Enroll in online and in-
person courses that
target your company's
growth

CONNECT TO OPPORTUNITIES



Locate tenders in
your
sector and win new
contracts and capital

Interested in Learning More?
Contact our supply chain and finance experts:

Whatsapp: +90 536 734 38 56
Email: turkey@buildingmarkets.org