

14.1: Introduction

Information systems have evolved at a rapid pace ever since their introduction in the 1950s. Today, devices that we can hold in one hand are more powerful than the computers used to land a man on the moon. The Internet has made the entire world accessible to people, allowing us to communicate and collaborate like never before. In this chapter, we will examine current trends and look ahead to what is coming next.

14.1.1: Global

The first trend to note is the continuing expansion of globalization due to the commercialization of the internet. The use of the Internet is growing worldwide, and with it, the use of digital devices. All regions are forecasted for significant growth, with some regions higher than others, such as Asia and Latin America.

The United Nations June 2020 “[Report of the Secretary-General Roadmap for Digital Cooperation](#)” reports that 86.6% of people in the developed countries are online, while only 19% people are online in the least developed countries, with Europe being the region with the highest usage rates and Africa with the lowest usage rate.

Chapter 11 discussed that by Q3 of 2020, approximately 4.9 billion people, or more than half of the world’s population, use the internet and forecast growth of 1,266% for the world total, with Asia being the highest 2136%, Latin America at 2489%. The smallest growth is still forecasted over 200% growth. For more details, please view the data at <https://internetworldstats.com/stats.htm>.

14.1.2: Social Media

Social media is one of the most popular internet activities worldwide. [DataReportal](#) (2023) reports that there are now **4.76 billion** social media users around the world, equating to just under **60 percent** of the total global population.

As of October 2023, Statista.com also reports that Facebook remains the most popular social network globally with about 3.03B monthly active users, YouTube with 2.5B, WhatsApps and Instagram with 2B, WeChat at 1.3B, Instagram at 1.1B, TikTok at 1.2B, and X/Twitter at 666M etc. For more details, please view this report at [Statista.com](#).

14.1.3: Personalization

With the continued increased usage of the internet and e-commerce, users have moved beyond the simple, unique ringtones on mobile phones. They now expect increased personalized experience in the products or services, entertainment, and learning, such as highly targeted, just-in-time recommendations that are finely tuned with their preferences from vendors' data. For example, Netflix recommends what shows they might want to watch. Wearable devices from various vendors such as Apple, Google, Amazon make personalized recommendations for exercises, meditation, diet, among others, based on your current health conditions.

14.1.4: Mobile

Perhaps the most impactful trend in digital technologies in the last decade has been the advent of mobile technologies. Beginning with the simple cell phone in the 1990s and evolving into the smartphones and tablets of today, mobile growth has been overwhelming.

Smartphones were introduced in the 1990s. This new industry has exploded into a trillion-dollar industry with \$484B spent on smartphones, \$176B in mobile advertising, \$118B in Apps, \$77B in accessories, \$25B in wearables (Statista, 2020.) For more details, please view [The Trillion-Dollar Smartphone Economy](#).

14.1.5: Wearables

The wearable market, which is now a \$25B economy, includes specific-purpose products such as fitness bands, smart socks, eyewear, hearing aids. We are now seeing a convergence in general-purpose devices such as computers and televisions and portable devices such as smartwatches and smartphones. It is also anticipated that wearable products will touch different aspects of consumers' life. For example, smart clothing such as [Neviano smart swimsuits](#), [Live's Jacquard jacket \(Lifewire, 2020\)](#),

Advances in artificial intelligence, sensors, and robotics will expand to wearables for front-line workers such as Exoskeletons such as [Ekso's EVO](#) to assist workers who have to carry heavy weight items such as firefighters, warehouse workers, or to health industries to provide mobility for people who are limited in mobility.

14.1.6: References

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