Chapter 2

Enthusiasts: The Technological Evangelists

Oh, I love technology. I have ever since I started using it way, way back when. But I just fell in love. I love everything from the word processor to the projector to making film strips. Recordkeeping is so easy and when I discovered spreadsheets, I was just in love. I've enjoyed the advantages of this kind of thing ever since they started making it available. I'm like a little kid in a candy store. I love to play around with everything — I just love this stuff. Love it. Love it! (Fred)

Love. Play. Fun. Toys.

To hear an Enthusiast speak about Information and Communication Technology (ICT) is to listen to a love ballad and, with the other ear, to listen to a five-year-old bursting with excitement in a candy store. Fred, in his edited quote, represents the essential Enthusiast relationship with technology: one of adoration and excitement. In the original transcript, Fred continues for two pages to talk about all the technologies he loves. When you speak with an Enthusiast about technology, you open the floodgates to hearing about their passion – and their passion is *most definitely* technology.

Enthusiasts' lives center on ICTs. They tend to have been exposed to ICTs early in childhood, in mostly positive interactions. They push technologies in their everyday lives to be used across work, family, community, and leisure tasks and relationships. They tend to form close bonds with other Enthusiasts, while filling their homes with ICTs in prominent places. Above all, ICTs invoke feelings of excitement — and using an ICT is much more play than work.

Formative Experiences

Enthusiasts tend to point toward a lifelong interest in technology that started at an early age, oftentimes with encouragement from their family members and older friends to explore technologies. Enthusiasts of this generation were the kids who often took apart their televisions, created kit radios, and modified their cars. When asked about their relationship with ICTs, they often share vivid

memories from childhood about encountering a new technology for the first time. For instance, Fred spoke about his first encounter with television:

I remember the first TV I saw [...] it was a little TV screen, in a big box. It was black and white. In the Fifties there were only three channels in my city. After 11:30 at night the only thing on was a test pattern. That was the early Fifties. It was amazing and so nobody on our street had a TV. And then the one kid I hung around with on the street their family got a TV. We'd go down there and watch TV and they had the fights on Friday and that was about it. But it was amazing. Later they had movies on TV, you could watch the news [...] it was great! (Fred)

While Fred speaks about how limited early television was (with only the fights broadcast on Fridays), he also speaks in terms of amazement and enthusiasm. In their descriptions, Enthusiasts focus on the technology itself and their personal relationship with it. While other types see technology as being a tool to get something done or a connector between people, Enthusiasts think using technology (even for mundane tasks) is simply fun play. In childhood, this fascination was often encouraged by those around the Enthusiast. In particular, Enthusiasts were encouraged to "tinker," to take technologies apart and put them back together:

My father was a mathematician engineer and he was career Army. He was into technology and electronics, so he would come home and bring radios and all kinds of stuff. So, I guess from the time I was a kid there was stuff around to play with. He would let me play with anything he brought home, and I just got into it. I've always just had this thing for playing with technology. (Fred)

Fred speaks about how his father was instrumental in his early love of technology by encouraging him to "play" with new gadgets. Similarly, Harry speaks about his grandfather, who tended to be on the leading edge of technologies and who let Harry play with his shortwave technology and other things that were available in his service department:

My grandfather ran the service department at a car dealership in the 1920s. My grandfather was an early adopter of technology and I grew up and around his shop. So, I think I grew up with the love of technology. My grandfather was always messing with new things. There was a shortwave radio that was my granddad's and it was a Zenith which in the 1950s was an equivalent of the iPod. I always used it in his office and when he passed away I got the radio. So, I grew up in a technical environment, around cars being fixed and electronics. I was interested in electronics when

I was a kid. My grandfather was the first kind of direct influence, and I don't really think anybody in particular really matched his influence on me. I got into ham radio in the Boy Scouts and I built a ham radio from a kit and did ham radio stuff and I really think that is because of my grandfather's encouragement. (Harry)

Enthusiasts, unlike other types, tend to be able to point to one person who has been pivotal in their journey with technology, resulting in the development of what has become a lifelong love affair with "things with plugs" (Alice). Harry could point to his grandfather as being the most influential person in his relationship with technology, while Fred pointed toward his father. At times, these relationships could be quite fragile due to other factors, but the love of technology helped to maintain a connection. Fred shared that his relationship with his father was strained as Fred had chosen the career path of a teacher and an artist (and later an IT professional) rather than an engineer, as his father had wanted. However, throughout their relationship, they could always find a common ground over technology.

As Enthusiasts grow older, their "toys" tend to become bigger. Male Enthusiasts often turned toward "hot rodding" their cars by adding speakers and trying to make them faster:

I was also fiddling in high school and college with car radios trying to beef up my car radio to make it not one speaker like they all had. I wanted five speakers if I could put them in. I've always just had a thing about machinery. (Fred)

So, when I got out of the service I ended up going to college and I needed money. I gravitated towards cars, so I started selling cars for this little sports car dealership in a Midwest City. Some of the guys that were racing cars were having trouble keeping their cars running so I started making deals with them that I would rebuild their engine in return for being able to use their car to go through driver's school. You had to go through four or six races in driver's school and then you had to do six novice races. So, the deal was that I would fix their car and for racing weekend I would use it for the novice race and they would use it for the more advanced race, so it worked out pretty well. So, I ended up starting racing cars by working on them, I fixed them and stuff. Then after college I won a major motor race and I went off on kind of this quixotic exercise of becoming a professional racecar driver which didn't work out. But in the course of it I got quite a reputation for fixing racing cars and then street cars, so I ended up with a car shop in a [North Eastern State]. I became the go to guy for exotic cars and stuff like that because

they required a little higher level of mechanical insight to do that... so I've always been interested in technology. Mechanics and technology. (Harry)

As Enthusiasts grow older, their interest in technology leads them to careers that often have a heavy technological focus. Enthusiasts see technology as being an important part of their career trajectory and often credit their love of technology as being the determining factor in their career choices. Harry, for instance, credits technology with "saving" him from becoming a delinquent, leading him instead on a career path to becoming an Information Technology (IT) professional:

I really thought that when I grew up I wanted to be an aeronautical engineer. I didn't have a real drive for it and so in a way technology saved me [...] I was a very bright student but I did not do well with authority. I had a lot of problems at home and I wasn't quite a delinquent, but I probably wasn't far from becoming one. The reason I ended up in the Army was I wanted to be a pilot and no other service would take someone without a high school diploma. The Army said, "since you're a little young for flight school you can go to helicopter mechanics school first." So, I became a helicopter mechanic and in that time I ended up not going to flight school. I ended up realizing three years in the Army was going to be enough. So, I had a very vocational focus but a pretty high level education in both aircraft mechanics, structures, and in electronics for doing the systems and stuff like that. Then I went on to fix cars, because of my electronics and mechanical background [...]

[Later] I started working in the physics lab. I'd always been interested in electronics and stuff. I built radios as a kid and I had gotten the electronics experience in the military. One of the reasons I got the job in the physics lab was being able to do electronics troubleshooting and maintenance; design and build power supplies, and stuff like that. That put me in touch with working on systems and that's how I came to do IT systems work. (Harry)

While not all Enthusiasts become IT professionals, all the older adult IT professionals in this study were Enthusiasts, and all Enthusiasts choose to incorporate heavy use of ICTs into their work lives. Alice, the only Lucky Few female Enthusiast in the study, had a slightly different journey with technology throughout her life. Alice was encouraged to be involved with technology from a young age, and in adulthood she chose to become a nurse, at one time working as a medical administrative assistant. While most would not see technology taking a central point in this type of work, Alice noted that she often "pushed"

technology in her workplace to be as efficient and effective as possible, even early in her career:

Many years ago, I was a nurse secretary in a big office. I had an electronic typewriter, which I programmed as much as I could. It made my job so much easier and efficient. When I left that office, there was one secretary who was really a bitch and she said "oh when you leave I'd love to have your computer - your typewriter!" I said, "oh sure!" I brought it into her and I said, "Here's my typewriter," and what she didn't know is that I had erased all the programs I had put on there. I knew that she couldn't figure that out. I've always pushed the technology to make it work for me. (Alice)

While most of the administrative assistants Alice worked with did not spend time programming their typewriters, she spent extensive time researching and finding out how she could program various shortcuts into the system. Alice greatly enjoyed this task, as well as how it benefited her during her work.

Introduction to ICTs

Enthusiasts are the most likely, of all the types, to seek out new ICTs (or to update their ICT forms to the latest version) on their own, often out of curiosity. Enthusiasts rely heavily on media to stay aware of new ICTs and updates, as well as to learn new techniques and methods for using their ICTs. In particular, they rely on technical columns, blogs, and magazines:

I had been reading Byte Magazine for years. I'd say Byte was a big mentor for me, that's how I got started in technology when I came to the area [...] I still read a lot of technical blogs. (Harry)

I read about stuff. I get the local paper so I read all the tech columns when they come out. Then often Fred and I discuss what I read. (Alice)

Alice speaks about the importance of not only reading about new ICTs, but also sharing that knowledge with others. Enthusiasts are the most likely of all the types to try out something new, to play with a new technology, and experiment with it:

I'm bolder than Fred is so I will go out and try something before he does, or I'll put my foot down and say "no, I want to do this." He's always gifting me technology. Quite a few years ago my small color photo printer died, and he said, "well I'll get you another one" and he's looking at mid-priced ones. I had been

working with another photographer and I learned about the more expensive printers. So, I told Fred I'm going to buy the printer because I didn't want to ask him to buy a very expensive one. About two years after that they had come out with an even better one so then he bought that. It was the same thing with the Smartphone. Once we have the same stuff, we learn from each other. (Alice about Fred)

Fred and Alice, Enthusiasts who were life partners (and both participants in this study), demonstrate an important aspect of technology to Enthusiasts: it underlies many of their relationships and their shared interest in technology helps them to form a bond of friendship, and in some cases (such as Fred and Alice), even romantic partnership. Enthusiasts share technologies and learn from one another. Unlike the other types, however, the introduction to ICTs in these relationships is not one-sided. Relationships with Enthusiasts evoke technology sharing between both individuals, and in some cases, this technology sharing is the *basis of the relationship*. For instance, Fred shares how Tom first introduced him to the Internet in the early 1990s:

Well Tom and I were friends to begin with, so it was a mutual interest in technology [...] It was shortly after we met that we both had 286 computers. Tom started on Prodigy [an early Internet service] before I did, actually he was the one that talked me into giving it a shot. Well I went to his house and I had my original computer with two big 51/4 inch floppy disks. I'd see Prodigy advertised and I thought "well that's sort of interesting but I don't know." So, I'd go to Tom's house and he'd go and show me Prodigy. He had email which was something new. There were groups that you could join, so if you're a photographer you could get [in a group] with all the photographers. After he showed it to me a couple of times and I thought, "Gee it's only \$4 a month I can do that" and so I got into it. Then it was a case of every five months getting a new modem that was just a tiny bit faster. So, we were both interested in the computer. I guess he has an affinity for machines too. Actually, we started with our shared interest in photography, but our love of technology grew from there. (Fred about his friend Tom)

Enthusiasts are eager to hear how their friends are using a technology and encourage their friends to try their latest technological discoveries. Tom showed Fred the Internet every time Fred came to his house, encouraging him to try it, since it was low risk. Friendships (and relationships in general) tend to be an important part of how Enthusiasts are introduced to new technologies. In fact, Enthusiasts tend to prefer to have many of their relationships with others who are technically savvy. In some cases, technology can become the basis for

romantic relationships. Fred and Alice met each other online, in the early days of Internet message boards:

In the old days of Prodigy there was a photography board that I was on and this lady comes on looking for information about venting a dark room. So, I sent her some information. So, we message back and forth a little bit, and then maybe a year later or quite a few months later here's this person looking for postmortem photography. I've been into cemetery things forever too, so I sent her a couple of emails on where to find some good cemetery stones and I suggested "well, why don't we get together?" We decided to meet because we lived close to each other. I said "well, would you like me to take you to a cemetery?" I know how to show a girl a good time. (Laughing.) So, we went that day and it just started a friendship. This was 15 or 16 years ago. (Fred on his relationship with Alice)

I met Fred online, on a bulletin board. First, I was asking for help with my darkroom. Then later I was doing a class at my local community college on death and dying. I was interested in the use of photography in death and mourning. So, I went back to the bulletin boards and the same man who helped me with the dark room said "I don't know if you remember me, but I helped you with your darkroom a while ago. I know some neat places in nearby cemeteries." So, we met in person and we were friends first. Then we fell in love. (Alice on her relationship with Fred)

ICTs, their use, and sharing technology remain an important part of Alice and Fred's relationship to this day. Enthusiasts enjoy receiving and giving technological gifts; to Enthusiasts, the best type of gift is a technology:

The last thing Fred got me as a gift was the new laptop. My bank is very good at Internet security. A service representative there called me and said "we were tracking your purchases and we had one that does not sound right. It was yesterday morning and it was a \$200 withdrawal from an ATM on Main Street." And I was thinking where is Main Street? Then I realized it could be Fred! I asked the service representative for the account that it was drawn on. It was my joint account with Fred and I said, "no that's fine." So then when I called Fred about it he said some bad words and he said, "they've ruined my surprise!" The next day I come downstairs and there's the laptop with gift bows stuck on it! (Alice)

Alice and Fred spoke about many of the gifts they had bought each other over the years. As Enthusiasts, their most memorable gifts to one another were "things with plugs" (Alice), and included smartphones, laptops, printers, and

cameras. In many ways, gifting these ICTs is important not only on the gift giving occasion, but because Fred and Alice spend a significant portion of time using, discussing, sharing, and teaching each other new things about technology; these gifts strengthen the relationship. In many ways, technology gifts represent a physical manifestation of their shared love of technology and its importance in their relationship.

ICT Use

Enthusiasts, noted by their love of ICTs, are interested in finding ways to use all of their ICTs in as many ways as possible, but also in moving as many processes from paper-based systems to digitalized ways of completing the same tasks. For instance, Alice speaks about how she moved her recipe collection to a digital format:

I started about six years ago putting as many recipes as I could put on my main computer. And I printed out a loose-leaf note-book for my daughter. Then I had a law student living here with me for a while and when she graduated I gave a similar one to her. I got to thinking, "why am I always printing out all this stuff? I have a computer." Fred gave me the little computer, a notebook I guess it's called, so I brought all those digital recipes down and put them on the notebook. So now all I do is if I'm looking for something that I don't have a recipe for, I just take the notebook and I go on the Internet. Then I cut and paste what I find into a Word document, and then I've got it right there. So, I don't even really bother printing anything out anymore. (Alice)

Enthusiasts view using ICTs as fun and play, so their perspective is: why not have more fun and play in every aspect of my daily life? To achieve this, they are constantly investigating and experimenting with ways to integrate a single ICT across all the different areas of their lives: family, community, work, and leisure. Like Alice with her recipes on her notebook computer, Enthusiasts constantly look at ways to update and improve their lives through technology.

Alice originally had purchased her smartphone for personal use (inspired by Fred's purchase). She found many uses for her smartphone in her family and leisure life, but soon also discovered uses in her work as a home healthcare nurse:

My smartphone is amazing. I'm always using it for the Internet. It's got really neat games! I'm a game person. But I use it in other areas of my life too. I was doing a temporary nursing case with a woman. Among other things I had to take her vital signs every day. I got there one day and darn it if my watch battery hadn't stopped. I just very quickly got on the smartphone, downloaded an app for an analog watch, turned it on, and there I was able to

take the vitals and I was done! But I use it in other ways too. I started taking a couple pictures and showing them to one young patient and the next thing I knew she was picking up the phone on her own and looking for them. I'm always taking pictures and printing them out for her. I take the pictures on my phone because she can use my iPhone. She's got the mentality of a prekindergartner or maybe 1st grader but she uses the iPhone [...] it's been a great use of my iPhone. So, I take pictures of situations that make her uncomfortable. For example, she does not like the dentist. Her father has this habit of not telling her what's going on just saying "get in the car we're going for a ride," and it could turn out to be something fun like going to the mall or could be going to the dentist. I don't think that's fair, so I will tell her in advance this is what we're going to do. So, if I have pictures of it it's much better, so the last time at the dentist I took pictures of her in the dental chair and they gave her a latex glove that she loves. So now she goes to those pictures all the time and she looks at them and says, "Glove, Dr. Smith." So that's a good prep for her, I do that on a lot of different things with her. (Alice)

Enthusiasts are the most likely of any of the types to be serious in playing digital or virtual games: all of the Enthusiasts in the study stated that they played digital games of some type. Alice was the most serious gamer and, through online gaming, had made several enduring friendships. While Alice began using her smartphone mostly for games (leisure activities), she quickly found uses for it in her work life. At first, these were relatively simple functions (such as replacing her watch) but eventually grew to her using her phone in more complex situations, such as a visual aid for her home healthcare patient.

Enthusiasts' use of ICTs is not simply spread across various areas of their lives, but they are constantly looking for ways to "stretch" the use of a single device to different life contexts. Like Alice looking for ways to use her smartphone in her work or her notebook computer in cooking, Harry and Fred also looked for innovative ways to "stretch" devices in their daily lives:

I use my computer all the time. I now have four computers, I have my base computer which is my big desktop and then I have two laptops, three laptops. Well two laptops and a Smartphone, which I consider a computer. I use them to do things. I do an awful lot of image processing, web searching, research, etc., etc. I use them for teaching and presenting, they're just a part and parcel. I have a projector when I'm talking somewhere that does not provide a projector. I use my computers to produce things for teaching classes. I use my computer for producing things, for putting talks together, teaching, for making little teaching units. I am just now dipping my toe into the not

podcasting but learning how to actually put good audio on my computer via microphone and using a little mixer and whatever. I use it for entertainment; a lot of what I look at on my computer is strictly entertainment. I start my day by reading Arts and Letters Daily, Salon, Slate, New York Times, the Wall Street Journal, just to get myself into what's happening during the day. I'm not a gamer but I have wasted many an hour playing Doom or solitaire. Once I started playing seriously with Photoshop I found I had barely scratched the surface. There are many websites that have wonderful lessons on Photoshop. I guess the one thing I haven't talked about yet but obviously the computer is wonderful for emailing people, communicating with other people. (Fred)

As you can see, Enthusiasts see many different uses for a single ICT across many different areas of their lives. Fred uses his computer for work (teaching and presenting), leisure (entertainment and gaming), community use, and communication with family and friends. When you ask how Enthusiasts use a single device, they typically name every major life context and how they use it in those contexts, often speaking for upwards of 10 or 15 minutes about a single device. This is in contrast to other types, such as Practicalists (Chapter 3), who tend to see a single device as being primarily for one life context (such as primarily for work rather than family).

Another unique trait of Enthusiasts is that they are often the "technological change agents" in their work. Their views on their workplaces (even those who work in IT professional roles, such as Harry and Fred) are that their employers are simply not using enough technology or not using the technologies they have to the fullest extent. Although Alice did not work directly in IT (she worked as a home healthcare nurse), she was often pushing her office to adopt more technology:

I think IT is great. I would encourage my home health nurse office to do more of it. I would prefer to email a lot of stuff. I'm not a "going to the office person." I'd rather email paperwork. But because of HIPAA they're antsy about privacy issues, so I can't even email something that has a client's name. I find that absolutely ridiculous seeing as how other places such as other doctor's offices go electronically between each other etc., etc. (Alice)

As Alice states, she wishes her office would adopt more technologically savvy ways of doing things, such as Electronic Health Records (EHRs). Enthusiasts tend to not be exposed to or adopt a technology because of their work life. Instead, they are the people who are bringing new technologies and ways of doing things into their work environments that they first encountered elsewhere.

For instance, Alice (as mentioned previously) had adopted a smartphone in her personal life and then started using it for work. She shared with many of her coworkers the advantages they would have if they also adopted such ICTs.

Just as in the introduction of ICTs to Enthusiasts' lives, relationships are very important in the use of ICTs. Enthusiasts, as mentioned before, tend to bond with others over the use of technology. Harry found that he had developed a very close relationship with one of his daughters because of her technical work. Harry's daughter Katrina reflected that technical discussions had brought them closer:

Information technology gives us (my father Harry and I) something else to talk about and some common ground, so he talks about what's new, like the newest cell phone. I've shown him my computer or my work and we'll talk about it. Whereas my mom might not know what I'm talking about or might not care just because she doesn't know about it. For my job I edit video on a computer a lot. Harry has started to do that, and he'll have suggestions for me, and so we talk about that a lot. I call him for questions more than not. He's sort of known as the computer guy for the family. My brother, my sisters, my aunts and uncles, they all call my dad for computer problems or computer suggestions. He is the technical support guy [in our family]. [But] they're not usually the oldest. (Katrina about her father Harry)

Everyone around Enthusiasts easily recognizes their love of technology. As Katrina spoke about, because of Enthusiasts' timely and extensive knowledge of ICTs, they tend to become the technical "help" people for less technical family members, friends, and coworkers. It is interesting to note that Katrina mentions how "every family" has such an unofficial technical support person, but it is not often an elder. This underscores that Enthusiasts are indeed experts in technology – not simply experts in technology for their age. In fact, because of their love of technology, many of their friends, family, and coworkers expect them to be knowledgeable about all forms of technology and devices:

Patty (coworker, friend) thinks I should know all the technical answers if she has a technical problem and if there's some issue with like a website or something she'll call and ask me. I mean her expectations are that I know about computer hardware and computer technology, which is pretty much everyone's expectation. (Harry)

As a result of their love of and for technology, Enthusiasts tend to, on the whole, embrace this role as an unofficial technical support person. Occasionally, they may be irritated by this role, but it is important to note that their expertise

transcends their age, and they break many of the stereotypes the average person has about older adults' ICT use.

Enthusiasts want to expand and stretch every ICT they use over every context of their lives, so their surroundings reflect their desires to constantly be in touch with their devices. Their homes and workplaces have ICTs prominently placed to facilitate their use in every life context (family, work, leisure, and community).

ICT Display

When one walks into the home of an Enthusiast, one is confronted almost immediately by some form of an ICT. Enthusiasts love using technology in every aspect of their lives; to be used often, ICTs must be accessible and readily available.

It is important to note that Enthusiasts make no attempt to hide their ICTs, unlike some of the other user types. They tend not to have cabinets that close over the television or over their computers, hiding them and making them less accessible. Making any technology inaccessible would prevent use, and Enthusiasts enjoy using their ICTs — constantly. They are quite proud of the ICTs they own, and such ownership is an important part of their identity. Technologies form the centers of their rooms, with furniture organized around their televisions and stereos. These ICTs represent the "digital hearth" of their homes — instead of their furniture being orientated to the fireplace, it is orientated toward ICTs (Flynn, 2003). When walking into their home, the first thing that a person often notices are objects such as computers, televisions, stereos, and phones.

As can be seen in Alice's home (Figure 1), one is immediately confronted by several pieces of technology – her television, stereo, and video players are



Figure 1. Alice's Living Room, Seen From her Front Door.

readily available and feature prominently in the room. They cannot be missed when you enter her front door, despite her ability to arrange them in multiple locations in this room that would not be in someone's direct line of sight upon entering her home.

You will likely also notice that the cabinet is open, despite the fact that it shuts, hiding the DVD player and VCR. When asked if she normally shut this cabinet, she said she shut it only rarely. She commonly leaves it open, as once she shuts it, she tends to open it up almost immediately again. Alice commented that she "liked the appearance of technology" and while she was happy that designers were thinking more about how ICTs looked, she was often frustrated by the "ugliness of the cords." While she saw no need to hide the technologies themselves, she was not happy with the unsightly cords that came with them.

The armchair, barely visible to the right of Figure 1, is where Alice leaves her laptop when it is not in use. Typically, when she is sitting on the chair she is using the laptop with the television or stereo on. Enthusiasts enjoy using multiple ICTs at once, as Alice shared when I called her one afternoon to arrange her next interview:

I was sitting here and working on a slideshow. Give me a minute to turn the television down [...] I'm trying to manipulate several photos in Photoshop and have a bunch of programs open on my computer: I often work on several things at once with the TV running. (Alice)

Such multi-ICT use is very common with Enthusiasts. Hence, their environment tends to cluster many ICTs in the same location. Since Enthusiasts love using ICTs they fill their house with technologies to allow frequent use. Unlike some other types, which may have a single computer in their office, Enthusiasts are likely to own multiple computers spread throughout their home, allowing use whenever and wherever the mood strikes (which for Enthusiasts is often):

So, my computer upstairs is a desktop. The laptop here [in the living room] I use for email and some things like slideshows and stuff like that. I have a little one that I've got in the kitchen and I use that when I travel and basically, it's my cooking computer. I've got all my recipes on it, which is great. I call that my kitchen computer. (Alice)

These computers all serve slightly different purposes. But as a typical Enthusiast, Alice having multiple devices does not result in "extras" being stored away or unused — but indeed every device is used, almost daily. Having computers in three places in her home allowed Alice to "play" with a computer wherever she may be, and whatever she may be doing, whether television watching or cooking.

Fred, who lived independently from Alice (despite their romantic partner-ship), keeps his technology in his "command center," an attic space in which he spends nearly 90% of his waking time at home. When one walks up the stairs into Fred's command center, one immediately sees his computer, several printers, and various other technologies.

Much like Alice, Fred's technology takes center stage. In addition to a computer, printer and stereo, he also has a large amount of digital photography equipment, including cameras and lights, as well as a high-resolution scanner and other equipment. He would like to air condition this space, as well as add a bathroom, as this would make the space more inviting. He states that no matter the conditions, however, he would choose to be in this space with his technology:

If I had a bathroom I could spend all day up there. I've been thinking about putting one in. There's a sink and a refrigerator so I keep soda in there, but it's generally comfortable up there. Now come mid-July and August even with the air conditioner, sometimes it isn't that great but it's livable. I just sit in my undershirt when it gets too hot. The air conditioner does the job and in front of it is a fan to blow the cool air around. So, yeah, it's livable up there and during the winter I actually have this heater thing, that's been an amazing. I just got it last winter. I'd use the space either way — too hot or too cold, but the reality is I'd be up there whether I had heat or cooling. But heating and cooling is nice to have. (Fred)

For Fred, the use of technology takes precedence over physical comfort.

Enthusiasts' homes contain ICTs in almost every living area possible, including the bathrooms. The mobility of technology makes it easier for Enthusiasts to use ICTs in such locations. Alice commented that, "Before I got rid of my landlines because of the cost and just went to the cell phone, I had phones everywhere in the house. I even had one in the bathroom!" For Enthusiasts, even the call of nature cannot separate them from their "fun toys."

Enthusiasts love their technologies, and their homes reflect this love and the central place ICTs have in their lives. Their placement of ICTs throughout their homes as the focal points of rooms demonstrates the centrality of these devices in their daily lives. This display is quite different from other user types, some of which place ICTs in specific areas (Practicalists) or may attempt to hide them (Guardians).

ICT Meaning

Technology tends to be a common thread that runs throughout Enthusiasts' lives, as Fred speaks about:

Two things have really shaped my life: photography and technology. I've been a photographer since I was in elementary school. I like photography, even dickered with the idea that maybe I would in college do something artistic. I was probably in 5th or 6th grade my father bought me a camera and I've been fascinated with cameras and really got into photography. Now even though I'm not an engineer, my dad would occasionally bring home these really fancy radios and whatever and so I got interested in electronics and then in college I got even more into it. If you wanted high fidelity it meant buying a kit and a soldering iron and you put it together. So, I've always been interested in that kind of stuff. Technology got me jobs, and photography was always there. There are two themes in my life: technology and photography. (Fred)

It is important to recognize the multiple meanings that technology has for Fred, mirrored in all Enthusiasts. In childhood, it was an interesting hobby (leisure) and in adulthood it became a profession (work). However, ICTs go beyond just simply being work and/or leisure to Fred. Technology is a lifelong *passion* and, much like photography, was something that was always there for Fred, no matter the circumstances. Returning now to the quote we read at the beginning of the chapter, we can see how technology is more than just devices to complete tasks or to maintain relationships, but instead represents a much deeper set of meanings to Enthusiasts:

Oh, I love technology. I have ever since I started using it way, way back when. But I just fell in love. I love everything from the word processor to the projector to making film strips...I was just in love. I've enjoyed the advantages of this kind of thing ever since they started making it available. I'm like a little kid in a candy store. I love to play around with everything I just love this stuff. Love it. Love it! (Fred)

These feelings were echoed by all the Enthusiasts, who when asked to describe their feelings toward technology responded with words such as "love," "toys," "fun," and "play." Harry describes his own attitude toward technology when reflecting back upon his relationship with photography:

I've played with digital cameras. I've had a digital camera since the beginning — to use here at work — because we had digital cameras going back to the very first one [...] And they are great fun. (Harry)

It is important to note that Enthusiasts have a great sense of attachment to their ICTs. They often feel nostalgic toward their devices and software. Fred

speaks of his love and sense of nostalgia toward one program he enjoyed using, called Sidekick:

I had started using years and years ago, an application called Sidekick. And Sidekick was a three-part program: it had a database, it kept records, mostly names and addresses but it was actually a little database, you could keep just about anything you wanted on it. It could be a record of names and addresses and you could have separate databases. These could be my personal friends, these could be galleries, and they could be just vendors that I use. It was very easy to look up information. It had a calendar with it so you could keep records of appointments. Up until Windows Vista it worked fine. Now I'm piecing together over four pieces of software to get anything near what Sidekick did and I still don't have the functionality. I really miss Sidekick. I considered going back to Windows XP, but that doesn't really make sense. I wish they come up with a new version of Sidekick, I really miss it. (Fred)

In Fred's language, you can easily see that he was attached to Sidekick not just because of its functionality (although that was a major part), but because he deeply enjoyed using it. Enthusiasts tend to form an emotional attachment to their technologies and, therefore, regret losing more than just their function: they miss the technology and the experience of using it. While the other user types discussed in this book may speak toward the functionality lost, the emphasis would not be on "missing" the technology — an emotional word that Fred chose purposely, because the loss of Sidekick was greater than just a loss of function — but a loss of enjoyment.

Despite their feelings of nostalgia, Enthusiasts are the most likely type to update their software and devices because they want to try new things and obtain the latest functionality. However, like all users (regardless of age) they struggle with updates that result in more dramatic changes to the user interface or functions. As Alice shares, she had difficulty using a newer version of Photoshop and kept using her older version on her older laptop until it failed:

I find the longer I have a piece of equipment, especially the smartphone, the more I find out about it [...]. So, I'm still fighting with Photoshop, but I'm getting better at it. For about a year until the old laptop died I was sitting down here using the old version of Photoshop, which was like three or four down from the new one, and putting my finished product on a thumb drive and going upstairs printing it because I could do in 10 minutes what it was taking me two hours to figure out on the new [version]. The fact that they change these things and end up confusing people is difficult. Don't get me wrong — I'm not going to

stop using Photoshop, but I'm hesitant to upgrade once I know how to use a piece of software. (Alice)

As you can see, Alice is determined to use the newer version of Photoshop, but is struggling with it. Unlike some other types, who may be more likely to quit using software or hardware they find challenging (or ask someone else to complete the task) Enthusiasts tend to keep trying. They are the most likely to update of all the types, but they weigh any potential update by considering the increased functionality against the time it will take to learn the new version.

Enthusiasts realize that their love of "things with cords" (Alice) and technology in general is quite different from most of the population. When asked to talk about their technology use in comparison to others their age, they often said that they were much more advanced. Alice shared the following:

I'm quite high tech for my age group. I do know I am quite high tech but there's a lot of people that are more high tech than me of different ages because that's the circles that I run in. I prefer hanging out with people who are tech savvy, but I know a lot of people my age would think that is strange. In fact, a lot of people younger than me would think my level of tech savvy is strange! (Alice)

Alice's comment recognizes that her heavy use and, in particular, her enthusiasm for ICTs are quite different from those of the general population. In fact, all the Enthusiasts in the study labeled their use as different not only from other people of the same age, but also from even people who were younger. Fred recognized that many people likely would think that his love of ICTs was "weird," unless of course, they also loved technology.

Enthusiasts: The Technological Evangelists

One can think of Enthusiasts as evangelists for ICTs. They encourage people to try new ICTs, surround themselves with others who use and love technology, and push their workplaces to incorporate more ICTs into their processes and procedures. Some key takeaways about Enthusiasts include:

- Enthusiasts have a lifelong love of technology that began in childhood and was encouraged by mentors.
- They are the most willing of any of the user types to try a new technology.
- Enthusiasts learn about new technologies through their own research (technical blogs and articles) as well as relationships with other technically savvy friends and family members.
- They place ICTs in prominent places in their homes and have a strong preference for technologies that are beautiful.

• Technologies are fun toys to the Enthusiasts, so to appeal to this user type one should emphasize the fun nature of an ICT.

Chapter 3 explores the Practicalist ICT user type. While Enthusiasts love ICTs as fun toys and are constantly looking for new ways to use them, Practicalists tend to view ICTs as tools that fulfill a certain purpose in one area of their lives.