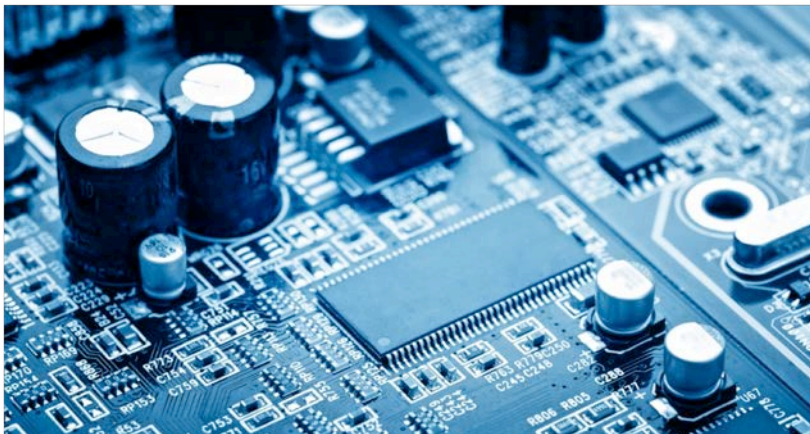


THE MAURELIAN

Future Trends

Inform and entertain



The future trends in technology are fascinating and perhaps shocking to consider. In this edition of The Maurelian, a few technological innovations and major cultural shifts have been researched and contemplated. Topics range from the vital signs of the national health care industry to the use of holograms in the entertainment industry.

Share your observations or commentary with us.

Send to Shawn Kelly, skelly@cbhs.org

A few thoughts on the future ...

“Figuring out what the next big trend is tells us what we should focus on.”

- *Mark Zuckerberg*

“It’s not a faith in technology. It’s faith in people.”

- *Steve Jobs*

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Where is American Health Care Heading?

By: Cole Capoccia

The American economy is a plethora of private and social institutions. Sometimes the free market and government regulation clash, and the government often wins. The medical industry exemplifies this. Being worth 3 trillion dollars, it is a cash cow.

Health these days is a tricky game. Whether you get coverage from your employer or you go out alone in the market, obtaining health insurance can be challenging. In fact, I believe that in the next 15 years the health industry will be nationalized. This is not a good thing.

Nearly 46 million Americans don't have medical insurance, and just one accident could leave nearly 15% of the American populus in serious debt. In fact, a large portion of the uninsured are people between 19-29. Moreover, most of the uninsured have one or more full-time workers in their household. I firmly believe that this staggering number will continue to grow. The unfortunate reality is that most of these people are more likely to die in the hospital than people who have insurance. This serious social issue can lead to massive social change in society. In today's world, many people believe that a functioning healthcare system for all Americans is as important as the Civil Rights Movement or the Revolutionary War. Nationalization of the health industry in America is inevitable.



Experts estimate that the medical industry overcharges clients 10 billion dollars a year. These gross overcharges have caused families to experience major financial upheaval. A nationalized program would help to curb debt involving medical expenses, they argue.

It is almost impossible to ignore the fact that our neighbors to the North have a nationalized health care system that has worked pretty well even though it has lead to heavy taxation. Every province of Canada has its own health care system, and this seems to cause many issues. The quality of the Canadian health care system is questionable. The cost of nationalized health care along with the fact that the wait for medical procedures in Canada is lengthy do not equate to a good model for America to follow.

Money is a major motivating factor behind the medical industry including the health care insurers. Doctors, pharmacists, and nurses alike could lose the motivation to go into the medical field if the government fully regulates the costs for various procedures. There are no easy answers to this huge issue, and the future does not look very clear.

Nationalized medicine has been the goal for several generations of politicians. Their dream is not far off. Our lawmakers would be stupid to model nationalized health care after Canada. With attempts to repeal the Affordable Care Act, conservatives and liberals alike have begun to ponder the idea of a nationalized healthcare system. The American public wants a functional health care system but the complex political, financial, and social concerns of insuring all Americans will continue to be a mountain to climb for American lawmakers and the health industry. All Americans should pay close attention to what is happening.

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Robotics on the Move

By: Ian Rone



Technology can be described as any tool that humans utilize. These “tools” can be something as humble as the bread slicer or as complex as the latest iPhone. Technology has brought us into a wonderful world where we can have a machine wash our clothes, or have a jet take us almost anywhere in the world. The latest technology has made living in the 21st century a lot easier compared to living just a hundred years ago. But, where is all this new technology taking us? What are scientists going to think of next to make life for the modern American just that much easier and different?

Already, we have self-driving cars on the verge of becoming reality. What could be more amazing than that? How about a personal driver that looks exactly like you? Humanoid androids have been in the works since as early as 2002, and are just getting more realistic. Hiroshi Ishiguro works in the Intelligent Robotics Laboratory in Osaka, Japan. The first android he made was of his daughter, and that was in 2002. Since then, he has made 30 unique androids. They range from local newscasters to famous actresses, and some of them have made public appearances in local cafes and malls. Ishiguro has even made an android version of himself called Geminoid HI-1.

The most recent android Ishiguro has created is called Erica. She is a fully autonomous android that can hold ten-minute conversations with people. She comes complete with life-like expressions and specific human mannerisms that make the illusion even more authentic. Erica was created in 2015. Just imagine what these androids will be capable of doing in the near future!

Technology is progressing so quickly that it might not be long before everyone can purchase a personal android to do one’s bidding. Adding humanoid androids to the work force could be useful by making the androids do jobs that humans cannot, or do not necessarily want to experience. While this would take away jobs from humans that need an income, it is still a viable option that is being heavily considered by many corporations. Decades of automation in the workplace have displaced many low skill workers. Now, higher skilled workers with college degrees find themselves being replaced with computer innovation.

The future of technology is upon us. Androids are just a small part of what technology will bring in the next decade or two. There are many technological advances in today’s world that were mere science fiction fantasies 10 or 20 years ago. Self-driving cars and 3d printers are being brought forth on production lines right now. Things that people would not expect to exist for a long time are becoming real right before our eyes. As 2018 unfolds, futuristic breakthroughs are entering our lives whether we are ready or not.

What Will Work Be in the Future?

By: Casper Jones

Society started out with everyone doing all his or her work by hand, but it has slowly evolved over time by the introduction of advanced machinery into the work force. Machines and other new technologies have been evolving, but human populations have survived and benefitted from the changes. There was a time where there were a seemingly endless number of jobs for people to pursue. People stitched clothes, pressed metals, and hand-carved wood, but the need for a lot of people doing those jobs has disappeared because machines can do most manual labor faster and cheaper. While technology is rapidly advancing at a pace never foreseen in history, people don't need to worry.

It is true that in the future robots and machines could become dominant in the work force, but that would also have to create jobs for other people. Someone must build and perform maintenance on these machines. Skilled workers must program them to do what they are designed for. And on top of that, one can realize that there is no way a country would allow robots to take so many jobs that people a nation's economy would collapse.

Massive unemployment in a technologically advanced country would destroy a nation but not before the government gave out massive amounts of money to sustain its population. This redistribution of wealth would ultimately resemble Communism. Fear of this level of political and economic change places breaks on allowing for the full automation of the American workplace. There is no easy solution to finding the best way to balance workforce technological innovations with the multiple skill levels of American workers.

Many people are worried about the advancement of robots and various other technologies. This is likely a healthy fear to possess, but people also love new technological changes. The future of the workforce will demand the same type of human skills such as team building and cooperation. The major shift will simply be a much heavier reliance on advanced instruments. This is the fast road America is creating under its feet.



Virtual Reality

By: Tom Lamm

Imagine a world where anything is possible. Virtual Reality (VR) is an experience that is about the human body, human interaction, and human identity. The VR experience usually involves putting on a mask that has a screen in it. From there, you look around manually, as you normally would, while controlling your arms with joysticks. Virtual Reality is a tool that can be used for many tasks in daily life, whether it be for school, work, or playing your favorite game.



However, VR has not been perfected. Jaron Lanier, a computer scientist and VR pioneer, is making Virtual Reality usable for improved communication. He says that VR is the future as opposed to Artificial Intelligence (AI). His push for communication via VR is being noticed by many, including a school in Arlington, Virginia, which has started using VR to take kids on virtual field trips. VR experiences are integrating real life aspects into the system. Vive, an HTC and Valve VR headset, has plans for a mobile phone VR headset with a tracker that can integrate real world, real time experiences into the virtual world.

Companies are taking notice of the untapped potential of virtual reality. Alex Kipman, a software engineer at Microsoft, says that Microsoft is already pushing for a single platform for all forms of mixed reality. Kipman says, "In the future, devices will become lenses, lenses that will allow us to see, touch and feel mixed reality. Mixed reality will enable us to freely and instinctually mix real people, places, and things with virtual people, places and things. This will unlock amazing new experiences anchored to the physical world around us. In the future, there will no longer be a need to choose between transparent or opaque headsets. Devices will adapt instantly blending the real and the virtual into mixed realities." With a single platform being pushed, multiple tech companies will be able to produce truly innovative products.

Usually, VR headsets involve computers, which take a while to install, but Samsung is looking to integrate smart phones with VR technology. Samsung's VR set is an affordable, easy to install headset that is only \$100. However, it does not include joysticks like the more expensive ones, such as the Oculus Rift, which is priced at \$400.

Big companies such as Facebook are getting involved in the VR market as well. Mark Zuckerberg helped develop the Oculus Go, another headset that does not have positional tracking either, but is an option for those who do not want to spend lots of money on a new device. He is optimistic and says he wants one billion people to buy a VR headset. These high expectations may disappoint him as the consumer market for VR devices has seen lukewarm sales.

My prediction is that big entrepreneurs such as Mark Zuckerberg getting involved in the VR market will hopefully attract other wealthy entrepreneurs to get into the business and take VR to places unexpected. With these wealthy elites investing in VR, maybe Kipman's vision of VR lenses will become a reality sooner than we think. Soon, gaming controllers or keyboards will be a thing of the past. Soon joysticks and our body will be the thing. This will evolve into school or business will be attended in VR headsets. Communication will be enhanced just as Lanier says will happen. With all of these innovations coming along, what will the future look like?

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Life is Moving Quickly

By: Kellon Musgrove



On a typical afternoon, I arrive at my house and do my homework on my laptop. I get on my smartphone and text friends with any questions I have. Often we talk about classes we share. Once my homework is done, I might play my Playstation if I have the time, but usually I end up playing on my phone or watching television.

As you can see, my typical school day afternoon, which many at CBHS would describe as “normal,” is a high-tech lifestyle. My parents often talk to me about what technology was like in their day. Small, boxy TVs with antennas sticking out were the norm. A large brick resembled early model mobile phones. Instead of having music instantly downloaded to

your phone or using a service like Spotify, you would have to put a cassette tape in a small box and clip it to your belt to listen to music while walking. Those relics were innovative staples of life for my parents’ generation. Many high school age students today would call 80’s technology somewhat “ancient.”

It may look like I am just another modern-age high school kid who is spoiled by all the modern amenities of 21st century life. However, my typical afternoon compared to the childhood of my parents is simply a testament to the vast technological innovations every generation experiences. We live in a time where instead of boxy TVs with three channels, we have huge TVs with thousands of channels with high quality imagery. Instead of a brick-like cell phone, we have smartphones, equipped with loads of features and applications that we can slip into our pocket. Instead of Sony Walkmans, our smartphones play music and even music videos if we wanted to feel retro.

Technology certainly has made my daily life different than my parents’. And technology is not slowing down. There are more innovations springing up, such as Amazon Echo and Google Home, which can perform tasks like setting reminders, turning on music, and switching off the lights, all by the sound of your voice. Soon, amenities like these and others such as Hue, which allows you to change the color of lights in different rooms, Nest products, such as “smart thermostats” and “smart doorbells”, and Ring, a modern-age home security program, will be a feature in thousands of home.

Even greater technological advancements are becoming more and more common. Phones using face recognition technology and remote-controlled drones delivering mail are becoming a reality. Self-driving automobiles and even fry-cookers with preset cooking times and temperatures to deliver you the best possible French Fries are making life simpler and perhaps a bit lazier. Want to turn a whole room of your house into an IMAX theater? No problem. Cloning sheep seems simplistic by today’s standards. Artificial Intelligence that serve many purposes, whether it be instantly translating between languages, spotting burglars in the neighborhood, detecting malware, or even locating cancer in your cells, are all moving out of the planning stages and into testing and implementation.

Technological advancements like these are a sign of the times. But is it a good sign? In my opinion: yes, but to an extent. Advancements like Google Home, Nest products, and the Ring security system are advancements that Americans should be investing in. They keep your home efficient, functional, and most of all, safe. But some innovative products are not needed. I don’t want drones delivering packages all over the world. Wide-spread drone use would likely fail as it was taking jobs from hard-working Americans.

There’s nothing wrong with technological innovations. They make lives more functional. However, there should be practical limits. We don’t need innovations that put people out of jobs or lead to an event out of a science-fiction movie. I believe that scientific and technological innovations are very cool, useful, and interesting, but we must tread lightly.

Human Labor and small talk is so 20th Century

By: Pete Voehringer

Since the Industrial Revolution of the 18th century in Europe, the world of technology has been changing. Technology, industry, and human life have all been transformed in ways once unimaginable to most people. The United States has seen this transformation in all facets of life, and, though many say the quality of life has improved due to such changes, it has been negatively affecting the American workforce for decades. Whether it was the Rust Belt workers in the 50's or the southern agriculturalists



in the earlier part of the twentieth century, technological advancements have been a major cause for unemployment increases. As these changes have undoubtedly brought happiness and rapid productivity to the lives of the American people, there are consequences for such changes. Machines and technology are used instead of hourly workers, while robots and computers are used instead of doctors, and the list goes on and on. In the 21st century, America and countries around the world are going to see a decrease in demand for human labor. Technology is taking us in the direction of computerized cars, talking robots, and other, yet to be developed, computer-driven machinery.

As the effects technology and industry will have on industry and the workforce are pretty well known, it is time to explore another avenue: Communication. In this new era of technology, social media, texting, and email are becoming the mainstream means of communication. Face to face conversations and even phone calls are more rare than they were 50 years ago. What's next in this field of communication? In my opinion, the smartphone age is only the beginning. In the future we won't even have to type in our phones. We will probably have to think about talking to someone and some device or computer will distribute a message or thought. That may be way on down the road, but I think it is a real possibility and so does technology expert David Lemereis who says "Scientists worldwide are working hard to develop Natural User Interfaces with the ultimate aim of making computing and communication ubiquitous as a natural part of our lives." Although a bit scary, this is what our world is coming to. It is impossible to predict how communication will develop in the next century and beyond, but public speaking and personal conversations could easily be going out of style.

If one really thinks about this, communication controls the lives of Americans. Whether it is a family schedule or political agenda, everyone talks to someone. Technological experts predict that communication is going to evolve in such a way that even texting a friend or posting a blurb on social media will be out of style. Who knows how this will happen, but what will happen is that the lives of people will change. The already decreasing ability of young kids to be able to speak with one another and feel comfortable in public is only going to worsen. The future generations of this country may not know what real conversation is like, and that would be a travesty. How will political debate work? How will news be broadcast? The answers to these questions are fleeting along with the age when Americans knew how to talk to one another.

Holograms

By: Fulton O'Keefe



Technology has advanced incredibly in the modern era. Today, it seems that everything in daily life is interwoven with technology. Without technology, our world today would literally stop working. Cell phones, televisions, and cars are just a few major advances in technology in the last century. In the early 20th century cars were introduced to the world. Now, in 2018 we have cars that are able to drive themselves. The telegraph was invented in the late 19th century. Today, we have the amazingly powerful iPhone. Visual mediums such as computer screens, televisions, and IMAX theaters are nearly perfect in the quality of picture they deliver.

The rapidly increasing advancement in holograms will soon bring three dimensional visual images to our daily life.

Holograms are now able to display full-sized human images as used in movies such as *Star Wars* and *Blade Runner 2049*. Technology will continue to evolve and holograms will help these advancements. One day, businesses will be using holograms for real-time long distance meetings. In fact, holograms will possibly innovate retail businesses as well as military technology.

A more visual and ironically “realistic” meeting between people from different locations around the world could potentially take place in a single room without anyone having to travel. While this may be only the thing of movies right now, there are currently holographic concerts of legendary musicians and rappers who have died interacting with live musicians. Imagine all of the possibilities if holograms continue to take on bigger roles than just concerts.

Holograms have become interactive in some places and can be programmed to speak only on certain topics and only have certain responses. Imagine having a hologram take your order at a fast food restaurant or ring up your merchandise at the grocery store. Clearly, this is a stretch and could quite possibly never become a reality, but technological advances are moving quickly. If Tony Stark (Iron Man), although fictional, can have a lab where he builds with holograms that then sync to his robots, then lots of highly imaginative people are undoubtedly tossing far-fetched and new ideas around the technology industry.

People have begun making hologram phone attachments to display three-dimensional images. Holographic keyboards are already in use. Holograms are new to many and many have no idea what to think of when they are mentioned, but in the very new future holograms will be a key source for man social and commercial activities.

Holograms will not immediately improve society but the base ideas that engineers have in hologram technology give hope that the future will be quite fascinating and visually stimulating.

Around Campus and Beyond



Students in Dr. Pensak's kite flying club enjoy a windy afternoon at Shelby Farms.



The CBHS Rugby team is in action for the start of this cold Spring semester!



Monthly mass is a powerful experience being celebrated at CBHS.



Seniors continue to participate in the weekly Senior Retreats.