

Youth – Rising and Reigning Scenario

Content and Services -- Production and Delivery Dominated by Young Users

2010-2012

At the start of the second decade of the new millennium, the global economy continued to stagger through recession, job loss, and massive government debt. Slumping national economies strained international organizations as fractures emerged within the EU. Governments were forced to face the stark realities of spending priorities, and investments in social welfare were challenged for the first time in generations. The Arab Spring, the protests of the disenfranchised in European countries like Greece and Spain, and other social unrest movements powered by Internet technologies changed the world. Young people increasingly became the power producers and consumers of Internet content.



Climate change and its impact became a central focus. Altered weather patterns contributed to an increase in disasters in all parts of the globe; historic floods and tornadoes in the United States and the earthquake and tsunami in Japan in 2011 created both huge economic costs to G8 countries, but also raised awareness more broadly about possible increased risk presented by the destructive forces of nature.

The spate of natural and environmental disasters captured the world's attention and galvanized relief efforts supported by social networking tools and citizen reporting, revealing the importance of "real-time" communication and on-the-ground assessment of the disaster landscape. The new phenomenon of social networks filled a void – and was adopted readily by traditional aid initiatives and citizen reporters. Ad hoc efforts and new NGOs quickly formed in response to provide assistance and coordination for victims. This new flood of information was welcomed by traditional aid respondents, but challenges existed to aggregate and authenticate the great influx of data and establish new methods of finding and responding to victims. Still, reports from citizens and aid workers on the ground were disseminated instantly via social media; and new uses of ICTs and radar in tracking and finding victims, and in response emerged. Together with video, social networks revealed the successes and failures of relief efforts, leading to new approaches of intervention and collaboration among aid responders, and an empowered citizenry better able to help themselves and help their neighbors in times of disaster.

More pervasively, the growth of social networking changed the way people maintain relationships in their everyday lives. Those who were adults when the Internet emerged used it to reconnect with lost friends. But the young – especially those who grew up with the Internet, mobile devices, and social networking assumed that such services were a basic requirement. Mash up applications added location information and video to provide a historical record of social interaction. Interactions for youth were often non geo-specific, and they assumed that global connectivity and mobile devices would continue to integrate into their lives and communications.

The extensive amount of content and personal data volunteered by individuals for their online profiles was raising privacy concerns. Governments and privacy activists were cautioning about the risks – and already data loss and identity theft were becoming commonplace. Yet despite the potential for misuse of this information, and periodic examples of its abuse, there seemed to be little to dampen the enthusiasm of users to expose their personal lives to the public or their ever-expanding network of friends. And even while raising concerns, businesses and governmental agencies raced to integrate online and social networking applications into their customer and citizen communications, taking advantage of the increased availability of personal data to tailor communications to attract digital citizen consumers.

The success of applications like Facebook and Twitter drove the emergence of similar competing services, including in a range of languages, and from suppliers located around the globe. Users found new choices – perhaps too many. Companies, large and small, went into and out of the social networking business with little notice. While this resulted in the ‘stranding’ of some users, still, increasingly, rapid growth of such networks was ongoing, and young users dictated which technology platforms were successful and which ones died.

While privacy and security concerns also existed for cloud computing, there was little that could discourage the desire of people to make their content portable. With the rapid improvement in mobile devices, both in terms of storage and the breadth of applications, users became more comfortable shifting their work and personal data to remote storage for ready access at any time and from any location – further altering the norm for access and business communication.

The Wikileaks case, the News of the World scandal, and the financial success of the Huffington Post, led consumers to question the value of traditional journalism. Content producers and consumers increasingly turned to alternative methods and media to media and share news. Traditional newspapers wrestled with declining readership numbers and advertising revenues. Young, ambitious reporters increased their influence in the online world.

Young people globally became politically more active and organized, and many such initiatives drew together like minded activists. Many joined the Pirate party, the Internet party and other technology-concerned political movements.

2012-2014

By 2014, the adoption of LTE by major wireless carriers as the new standard for mobile communications produced dramatic improvements in the broadcast and delivery of content to portable devices. Vast increases in the speed and volume of data available to users led to a period of dramatic growth in manufacturing and application development.

These advances ushered in an era of wireless ubiquity where users sought remote monitoring and control over increasing elements of their lives. The smart grid and monitoring increased energy efficiency in buildings, vehicles and electronic devices. In an effort to improve energy efficiency and to provide more control to the user, everyday appliances became smart machines connected to the network, generating data logs and allowing remote access.

Social networks made great use of this new information. By networking appliances and recording usage data, people were able to track their electrical consumption, performance and quality. They shared these findings with others, pooling information together to create automated assessments, benchmarks and purchasing recommendations. It also greatly assisted the troubleshooting process as technical support representatives or repairmen could perform remote diagnostic tests to address problems remotely.

Houses, energy consuming devices, and automobiles also integrated wireless connectivity as a standard feature. For motorists, this provided location-based information for traffic monitoring and opened a marketplace for on demand audio and video entertainment and information resources. With the added ability to record and transmit video, cars were equipped with cameras that allowed parents to monitor their children's driving behavior. These devices had the added benefit of serving as accident video recorders, the use of which was incentivized by insurance companies through lowered premiums. Wireless connectivity and the expanding use of sensor technologies facilitated the remote diagnostic and maintenance of vehicles. The privacy and security issues of these new technologies challenged the technologists, the lawyers and the legislators.

But the world was not necessarily peaceful. Continued civil strife in certain oil producing countries, unpredictable and extreme weather and earthquakes in Asia, and continuation of the year long rash of tornadoes and flooding in the US continued – interrupting reliable power in many cities or raising the cost of energy. Extreme and unpredictable weather began to affect reliable agricultural production, and the cost of shipping food, and people spiraled ever higher. In response to these threats to energy and food, smart devices and sensors were increasingly seen as essential tools to collect information on an ever growing array of business and personal activities.

In response to ongoing fears of terrorism and online crime and risks, biometric identification became mandatory for government issued IDs. Faced with this new requirement, users sought to integrate biometrics into their smart phones since it provided added security to communications and commerce. Mobile devices evolved into the principal instrument for both personal identification and commerce as plastic cards that performed these tasks become redundant.

Citizen journalism grew – shifting control of information from major media conglomerates to informal gangs of powerful, yet loosely affiliated information leaders known as "connectors." Charismatic leaders emerged with their own 'commentators nets', replacing formalized news commentators. Without editorial controls or industry oversight, the connectors exerted much influence in society and were behind the rise and the fall of many public figures. A new form of 'cyber bullying' emerged in daily life, and in politics. Online defamation became common and those defamed had little recourse. Lawsuits and government investigations proved unsuccessful in addressing these problems.

Users believed that the well-being of the majority was more important than the rigid preservation of copyright laws. Copyright systems worldwide crumbled under the pervasive violations of copyright laws by individual users and the inability of governments to prosecute the volume of offenses. New content aggregators emerged who developed new business models; some content producers adapted by developing new business models. Others disappeared.

2015-2020

As with the Arab Spring in 2011, the Internet and social and mobile networks continued to bring visibility to the oppressive acts of some governments against citizens who engaged in political dissention. Social networking powered many of these movements, with trans-national support thanks to privacy-enhancing technologies. People, particularly the young, demanded action against such states.

Many countries evolved or revolved towards freedom and this drew a returning Diaspora, formerly in economic, social, or actual political exile to return to their home countries to build democratic and responsible governments. Yet, the cost of wars, social unrest and conflicts, the cost of dealing with climate change and natural disasters had impacted many local economies – and slowed the economic growth and creation of jobs. The young responded by creating new online businesses, giving rise to a new social order, and a geo-political perspective of national identity/nationalization.

2015 saw the major breakthrough in software programming for real time language translation, both written and spoken, in the “cloud”. With this development, the lives and work of researchers and educators, health care providers, and law enforcement were dramatically altered as a truly global communication network was realized that allowed real time information exchange across geographic, language and cultural barriers.

With this new capability, community elders were drawn into the on-line activities as the translation software coupled with the rapid evolution of the video phone allowed them to share their heritage with younger generations as never before – no keyboard required! This development had a tremendous impact on the preservation and continuation of numerous native languages and cultures, which were struggling to find a place and relevance in this modern world.

With users continuing to push the limits of mobile devices on a global scale with 10s of millions of new mobile users in China, India and Africa, battery technology was seen as roadblock to further development on the mobile platform. Government-sponsored research programs established new public-private collaborations and achieved breakthroughs in solar and battery power, eventually leading to mobile devices with autonomy of operation for days and even weeks. The world achieved its third Billion users.

In 2017 a significant breakthrough in solar battery charging technology occurred. New mobile and handheld devices were available with a separate device with allowed for a powerful charge in a matter of minutes-not hours. Users were quick to recognize this market-altering development and drove another huge expansion of the mobile device market. Solar emerged as a major energy source for ICTs. This new battery technology was also hailed by civil society organizations as a key to bringing reliability and predictability to those regions and countries struggling with these limitations in the past.

While the expansion of mobile usage was welcomed – many of the historic challenges remained, namely privacy and online security. But this too was now being addressed in a new manner with software developers recognizing the fundamental importance of the issue and building in security into both the devices as well as the software. Users of all ages became more demanding in terms of privacy and information security. But interoperability was a challenge in this new improved online world. As was

recycling of devices – adding to the e-waste stockpiling in most countries, or being shipped to the developing countries.

Responsible use on the Internet was now being viewed in the same light as responsible driving was in the past: as a shared responsibility that all were expected to contribute to. Another sign of this new sense of online responsibility was the development of youth organizations (similar to the Boys and Girls Scouts) charged with teaching and spreading the message of responsible use to new users. Recognizing the value of these youth organizations, national governments were quick to jump in and support these initiatives at the grassroots level.

Growth of concerns about online safety and identity theft, coupled with viruses, malware and financial risks led to industry and government collaboration on online safety requirements. Mandated digital citizenship training in preschools and primary schools spread around the US and the world – required for mobile and broadband users alike. It started with schools but migrated aggressively into the workplace. To control insurance costs, employers of all sizes accepted the government required ‘online licensing programs provided by government agencies, based on ‘standards’ developed by the Internet’s governance departments in all OECD and many other nations.

Digital technical skills became a baseline for employment – especially in government jobs, and automation of many functions moved very rapidly into the mobile, untethered devices, using voice and images as access mechanisms. Video traffic dominated the Internet. Vast investments in broadband continued throughout the world, inspired by the UN Broadband Commission and the OECD. New spectrum allocations lowered access costs.

2020-2025

By 2021, the 65-year old of 2011 was 75 and was redefining the concept of “old age” ; thanks to improved health care, elders had both energy, and interest to continue their contributions. But, due to the lack of jobs, governments and corporations pushed earlier retirement for many of their workforce employees. Health and fitness become a requirement for insurance and in some cases for employment. Seniors emerged as a new, frustrated political group and mobilized globally, in the way the youth had in 2010 and 2013. The overall percentage of the population in the US, Canada and some European states in the ‘elder’ status was very high, partly because of the 2010-2015 immigration policies in those countries. Those countries now found a severe shortage of caregivers for the eldest, especially for those who require assistance and lack financial resources. New uses of mobile devices and robotics enabled remote monitoring, but did little to deal with the physical care challenges.

The most dramatic technological development to emerge at the close of the decade was the widespread integration of miniaturized video into the fabric of everyday life. With video recording equipment becoming progressively smaller, and the ability to transmit video feeds requiring minimal space, viewwearTM became the new means to record and broadcast video. Glasses, hats, clothes all became devices to provide a video record of that satisfied consumers’ desire for a first person, participatory perspective to commemorate social interaction.

With seemingly endless storage available in the cloud and sufficient wireless capacity to send as much data there as needed, viewwear™ allowed its users to document their lives more completely than ever before. This was used in varying forms based on the individual's preferences and needs.

Using this service, social networking took a new form as people shared their direct life experiences in episodic form called life-feeds, broadcast live, or on demand, for subscribers. Continuing to serve the voyeuristic nature of audiences once satisfied with reality TV programming and twitter feeds, people watched and rated the entertainment value of user-generated productions of real life experiences.

In addition to personal recordings and public broadcasts, viewwear™ served as a deterrent to physical harm. Since the video record of any incident or attack could be retrieved from storage and used as evidence, the service provided a strong disincentive for assailants. Some in society accepted the pervasiveness of video recordings and were willing to sacrifice individual rights to privacy and freedom from unauthorized recordings as it became easier to solve crimes and adjudicate legal claims. Others set up viewwear-free zones.

But, AIDS, pandemics, civil strife and natural disasters affecting some parts of the world continued -- adding to the financial debts faced by governments. The warming of the world's oceans was having an impact on marine life, and food production had replaced climate change as the topic of debate online, and on any remaining global broadcasting networks, causing global alignments of corporations, purchasing of land across national borders by small but rich governments to raise and ship food into their own countries. New forms of 'divides' had emerged.

As governments faced fiscal difficulties to care for retired baby boomers and no willingness to shift resource allocations, they innovated to generate revenue. While society was generally unwilling to embrace widespread law enforcement surveillance of video feeds to prosecute victimless crimes, its resistance was not so great when the penalty was a fine and a ticket. While citizens once decried the frequency of parking tickets and the invasiveness of speed cameras, they came to bemoan tickets incurred for breaking laws they had previously broken with impunity. Police access to vehicle video feeds resulted in fines for speeding and for violations like rolling stops. Life-feeds yielded fines ranging from jaywalking to crimes seldom pursued by police in court like recreational drug use.