At the 56th World Economic Forum Annual Meeting in Davos, Switzerland, government officials and business leaders from around the world came together to discuss some of the most pressing issues facing society today. However, as several accounts prove, the greatest issue was not increasing investment in technology, building stronger trade infrastructure, or even resolving the growing affordability crisis. Rather, it was the clash between cultural norms of whether to walk on the left or right side of the street – a discrepancy that led to several people bumping into each other, fostering short-term pain and, more importantly, long-term partnerships. The conference showed that, even in 2026, seemingly silly issues such as appropriate walking mechanisms persist as globalization becomes more of a necessity rather than just an objective. As individual nations' systems and societies develop to rely on one another, it is important to acknowledge even the smallest of differences between cultures in order to ensure sustainable innovative growth and economic prosperity.

No matter how insignificant this recent example from Davos may seem, it is representative of an increasingly obvious shift in both our local economy in West Michigan and the global markets, one marked by swift changes in the realm of technology, innovations that redefine the labor force, and transformations of human culture that alter consumer behaviors. In the 21st century, rapid changes in innovation, technology, and culture impact our local and global economy to a large extent, in both positive and negative ways. All three facets of society play an essential role in the development of global economic value systems, but the long-term efficiency and scalability of this growth depends on whether or not the implementation of these changes are well-paced and sustainable. Furthermore, in a world that is so interconnected as a result of technological innovations, impacts on the local economy are often just the consequences of broader actions taken at a global stage. The Chinese multinational technology corporation

Huawei termed this parallel structure “the Glocal ecosystem,” a portmanteau of “global” and “local” (Huawei). From this lens, the impacts of any changes in our economic system at an international level quickly become observable in our surrounding environment as well.

A primary way that the modern local and global economy has been impacted is with rapid changes in the pace of technological innovation, especially in recent years. With the rise of new technologies such as artificial intelligence (AI) and machine learning (ML), and their growing availability for public use, their impacts are becoming more apparent at an international level. The Penn Wharton Budget Model estimates that the implementation of AI in the American economy will increase GDP by 1.5 percent by 2035 and nearly 3 percent by 2055, formidable growth that is analogous to the impact that investment in railroads had on the economy in the mid-1800s (UPenn). There is no denying that technology is the future of the economy, with 27.2 percent of business in 2025 being conducted online (IBIS). As startup companies take over the technology arena, forcing larger companies that are well-established in the market to adapt, there are two key consequences that have already started to play out from these quick advancements.

The first is in regards to a restructuring of the employment sector, in the form of both job creation and job loss. The demand for skilled workers who are highly specialized and have a technical background or college education has vastly expanded to match the rising investment in companies that focus on AI. This finding is nothing new – it rather serves as the latest rendition of an economic concept established by Joseph Schumpeter in 1942 known as “creative destruction.” As with all aspects of life, change is inescapable in the global economic cycle, so outdated systems, processes, and, in this case, employment opportunities will constantly be superseded by new ones (Uctu et al.). The area of employment that is expected to grow the most in the long-term is AI training, which includes computer engineers and data scientists who

develop large language models (LLMs) like ChatGPT (Shine). In fact, ever since ChatGPT became available to the public in the fall of 2022, AI has contributed to the creation of 1.3 million new roles worldwide (Shapero). However, in contrast, the effective nature of new technology that automates previously mundane tasks has led to a replacement of human labor in the manufacturing industry as well as clerical and administrative roles such as customer service representatives, bank tellers, and telemarketers. Since 2000, more than 1.7 million routine manufacturing jobs in the US have already been lost to automation and 20 million manufacturing jobs around the world could be replaced by 2030 (Oxford). Some extreme estimates suggest that, over the next decade, 300 million jobs globally could be lost to AI, making up 9.1% of all jobs (Prestianni). This is expected to affect recent college graduates the most as this demographic's unemployment rate is currently at its highest in more than four years. Skills that are being taught in college for certain majors such as computer engineering, graphic design, and architecture are now rendered obsolete with high-performing AI technologies (Feroli). Holistically, as the 2025 Future of Jobs Report found, by 2030, global employers expect a net gain of 78 million jobs compared to today's workforce (World Economic Forum). The global issue of the future will quite definitely not be with the availability of employment opportunities. Rather, it will be regarding whether or not those jobs match both the interests of the labor force and the capabilities of AI to influence the existence of those jobs. These preliminary findings show that some industries, such as computer engineering and telemarketing, will be dwarfed by technological advancements while others, including data scientists and financial advisors, will experience long-term growth.

The second consequence of rapid changes in technological innovation on the global economy is the shift in employee productivity, an outcome that proves to be divergent between

short-term and long-term impacts. In the short-term, worker productivity has increased as a result of artificial intelligence systems because the technology takes care of mundane tasks, allowing employees to center their brain power and billable hours around creative, higher-level decision-making. For example, the automation of repetitive tasks including data entry, packing, and sorting allows employees to focus on more complex, high-value tasks that can have a greater impact on a company's operations. Furthermore, communication tools that are constantly being developed such as Microsoft Teams, Slack, and Zoom facilitate remote collaboration, providing employees with the ability to stay productive with one another from anywhere. However, in the long-term, the global economy is expected to suffer from rapid technological innovation because of patterns of diminished productivity. Younger members of society who are just entering the labor force face many distractions on a daily basis due to applications that limit their productivity while they are studying or at the beginning of their careers. The constant connectivity offered by the internet, whether it be through social media platforms, emails, or instant messaging apps, is intentionally designed to compete for engagement (Keer). This negative impact on productivity has already taken its toll on adults, with a survey by the American Psychological Association finding that roughly 40% of adults routinely multitask with digital devices, significantly increasing self-reported stress and lowering productivity (Hasan). Nonetheless, the youth are disproportionately affected as technology has become so much more accessible to students compared to their adult counterparts. Whether it be educational institutions, afterschool programs, or at home, smart devices are readily available for 94% of all students in the US (Robert). Studies have shown that multitasking, which is bound to occur with easy access to technology, decreases productivity by 40 percent (Steinhorst). In a similar vein, it takes over 23 minutes for the average human to fully regain focus on a task after being interrupted by

technology (Mark). As the younger generation that has grown up with technology integrated in their daily lives starts entering the workforce, worker productivity will notably decrease.

In the spirit of Huawei's concept of a "Glocal ecosystem," the impacts of innovation in technology at the global scale have trickled down to the local economy as well. As the rest of the world adapts to developments such as artificial intelligence, Grand Rapids and the broader West Michigan community has responded to the aforementioned consequences. While some are essential for the growth of the community and ensure short-term economic prosperity, others could be viewed as initially risky initiatives that will set the stage for a sustainable future.

To address the first consequence of rapid changes in technological innovation, the business community in Grand Rapids has largely coalesced around embracing AI as a tool to unlock the potential for structured employment growth. Primarily, heavy investment from community leaders into the technology sector through organizations such as The Right Place and the Grand Rapids Chamber have helped West Michigan blossom as a regional leader for job creation in the world of AI. For example, the Grand Rapids Chamber recently launched a Career Pathways partnership with Ferris State University to introduce students to high-quality career exploration and workforce readiness at an early stage, including jobs within the technology sector (FSU). Similarly, The Right Place's recently unveiled Tech Strategy calls for investment to grow technology to 10 percent of regional employment and adding 20,000 new jobs by 2031. These investments directly attract businesses to establish offices in Grand Rapids, thereby employing locals who have the technical skills and background needed to work in technology-related jobs. Regional progress is already on track to meet these goals, with 5,610 net new tech jobs added since 2021 and $57 million in venture capital raised through August 2025 (Crain's Grand Rapids). Grand Rapids is already gaining national recognition for this strong community

support for investing in technology-related employment to respond to the rise of AI: in 2025, LinkedIn ranked Grand Rapids the #1 City on the Rise in the country and CBRE named West Michigan among the Top 25 Emerging Tech Markets in North America.

Despite this strong growth from the region, Grand Rapids also faces some challenges in terms of employment in the face of AI and other recently-developed technologies, similar to economies across the world. In the fall of 2025, Acrisure, a global insurance brokerage and financial services company based in Grand Rapids, announced plans to cut 400 accounting positions in the first quarter of 2026, including roughly 200 jobs in Grand Rapids. These layoffs were explicitly said to be the result of AI systems that automated a significant portion of the accounting work (McVicar). More broadly, of the 5.6 million jobs estimated to be lost in the US to AI, Grand Rapids risks losing 79,910 jobs or 14.54% of the total labor force by 2027 (Sergent). While this is quite definitely an extreme estimate, it is still vastly disproportionate to the number of jobs expected to be created in the same timeframe, serving as a warning for the Grand Rapids community to continue investing in technology to create employment opportunities that replace those lost to automation.

While rapid changes in technological innovation play a crucial role in local and global ecosystems, some of the most significant impacts on the economy are as a result of cultural shifts. These changes either happen internally within a society or are influenced by foreign actors who integrate themselves into a new community. Either way, the consumer trends shaped by cultural transformations considerably impact the economy in largely positive ways.

Two key internal cultures that have become popular in the global economy are digital culture and sustainability culture. Digital culture is marked by “instant gratification,” or the concept of ease of access for consumers to a wide range of daily activities from shopping to

information to entertainment (Rathnayake). This cultural change rose as personal convenience became a necessity, forcing stores like Walmart and Target to move their industries to online platforms. As a result, by the first half of 2025, e-commerce sales made up 16.4% of total US retail sales (Dublino). Even in West Michigan, restaurant owners are finding ways to offer online ordering and delivery to respond to this cultural shift. A recent local example is Uccello's Ristorante: before the COVID-19 pandemic, none of their restaurants offered online ordering, but today, over half of their delivery orders are placed online (Carlson). On the contrary, a growing number of consumers are supporting sustainability culture where their contributions to the economy are rooted in environmentalism, compelling companies to adopt eco-friendly practices. This shift has given rise to a variety of products including electric vehicles, organic foods, and renewable energy (Brower). Here in Grand Rapids, the city government's 2025 Climate Action and Adaptation Plan incentivizes consumers to switch to electric vehicles in hopes of reducing per capita emissions (Frick).

Cultural shifts are also influenced by those who immigrate to new communities, introducing their personal experiences and ideas to the economy. Studies have consistently confirmed that these experiences are not just beneficial, but also necessary for countries who seek long-term economic growth. The US holds a strong advantage in this sense, with immigrants making up 19 percent of the labor force, far higher than the global average of a mere 3.7 percent (Kramer and Passel). As a result, their impact on the economy is significant, generating approximately $1.7 trillion in economic activity annually by contributing to major industries such as entrepreneurship, manufacturing, and agriculture (Roy). In Grand Rapids, particularly, many industry leaders have urged local businesses to tap into the potential provided by the hardworking, dedicated labor force of immigrants. Despite making up 8.9 percent of Kent

County's overall population, immigrants represented 10.5 percent of the labor force, helping our region meet rising labor demands. As the Grand Rapids Chamber found in an interview with Geoffrey Miller, the CEO of Grand Rapids Chair Company, by becoming more internationally-minded and strengthening their talent pool, they serve as "a driving force for innovation and productivity" (Cyr). As the local economy continues embracing changes in West Michigan culture due to increased immigration, sustainable economic growth becomes an increasingly viable path for the future.

When returning to the discussion of the impact of rapid changes in innovation, technology, and culture, it is evident that the local and global economy is constantly shaped by new developments in the efficiency of digital tools and shifts in human behavior. Specifically, advancements in all industries driven by artificial intelligence have significant impacts on employment and worker productivity. When the economy seems to be growing and adapting at such a quick pace, balance is key to ensure sustainable growth. As the author Jana Kingsford reminds us, "Balance is not something you find, it's something you create." In the face of issues as small as walking on the wrong side of the road at Davos to those as large as creating employment opportunities to offset the impact of automation, the local and global economy require a balanced response from mankind.

References

Brower, Michael. “Electric Vehicles in the Community: Benefits and Challenges.” *Clean Energy Group*, 24 Feb. 2023, www.cleanegroup.org/electric-vehicles-in-the-community-benefits-and-challenges/. Accessed 30 Jan. 2026.

Carlson, Kate. “Restaurants Embrace E-Commerce as Consumer Habits Permanently Shift.” *Crain’s Grand Rapids Business*, 27 Mar. 2022, www.crainsgrandrapids.com/news/economic-development/restaurants-embrace-e-commerce-as-consumer-habits-permanently-shift/. Accessed 30 Jan. 2026.

Cellan-Jones, Rory. “Robots “to Replace up to 20 Million Factory Jobs” by 2030.” *BBC News*, 26 June 2019, www.bbc.com/news/business-48760799. Accessed 30 Jan. 2026.

Crain's Grand Rapids Business. “Momentum in Motion: Tech, Growth and the Road Ahead for Greater Grand Rapids.” *Crain’s Grand Rapids Business*, 20 Oct. 2025, www.crainsgrandrapids.com/content-studio/grand-rapids-tech-growth-surges-in-2025-report/. Accessed 30 Jan. 2026.

Cyr, Elizabeth. “Innovations in Talent Acquisition - Grand Rapids Chamber.” *Grand Rapids Chamber*, 15 July 2024, grandrapids.org/news/innovations-in-talent-acquisition/. Accessed 30 Jan. 2026.

Dublino, Jennifer. “Retail or E-Tail? Buying Online vs. Buying in Person.” *Business.com*, 9 Sept. 2024, www.business.com/articles/retail-or-e-tail-buying-online-vs-buying-in-person/. Accessed 30 Jan. 2026.

Feroli, Michael. “AI’s Impact on Job Growth | J.P. Morgan Global Research.” *Jpmorgan.com*, J.P. Morgan, 15 Aug. 2025, www.jpmorgan.com/insights/global-research/artificial-intelligence/ai-impact-job-growth. Accessed 30 Jan. 2026.

Ferris State University. “Grand Rapids Promise Zone, Grand Rapids Chamber Launch Career Pathways Partnership to Introduce Students to In-Demand Fields.” *Ferris.edu*, 5 Jan. 2026, www.ferris.edu/news/archive/2026/ferris-state-promise-zone-launches-career-pathways.htm. Accessed 30 Jan. 2026.

Frick, Melissa. “5 Things to Know about Grand Rapids’ New Climate Action Plan.” *MLive*, 14 Aug. 2025, www.mlive.com/news/grand-rapids/2025/08/5-things-to-know-about-grand-rapids-new-climate-action-plan.html. Accessed 30 Jan. 2026.

Hasan, Kamrul. “Digital Multitasking and Hyperactivity: Unveiling the Hidden Costs to Brain Health.” *Annals of Medicine & Surgery*, vol. 86, no. 11, 18 Sept. 2024, pmc.ncbi.nlm.nih.gov/articles/PMC11543232/, https://doi.org/10.1097/ms9.0000000000002576. Accessed 30 Jan. 2026.

Huawei Corporation. “Huawei’s GLocal Ecosystem: Helping Carriers Unlock the Golden Era of IoT.” *Carrier.huawei.com*, 2025, carrier.huawei.com/en/trends-and-insights/iot/huawei-glocal-ecosystem. Accessed 30 Jan. 2026.

IBISWorld. “Percentage of Business Conducted Online - Business Environment Profile.” *Ibisworld.com*, 18 Aug. 2025, www.ibisworld.com/united-states/bed/percentage-of-business-conducted-online/88090/. Accessed 30 Jan. 2026.

Keer, Lisa. “Digital Distraction and Its Impact on Your Health.” *Massachusetts General Hospital*, 27 Sept. 2023, www.massgeneral.org/news/article/digital-distraction-and-its-impact-on-your-health. Accessed 30 Jan. 2026.

Kramer, Stephanie, and Jeffrey S. Passel. “What the Data Says about Immigrants in the U.S.” *Pew Research Center*, 21 Aug. 2025, www.pewresearch.org/short-reads/2025/08/21/key-findings-about-us-immigrants/. Accessed 30 Jan. 2026.

Mark, Gloria. “Brain-Based Tips for Sharpening Your Focus.” *University of California-Irvine*, 11 Dec. 2018, www.informatics.uci.edu/forbes-brain-based-tips-for-sharpening-your-focus-gloria-mark-cited/. Accessed 30 Jan. 2026.

McVicar, Brian. “Major Grand Rapids Company Laying off 400 People due to AI, 200 in West Michigan.” *MLive*, 8 Oct. 2025, www.mlive.com/news/grand-rapids/2025/10/major-grand-rapids-company-laying-off-400-people-due-to-ai-200-in-west-michigan.html. Accessed 30 Jan. 2026.

Prestianni, Timothy. “59 AI Job Statistics: Future of U.S. Jobs.” *National University*, 30 May 2025, www.nu.edu/blog/ai-job-statistics/. Accessed 30 Jan. 2026.

Rathnayake, Pathum B. “The Fast Lane Generation: Unpacking Instant Gratification in Digital Natives - Information Matters.” *Information Matters*, 22 Oct. 2025, informationmatters.org/2025/10/the-fast-lane-generation-unpacking-instant-gratification-in-digital-natives/. Accessed 30 Jan. 2026.

Robert, Jenay. “Access to Educational Technology.” *Educause*, 3 Oct. 2022, www.educause.edu/ecar/research-publications/2022/students-and-technology-report-rebalancing-the-student-experience/access-to-educational-technology. Accessed 30 Jan. 2026.

Roy, Diana. “How Does Immigration Affect the U.S. Economy? | Council on Foreign Relations.” *Council on Foreign Relations*, 4 Dec. 2025, www.cfr.org/articles/how-does-immigration-affect-us-economy. Accessed 30 Jan. 2026.

Sergent, Katie. “Nearly 80,000 Grand Rapids Jobs Threatened by AI, Study Finds.” *WWMT*, 2 Aug. 2023, wwmt.com/news/local/artificial-intelligence-jobs-grand-rapids-

automated-2027-global-national-detroit-las-vegas-miami-employment-statistics-study-bureau-labor-economic-forum-west-michigan. Accessed 30 Jan. 2026.

Shapero, Dan. “AI Has Already Added 1.3 Million Jobs, LinkedIn Data Says.” *World Economic Forum*, 15 Jan. 2026, www.weforum.org/stories/2026/01/ai-has-already-added-1-3-million-new-jobs-according-to-linkedin-data. Accessed 30 Jan. 2026.

Shine, Ian. “Jobs AI Will Create? Here’s the World Economic Forum View.” *World Economic Forum*, 18 Sept. 2023, www.weforum.org/stories/2023/09/jobs-ai-will-create/. Accessed 30 Jan. 2026.

Steinhorst, Curt. “How Multitasking Erodes Productivity and Dings Your IQ.” *Forbes*, 20 Feb. 2020, www.forbes.com/sites/curtsteinhorst/2020/02/20/how-multitasking-erodes-productivity-and-dings-your-iq/. Accessed 30 Jan. 2026.

Uctu, Ramazan, et al. “Creative Destruction and Artificial Intelligence: The Transformation of Industries during the Sixth Wave.” *Journal of Economy and Technology*, vol. 2, 1 Sept. 2024. *ScienceDirect*, www.sciencedirect.com/science/article/pii/S294994882400043X, https://doi.org/10.1016/j.ject.2024.09.004. Accessed 30 Jan. 2026.

University of Pennsylvania. “Penn Wharton Budget Model.” *Penn Wharton Budget Model*, 8 Sept. 2025, budgetmodel.wharton.upenn.edu/issues/2025/9/8/projected-impact-of-generative-ai-on-future-productivity-growth. Accessed 30 Jan. 2026.

World Economic Forum. “Future of Jobs Report.” World Economic Forum, 2025.