

How Technology has Affected, and is Affecting, Mission



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I am an American computer consultant who trains missionary IT people how to set up and deploy computer technology. I have worked with over 100 mission offices in 13 countries, and consider myself having seen a good overview of how missions use technology.

Recently I attended a prayer-time at a mission organization with whom I was volunteering. They introduced the morning by announcing that, over the previous weekend, one of their pilots and a passenger were killed in an accident. They shared a lot of information about how the plane went down, how two of the four people on-board were alive, and about the desperate attempts of some bystanders to rescue the pilot and passenger (both of whom ended up perishing). Everyone there knew the pilot and their family, and so the prayer-time was intense and heart-felt. As an outsider, I thought this was an excellent example of technology in action. Nobody paid any attention to the fact that the first announcement of the plane going down went out over email, that half of the information came by reading the African newspaper on the Internet, or that the desperate fight for the lives of the pilot and passenger was captured on YouTube. The focus was on ministry, not the technology that enabled it to happen smoothly. Most missions do not know how to express the impact technology has on their ministry, simply because technology is so ingrained that they take it for granted.

What is technology?

Computers are a normal part of our everyday life. We have computers in cell-phones, computers in our cars, and computers on our desks. It is very easy for us to take them for granted unless the technology is being problematic. When I was in Indonesia, I once worked on computers while in the middle of flood-waters. Standing in a room where the water is up to your knees makes you think about turning off your computer equipment (we ended up moving to the third-floor of an office to do most of our work). And while I was in Sierra-Leone, Africa, I found out how to set up computers when there is only electricity for a few hours a week. Conditions do not always lend themselves to having computers, and yet, missionaries continue to take them into the most outlandish areas. At the same time, one regularly hears of these computers crashing because ants ate something vital, rain shorted it out, a customs official decided to steal it, or that the military chose to impound it so they could find all the missionaries one communicated with. How has technology impacted missions? Are computers worth the time and energy being put into maintaining them?

As a computer guy, I will focus primarily on computer technology, but I will start by explaining something of technology in general. We use the word technology in a very strange way. Technology, as defined in the dictionary, refers to our use of knowledge and crafts. But we typically use it by referring only to the "latest" stuff we are using, not to things that we take for granted. For example, there was a time when the wheel was the latest in technology. If I used this article to explain the role that the wheel has impacted mission, this article probably would not be published. But at the same time, we sometimes still have to discuss various technologies that are not the very latest, simply because they have impacted mission in some amazing ways.

For example, the airplane not only allowed missionaries to arrive on the field in a reasonable amount of time and have regular "return visits", it created the possibility of "short term

missions.” Short-term missions created a shift in how missions were done, and we are continuing to find new uses of short-term ministry. But also, the airplane allows us to do what we call “deputized fund-raising”, which is how many United-States based mission organizations run. The missionary returns from the field every few years to talk with those who have supported them financially, and this relationship helps with the funds for the next section of time. The airplane is still shaping the concept of how we as Christians spread the Gospel, so it is a viable “technology” to discuss, even though we mostly take it for granted.

So technology is a tool through which we do a task, and “mission” is the task that we are currently talking about. Let’s spend some time looking at some of the history of how technology has impacted mission in the past.

How technology has impacted Missions

In the 70s and 80s, there was a serious push in missions to have the Bible in every language, and a church for every people group. But there was a problem with this; we did not know how many people groups there were. Actually, we did not know how many languages there were. The first part of that goal was met by starting to collect and distribute information, and most of this was done using computers. (One thing that you will note, as I relate these stories is that people do the work, but they use computers to do it.) Through the efforts of those collecting this data and those trying to focus on the world’s least reached peoples, the “10/40 window” was discovered. It was not that these countries did not exist prior to our discovery of the 10/40 window, but rather, the focus of missions was elsewhere. The 10/40 window helped missions focus its efforts.

From this initial listing of languages and people-groups (now hosted at the Joshua-Project: <http://joshuaproject.net>) came a new outgrowth of potential. Groups like AD-2000 (<http://ad2000.org>) put a lot of effort into encouraging mission organizations to spread out their focus. For many years, most of the missions focus was in the same cities that other missions were working in. With AD2000, they started trying to work in different areas so that the unreached peoples could hear. When AD2000 closed down, other approaches to making sure new missionaries were heading out to unreached areas began to spring up. <http://Worldmap.org> is a site that allows us to see relatively up-to-date information about the status of world evangelism. Using this site can allow an organization to send people to areas that have never heard the Gospel.

Bible translation has also undergone an amazing shift through the use of computer technology. While translations used to take 15 to 20 years to do, many of them can now be done in three to five years. Missions researchers have put a lot of time into understanding languages, and programmers took that learning and created tools which made the translation process more exact and simpler. The Bible translators go through some extra training in these tools, which enables them to be much more effective in their translations.

Computers, as a tool, have changed how a lot of things are done in missions. At one time, when someone went off to missions, they packed their belongings into a casket and basically vanished from history. Sometimes letters from them would come back home, but it would take multiple months to arrive. Imagine getting a letter, dated four months previously, saying, “Please pray for the neighbor next door who is dying with HIV.” By the time you receive the letter, the situation has already been resolved. That age did not allow the Body of Christ to work as a body, but rather it worked more as a collection of individuals. With the airplane and international postage, communication became more regular. But email and blogs allow people to pray for things as they happen. This allows people who are “prayer warriors” to be able to pray for situations around the world.

Communication does not only come from missionaries, but it goes to them as well. People from churches can encourage their missionaries by dropping them an e-card, a short email,

or even using “Skype” to talk to them for free. But something equally as important, the sending mission office can communicate with them. Finances can be sent through digital methods, enabling those of us who are not “sent” as missionaries to meet the needs of missions in ways that could not be conceived of just a few years ago. All this allows the church to treat their remote missionaries as if they are part of the local congregation. To pray for them when they are hurting, to offer words of support when they are needed, to help meet their financial needs, and many other things.

Technology is also used in direct evangelism through websites, online chat, blogging, Facebook, and other interactive web. Some of the more creative technologists use online games to make relationships through which they share the Gospel.

Digital media has added a new facet to evangelism. Global Recordings (<http://globalrecordings.net>) is a mission organization that has created verbal tracts in over 5,700 languages and dialects. They have put together a number of simple things for mobile devices (cell-phones, mp3-players, etc) that can enable you to determine what language someone speaks, and play a quick tract for them in their language. This is often used at a mall or other public location. You find someone dressed in national garb of some sort, engage them in conversation to ask them where they are from, and then you can play a sample of their language for them. If you have someone with a laptop in the area, you burn an entire CD of content in that language. Because the media is in digital form, it can be transported very easily. The Spark VMS group (<http://sparkvms.org>) lists many forms of media (digital and non-digital) which can be used to spread the Gospel, as well as amazing stories of how these technologies can be used effectively.

Issues Missions have in using technology

The first issue with technology in missions is that, the more technology a mission uses, the more technology people they need to set it up and maintain it. While there are lots of trained computer people in the Body of Christ, there are few of them in missions. Finding a good computer person for the mission organization is a very difficult task. This is primarily because few techie people are called to full-time ministry. We have a very odd mindset in that, we think that people called to full-time ministry should attend Bible Seminary instead of a computer college. When, in-fact, there are needs for virtually all skill-sets within missions. So a person should be able to be a doctor, an engineer, or a computer-person, and be able to pursue that form of education even if they are “called to missions.” But at this time, most people who are called to missions do not have any formal computer training. The people that have computer training (most of whom are not called by God into full-time missions), whom the mission organizations try to recruit, often feel out of place. We have found that it is easiest to take someone who already has the call of missions on their heart and teach them in computers, than it is to take a techie and try to plant in their heart a call to missions. So there are a number of ministries geared towards training the IT people in missions about the technology they are supposed to be working with. (See <http://iccm.org> and <http://lightsys.org>)

But once a mission has a technologist, they need to decide which technologies to implement. Technology moves at a very rapid pace, and it is hard for even professionals to keep up with it. Missionary technologists have a difficult time determining what technologies they should use in a given situation. Missions are very odd in how they are set up. Most missions have their main headquarters based in a highly ‘civilized’ culture, but have their workers based in majority-world countries. If you had a corporate organization that had 30 offices scattered in thirty countries, your corporate headquarters would have a large team of computer staff. Most mission organizations have only one or two IT staff. There is also a huge discrepancy in funds available for technology. A large corporation has a large IT budget while the mission that works in the same number of countries has a very small IT budget. Missions, when they roll out a new technology, want to get it right the first time. This means choosing the right

technology, as well as implementing it the correct way. But they do not have finances for training, nor do they have large budgets for researching technologies and how they work in the majority-world. But missions have found a fairly good solution. The ICCM conferences (<http://iccm.org>, <http://iccm-europe.org>, <http://iccm-asia.org>) are where mission IT people gather every year to discuss what works and what does not work. They give each-other training on technologies, as well as bringing in Christian professionals to provide professional training at a fraction of the cost. Once a mission knows what technologies it should be using, then it can utilize volunteers to implement it. There are issues with volunteer IT help (contact <http://lightsys.org> if you wish to know more about that), but we will not discuss those details here.

One of the great limitations of technology is that the amount of impact relies on those who use the technology. Life would be simpler if we could roll out a new word-processor and expect people to be able to use it immediately. But with every new technology, we need to train people how to use it. There are two main "audiences" we will look at; the home office staff and the field missionaries. Home-office staff are usually in the same building as the technologist, so you would assume they should be easier to train. Most home offices are staffed by older missionaries who came off the field for some reason, and older people are often more resistant to changing technologies. (This is not so much an issue with age as it is with the cultures we grew up in.) The missionaries on the field are a mix of older and newer ones. Young missionaries usually adopt new technologies very rapidly, but they still require various amounts of training. The difficulty here is in getting the information to them in a timely manner. Many mission organizations have an annual meeting somewhere on the field where various things can be taught. But this teaching and training is still a work in progress. As distance-learning tools become ironed out (and as various specialists in distance education volunteer their expertise to missions) this problem will start to be addressed more completely.

One huge issue for missions is the problem of information security. This is a very important issue in the business world, but in many areas of missions, lives hang in the balance. There is a lot of security training that goes on during the ICCM conferences, and there are a lot of good, inexpensive security tools out there which can be used. But information security is not only about technology; people need to know how to use that technology, and they need to have good security practices. (For example, it is not only important to have a good lock on your door, but you need to know how to use it. But that is not even enough, you need to have the practice of locking the door at the appropriate times.)

Since there are so many computers on the field, there is a growing need for computer repair work to be done on those computers. Most of the time, there are no local repair places to take the computers. If you are a missionary working in the jungles, teaching literacy, it is fairly obvious that there will not be a computer-repair guy there. Oddly enough, missions have some good solutions to this particular problem. A few years ago, laptops were mailed, or hand-carried back to the home office for repair work. Now, many of them are repaired on the field. As missionaries gather during their once-a-year meetings, often a team of computer repair-guys show up to do basic help-desk work (see: <http://missionarytechsupport.com> or contact your local mission agency if you want to volunteer for such a trip.) As those meetings usually only happen once a year, there is a need for more regular helpdesk support. There is a move towards putting together a Day of Missionary Helpdesk (no known web-site at this time), where volunteer IT people will man a virtual helpdesk one day a month and missionaries will be able to log in and have their computers looked at. Some excellent remote helpdesk tools, like Bomgar (<http://Bomgar.com>), have emerged on the market and are exceptionally cost-effective for mission organizations. This allows a techie who is not called to full-time ministry to volunteer one day a month, and still be able to help repair missionary computers all around the world.

How has Missions impacted technology?

If you think about it, you may know a number of technologies that were produced as part of a different goal. For example, the United States Space program invented a number of very interesting technologies as a part of their discovering problems about space (<http://science.howstuffworks.com/ten-nasa-inventions.htm>). Cordless drills and some water filtration tools are part of these things. But has the world benefited from missions technology? The brief answer is, "Yes."

Amazingly enough, things as basic as Email were heavily impacted by missions. Email was once broken up into many segments that could not communicate with the other segments (AOL, CompuServe, etc.). Christians, working on trying to help their missionaries, were the first ones to make Internet Email Gateways to bridge this gap. The first PC-Based GIS software has its roots in missions too. Missions wanted to begin to track the details of people-groups, languages, and the status of world evangelization, but mapping software was not available for personal computers. The first GIS software was built for missions, and one of the first things ever to be mapped resulted in what is known as the 10/40 window. Missions has impacted computer programming languages like Perl (see: http://en.wikipedia.org/wiki/Larry_Wall), and some well-known computer programs (Squirrelmail, Centrallix, Etc.).

If you are into a lot of reading and wish more information on this topic, you might consider looking at this article: <http://www.articlearchives.com/humanities-social-science/religion/2319257-1.html> which describes a lot of other examples where missions have impacted technology in the early years of computing.

In Conclusion

Part of the reason we use anything in missions is not just because it has an impact. Often it is simply a natural outgrowth of the body of Christ. We are to be stewards of what we have been given. As people develop skills in being doctors, engineers, pastors, teachers, or athletes, we find that the Lord enables these people to use these skills to grow God's kingdom. It should not be surprising that the same holds true for computer technologists. God has given everyone the task to further His kingdom through the skills He has given them. And so there are people whose calling in life is to use technology for His purposes. When we are called to serve God, the impact we have is not due to the technology or the person, but to the Spirit working through us. Even with computers, the old proverb still holds true; "The horse is made ready for Battle, but victory rests with the Lord." (Proverbs 21:31) Or written for computers, it would read: "The computer is loaded with software, but the impact rests in God's hands."

While it is interesting to think about technology and its impact in missions, we should never lose sight of what technology is. Technology is just another sort of tool which people have at their disposal, something we are stewards of as we strive to be obedient to Christ. Technology has enabled the common man to impact people and situations far removed from himself. This makes the question, "Who is my neighbour?" much more vague. But while it adds a different perspective, it is the same age-old question. Technology seems new and different, but there is truly still "nothing new under the sun." Each person will be called to give an account of himself unto God for what we have been given. Each generation has been given different things, but we are still called to the same task. To be obedient. It is not technology that does the work, the work is done by obedient people, following the leadership of Christ. In the end, we cannot give any credit for the impact to technology, the same way that we cannot take the credit ourselves. The credit for the impact that technology has had in missions can only be given to Christ, the one to whom we try to be obedient.

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