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Online Legacies: Online Service Providers and the Public – a Clear Gap

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Abstract

In our contemporary society, people leave behind a great amount of digital assets which are not accessible to their relatives after they die. There is currently a gap between the need for access to online accounts of the deceased, as could be witnessed in several high-profile cases, and the online service providers policies and practices regarding the granting of said access.

We suspect that the above-mentioned gap is a prevalent problem, but most people have not yet experienced it and, thus, remain oblivious to its existence. In order to confirm this hypothesis, we conducted an online survey in Israel in 2013, asking people for their opinion: what should the online service providers' policies be, in regard to this issue?

The survey gathered data from 506 respondents. While a majority of the respondents indicated they would be interested in gaining access to their relatives' e-mail accounts, social media accounts and cellular phones (80%–91% altogether), they were less eager to gain access to other digital legacy categories, such as website surfing history and Internet search history (52%–75%). The wish was also different when dealing with the digital legacies of children and spouses, as opposed to parents.

The overall amount of respondents wishing to gain access to the website surfing history and Internet search history was significantly smaller in comparison to the other digital legacy categories (53%–75% and 52%–74%, respectively). In all of the above cases, the wish to gain access to children's digital legacies was greater than the wish expressed towards spouses' legacies, which was greater still than the wish expressed towards parents' legacies.

Our results show that the majority of respondents (70.8%) believed that online service providers should give access to online legacies to first-degree relatives, unless otherwise stated by the deceased. This indicates once again the existence of a gap between existing policies and the needs and wishes of the public. We believe this

gap can be bridged by a few alterations of existing policies and laws. This point is addressed in the paper, in hopes of creating a future change for the families of the deceased.

Introduction

Lance Corporal Justin Ellsworth was 20 years old when killed in Iraq in 2004 during operation "Iraqi Freedom II". He was awarded a Bronze Star Medal with Combat Distinguishing Device posthumously, as his heroic actions as a Combat Engineer saved the lives of 11 other Marines and spared four others from more serious injuries. (TogetherWeServed 2008). Sadly, his name did not become well-known due to his bravery, but because of his family's lawsuit against Yahoo for denying access to his email account after his death (Hu 2004). His family did not have his password, and it was – and still is – in violation of Yahoo's policy to grant access to the account of a deceased user (Yahoo! 2013).

This story was the first on the subject of digital legacies to make headlines, but it was not the last: When 21 years old Benjamin Stassen committed suicide in 2010 (Hopper 2012) and when 15 years old Eric Rash committed suicide in 2011 (Boyle 2013), their respective parents sued Facebook and Google for denying access to their accounts. According to a quote from a Facebook spokesperson, the company's "…policies do not allow access to a dead user's account" (Hopper 2012).

Most of the Internet service providers (ISPs, in which we include mailbox providers and social network providers) have strict policies regarding the granting of access to a user's account after his/her death:

Name	Policy Regarding Access To The Account Of A Deceased User	Reference
Yahoo!	States that "Yahoo cannot provide passwords or access to deceased users' accounts, including account content such as email"	(Yahoo! 2013)
LinkedIn	Only offers to remove profiles of deceased users	(LinkedIn 2013)
Twitter	Only offers "to have an account deactivated" and clarifies that "[w]e are unable to provide account access to anyone regardless of his or her relationship to the deceased"	(Twitter 2014)
Gmail	States that "in rare cases we may be able to provide the contents of the Gmail account", and emphasizes that "[w]e take our responsibility to protect the privacy of people who use Google services very seriously"	(Google 2014)
Google	This policy extends to all of Google's products, including Blogger and YouTube: "in rare cases we may be able to provide the account content"	(Google 2014)

Facebook	Offers to either memorialize the account or to have the account removed	(Facebook 2014; Facebook 2014)
Microsoft	Offers a different solution altogether, called "Next of Kin Process", which supports all Outlook.com accounts (including email accounts ending in @outlook.com, @hotmail.com, @live.com, @windowslive.com or @msn.com). "The Microsoft Next of Kin process allows for the release of Outlook.com contents, including all emails and their attachments, address book, and Messenger contact list". However, "W[w]e cannot provide you with the password to the account or change the password on the account, and we cannot transfer ownership of the account to the next of kin"	(Microsoft 2012)

Chart 1. Examples of policies enacted by the most popular online service providers. Only international online service providers were selected, to provide a wide view of the topic.

As far as legislation is concerned, in the words of attorney Deirdre R. Wheatley-Liss, as quoted in MarketWatch: "Most digital content exists in a legal black hole" (Fottrell 2012). In the United States, "there are few laws who have stepped in to address this (digital legacy issue)", and "[t]he law is lagging behind in this digital space". The present law is a 1986 federal act which prohibits companies from sharing dead individuals' information (NewsHour PBS 13).

Eric Rash's parents initiated a change in legislation following their tragedy, and Virginia passed a bill in May 2013 granting access to social network accounts of deceased minors (Kunkle 2013). According to the newest law in this field, bereaved parents may file a written request to the ISP with an official death certificate. The ISP is then required by law to "provide… access to the deceased minor's communications and subscriber records within 60 days from the receipt of a written request…" (Virginia's Legislative Information System 2013; Virginia General Assembly 2013).

State	Current Legislation	Reference
Connecticut	Gives the personal representative of a deceased person's estate the powers to access or copy the contents of the person's e-mail accounts	(State of Connecticut General Assembly 2014; Lamm 2013)
Idaho	Gives the personal representative of a deceased person's estate the powers to "[t]ake control of, conduct, continue or terminate any accounts of the decedent on any social networking website, any microblogging or short message service website or any e-mail service website"	(State of Idaho Legislature 2014; Lamm 2013)

Indiana	Allows the personal representative to access or copy any of the decedent's documents or information stored electronically by a "custodian," and requires the custodian to retain a deceased person's electronic information for two years after receiving a request for access or copies	(State of Indiana, 2008; Lamm 2013)
Nevada	Gives the personal representative of a deceased person's estate the power to direct the termination of any online account or similar electronic or digital asset of the decedent, but it does not address powers to access these accounts or copy their contents	(State of Nevada 2014; Senate Bill No. 131–Senator Cegavske 2013; Lamm 2013)
Oklahoma	Gives the personal representative of a deceased person's estate the powers "to take control of, conduct, continue, or terminate any accounts of a deceased person on any social networking website, any microblogging or short message service website or any e-mail service websites"	(State of Oklahoma 2014; Lamm 2013)
Rhode Island	Gives the personal representative of a deceased person's estate the powers to access or copy the contents of the person's e-mail accounts	(State of Rhode Island 2014; Lamm 2013)
Virginia	Gives the personal representative of a deceased minor's estate (but not a deceased adult's estate) the power to assume the minor's Terms of Service agreement for an online account "for purposes of consenting to and obtaining the disclosure of the contents of the minor's communications and subscriber records pursuant to 18 U.S.C. § 2702"	(Virginia General Assembly 2013; Virginia's Legislative Information System 2013; Office of the Law Revision Counsel 2014; Lamm 2013)

Chart 2. Currently, six other US states have older laws regarding digital assets: Connecticut, Idaho, Indiana, Nevada, Oklahoma and Rhode Island, and 18 states are considering the matter, to a certain degree (Lamm 2013).

The Password is Strong, but the Will is Weak

As we study the stories above, it would seem that leaving a list of passwords to one's digital legacies is a prudent step. Unfortunately, detailing one's usernames and passwords in a will is not recommended, for two main reasons:

1. It is the nature of the Internet to be dynamic, for people to keep registering to new sites and for ISP users to change their passwords periodically (according to Symantec, some passwords should be changed every month or two), either due to the website's prompting (for security reasons), or due to the user's own volition (upon forgetting his or her password and setting up a new one, for example) (Granger 2011). To assume that a user would update his or her lawyer with the new password after each occurrence seems unrealistic, as "the average Internet user has 26 online accounts... For individuals between the ages of 25–34, the number of online accounts jumps to 40" (Heck 2013).

2. Wills become a public record posthumously, and one would not wish for this data to become public (Eisenberg 2013). Since a will becomes a public document as soon as it is executed, the digital assets become vulnerable to exposure.

If that is the case, shouldn't a person leave in his or her will directions about the whereabouts of a hand written/digitally created offline list of passwords? While some will certainly do so, the will is written exactly to prevent cases in which a house burns down with all the documents in it, or similar cases in which physical documents are stolen or computer files become infected with viruses. Keeping a physical list in a safe place usually means it is not easily accessed, which diminishes the chances of each and every site and/or changed password there to be updated. It also makes it impossible to access from any place and at any time, which, again, diminishes the chances of the list being kept up-to-date. In addition, spouses or children of the deceased might have an interest of their own regarding the execution of the will, and might thus choose to keep the list hidden or claim not to have found it. Last but not least, a list kept in the house can be found accidentally or on purpose, even before the person in question has died.

Private online companies that offer digital legacy management solutions make use of high-end security measures to keep the stored lists of passwords safe. Several are referring to it as a virtual "safe" or "vault", thus highlighting the need to protect such sensitive data. Some utilize encryption methods to keep the lists safe. Others release the lists only upon receiving a death certificate, along with confirmation from more than one individual who were pre-assigned by the deceased (SecureSafe 2014; Estate++ 2014; Capsoole 2014). However, this service is supplied by private companies that may later be purchased or shut down, instead of the large ISPs themselves offering effective in-house solutions; Google was the first to offer an in-house service: "Inactive Account Manager" tool, which is only a partial solution (Google 2014).

Israel as a Case Study

Many companies now offer online tools for managing digital legacy and assets (Carroll and Romano 2014). These online tools provide an efficient, handy solution, as they are accessible at any time and from any place. Adding sites – or updating passwords to existing sites – is easy and immediate, and it makes more sense to add links to sites online then to dictate a URL over the phone to a lawyer. These online solutions cannot, however, provide an efficient solution for Israeli citizens, as Israeli law differs in two ways:

1. An official will can only be conducted on paper and in front of witnesses: therefore, wills that are online/digital/virtual/electronic etc., are not accepted (electronic signatures included), according to Inheritance Law and Regulations, clause 18–20 in Chapter 3: Inheritance by Will, Article 1:

> a) "18. Forms of will: A will is made in handwriting, witnessed, before an authority or orally.
>
> b) 19. Handwritten Will: A handwritten will shall all be written in the testator's hand, shall bear a date written by him and shall be signed by him.
>
> c) 20. Witnessed Will: A witnessed will shall be in writing, shall state the date and shall be signed by the testator before two witnesses, after he declared before them that it is his will; the witnesses shall at that time attest by their signatures on the will that the testator declared and signed as afore said"
>
> (State of Israel 2012).

2. Any posthumous instructions left outside the official will shall have no legal status, according to Inheritance Law and Regulations, Chapter 1, Clause 8a:

> a) "8.a. Transactions in future inheritances: An agreement about a person's estate and a waiver of his estate, made while that person was alive, is void"

(State of Israel 2012).

If an Israeli citizen were to use an online solution, it could not be considered a part of his or her will, and if conducted outside the will while carrying instructions to be performed posthumously, it can have no legal status. Even defining digital legacy as digital assets – a word that has legal implications – could prove to be a problem, as it places digital assets under the 8a clause. A solution can be found by defining digital legacy as extra-testamentary: assets which are in a category of their own, outside the assets which combine the estate. This solution is already in use in Israel regarding several financial assets, such as pension funds, study funds and provident funds.

Israel is lagging behind in an additional aspect: most of the Israeli ISPs, if not all, do not publish online their policy following the death of a user (a conduct which Vered [Rose] Shavit, co-author of this paper, is working on rectifying). Even the ISPs which do have a policy do not publish it online, making it impossible for users, while they are still alive (as well as their loved ones, after the death of the user) to be aware of it – until it's too late. Details of Israeli policies can currently be found only in Vered [Rose] Shavit's blog. It is clear that this type of information should be readily available to the users in each ISP's site, just as it is with the international ISPs (Shavit 2012). One of the reasons this online survey was conducted was the hope of steering Israeli ISPs to action by showing the public's wishes.

Incentive for Research

As mentioned, we suspect the gap is widely spread, but most people have not experienced it yet and thus remain oblivious to its existence. In order to confirm this hypothesis, we conducted an online survey in Israel in 2013, asking people for their opinion about the current state of ISPs policies. More specifically, we tried to find what default policy the public wants, in case the deceased did not clearly state his or her wishes in this regard prior to his or her demise. Should the service providers grant access to first-degree relatives? Which is more important: the deceased's right for privacy, or the remaining loved ones' wish to obtain and cherish his or her digital legacy?

Methods

In order to collect the view points of the public on the topic of digital and virtual death and legacies, we decided to conduct an online survey using the online service SurveyMonkey (abbreviated hereafter as SM). SM has received positive feedback in peer-reviewed journals, and has made a mark as an important and highly usable tool for conducting online surveys (Allen and Roberts 2010, 35–48). As such, we deemed it especially fitting for our purposes. Since the free version was limited to 100 respondents, we paid to use the extra features, which included the possibility of receiving the responses of up to 1,000 people.

After writing an initial pilot survey, we sent it to a small number of collaborators who hold expertise in surveys and digital culture, per the recommendation in the literature (Presser, et al. 2004, 109–130). The experts gave criticism and feedback of the survey, and their comments contributed to the final form of the survey.

Delivery of the Survey

Access to the survey was possible only via links created specifically for this purpose. The links were published in various Israeli blogs and social networks, mainly those dealing in digital culture[1]. We specifically targeted the Israeli public, by only conducting the survey in Hebrew. The survey was kept open for a month, between the 5th of May and the 4th of June, 2013. Overall, during this time period, 506 respondents entered the survey and answered some or all of the

[1] The links were published mainly in three blogs: Digital Dust (www.digitaldustblog.com); Room 404 (http://room404.net/(and Blazing Sciences (www.mada-duh.com).

questions. Demographic data about age, gender, living place (city/area in Israel), marital status, monthly income and religious beliefs of the respondents was collected. Of the respondents, 84% ranged from 18 to 45 years of age, 11.6% ranged from 45 to 60, 3.28% were minors (up to 18) and only 1.09% were between the ages of 60 and 70. The respondents were asked both about their sentiments regarding ISPs' posthumous policies in general as well as their hypothetical feelings and wishes regarding the digital legacies their relatives may posthumously leave behind. They were also asked specifically about the digital legacies they themselves would like to leave behind.

Ethical Aspects

The privacy of the participants was kept in strict confidence, and their answers were not attributed to their names and identities in any way or form. In the interest of utmost anonymity, the respondents were not asked to provide any identifying details such as names, e-mail addresses or digital usernames. However, the IP addresses of the participants were recorded in the surveys, in order to lower the chances that a single person would fill the survey twice. In order to protect this sensitive information (from which the identity of the respondent could theoretically be elucidated), SM makes use of various security measures and technologies, including the encryption of administrator passwords, intrusion detection systems and others (Gill et al. 2013, 1322–1328).

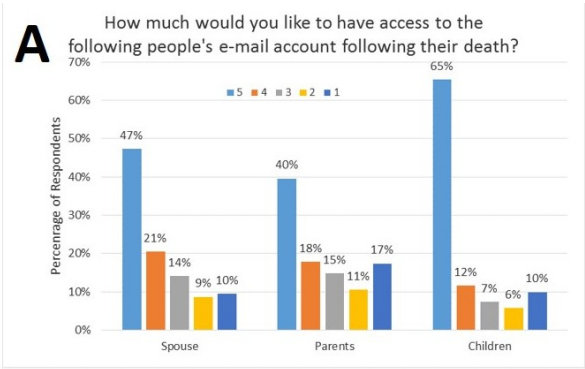
Results

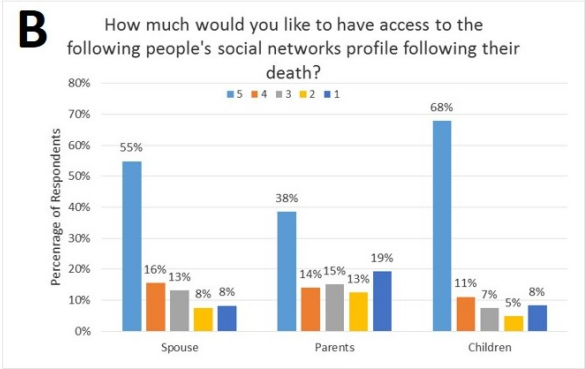
The Wish for Access

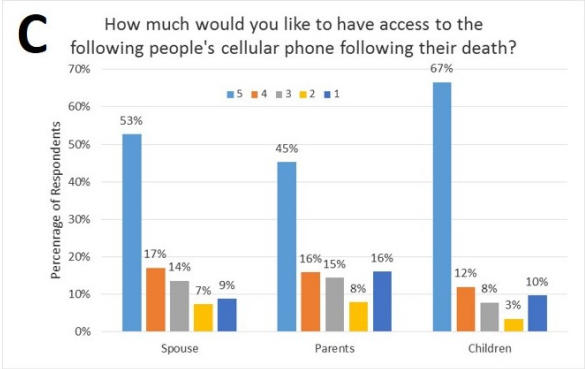
We asked the respondents how much access they would want to the digital assets that their relatives may leave behind after their death. The respondents were asked to grade their wishes in a scale of 1 to 5, when 1 is "Not at all" and 5 is "Very much". The number of respondents to each question ranged from 430 to 460 (n=506).

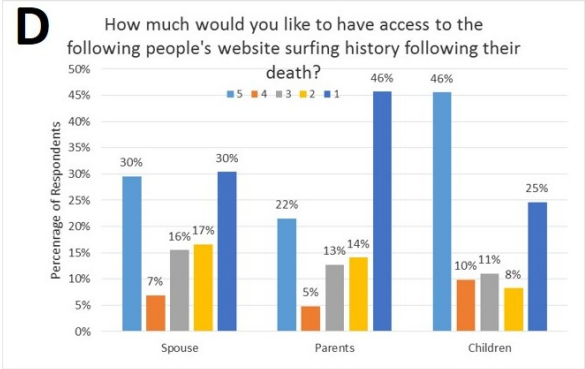
When asked to imagine the death of a loved one, most people wished for access to certain digital assets. A majority of the respondents indicated they would be interested in gaining access to their relatives' e-mail accounts (83%-90%), social media accounts (80%–91%), and cellular phones (84%–91%). The overall wish of the respondents to gain access to the website surfing history and internet search history was significantly lower than the other digital legacy categories (53%–75% and 52%–74%, respectively) (see Figure 1. A–E, the next page).

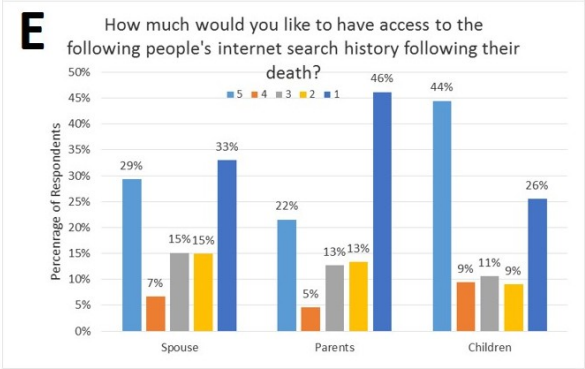
For easier viewing of the results, we re-clustered the data, and defined 1 as "No wish to gain access" after his/her death and 2–5 as "Wish to gain access, to various degrees", after his/her death (see Figure 1. F–J).

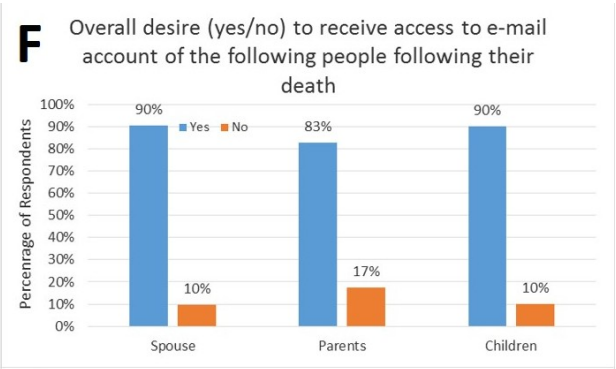

A
How much would you like to have access to the following people's e-mail account following their death?
Percenrage of Respondents
5 4 3 2 1
47% 21% 14% 9% 10%
40% 18% 15% 11% 17%
65% 12% 7% 6% 10%
Spouse
Parents
Children

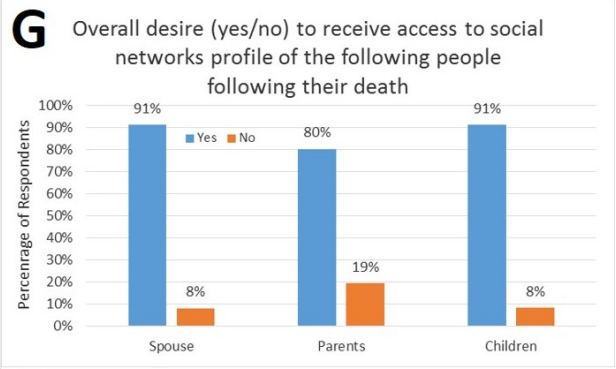

B
How much would you like to have access to the following people's social networks profile following their death?
Percenrage of Respondents
5 4 3 2 1
55% 16% 13% 8% 8%
38% 14% 15% 13% 19%
68% 11% 7% 5% 8%
Spouse
Parents
Children

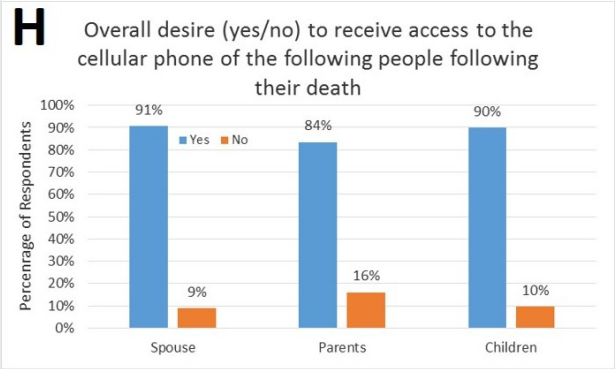

C
How much would you like to have access to the following people's cellular phone following their death?
Percenrage of Respondents
5 4 3 2 1
53% 17% 14% 7% 9%
45% 16% 15% 8% 16%
67% 12% 8% 3% 10%
Spouse
Parents
Children

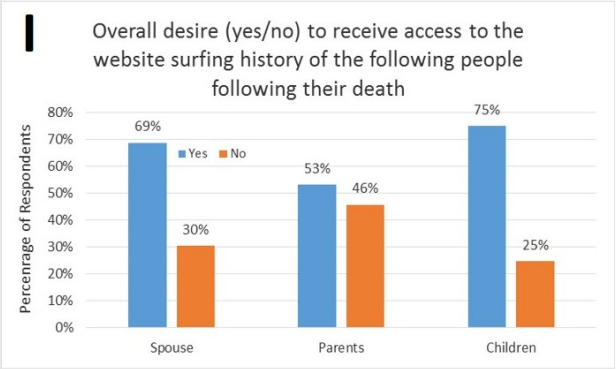

D
How much would you like to have access to the following people's website surfing history following their death?
Percenrage of Respondents
5 4 3 2 1
30% 7% 16% 17% 30%
22% 5% 13% 14% 46%
46% 10% 11% 8% 25%
Spouse
Parents
Children


E
How much would you like to have access to the following people's internet search history following their death?
Percenrage of Respondents
5 4 3 2 1
29% 7% 15% 15% 33%
22% 5% 13% 13% 46%
44% 9% 11% 9% 26%
Spouse
Parents
Children


F
Overall desire (yes/no) to receive access to e-mail account of the following people following their death
Percenrage of Respondents
Yes No
90% 10%
83% 17%
90% 10%
Spouse
Parents
Children


G
Overall desire (yes/no) to receive access to social networks profile of the following people following their death
Percenrage of Respondents
Yes No
91% 8%
80% 19%
91% 8%
Spouse
Parents
Children


H
Overall desire (yes/no) to receive access to the cellular phone of the following people following their death
Percenrage of Respondents
Yes No
91% 9%
84% 16%
90% 10%
Spouse
Parents
Children


I
Overall desire (yes/no) to receive access to the website surfing history of the following people following their death
Percenrage of Respondents
Yes No
69% 30%
53% 46%
75% 25%
Spouse
Parents
Children

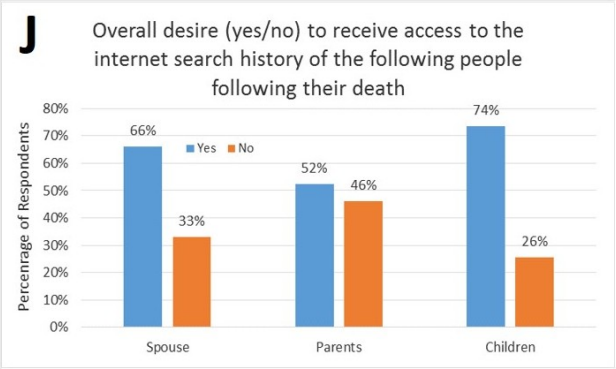

J
Overall desire (yes/no) to receive access to the internet search history of the following people following their death
Percenrage of Respondents
Yes No
66% 33%
52% 46%
74% 26%
Spouse
Parents
Children

Figure 1. A–E – The respondents were asked to rate their wish for access to the digital assets of a hypothetically deceased relative (in the scale of 1 to 5, when 1 is "Not at all" and 5 is "Very much"). F–J – The data is shown following re-clustering, where 1 equals "No wish to gain access" and 2–5 equals "Wish to gain access to various degrees".

In order to visualize the differences of attitude to various degrees of relations, we created a weighted averaged answer for each category of digital assets and relatives. The weighted average was calculated according to Equation 1, where TNR5 is the Total Number of Respondents who graded their wish as 5, TNR4 is the Total Number of Respondents who graded their wish as 4, etc.

Equation 1:

The visualization of the results in this way made obvious a second distinction that existed in attitudes towards spouses vs. parents, vs. children. The wish to be granted access to digital assets of children is significantly and repeatedly greater throughout the five categories of digital assets, than that expressed to those of spouses and parents. The wish to be granted access to those same digital assets of spouses is significantly and repeatedly greater than that expressed for parents (see Figure 2.).

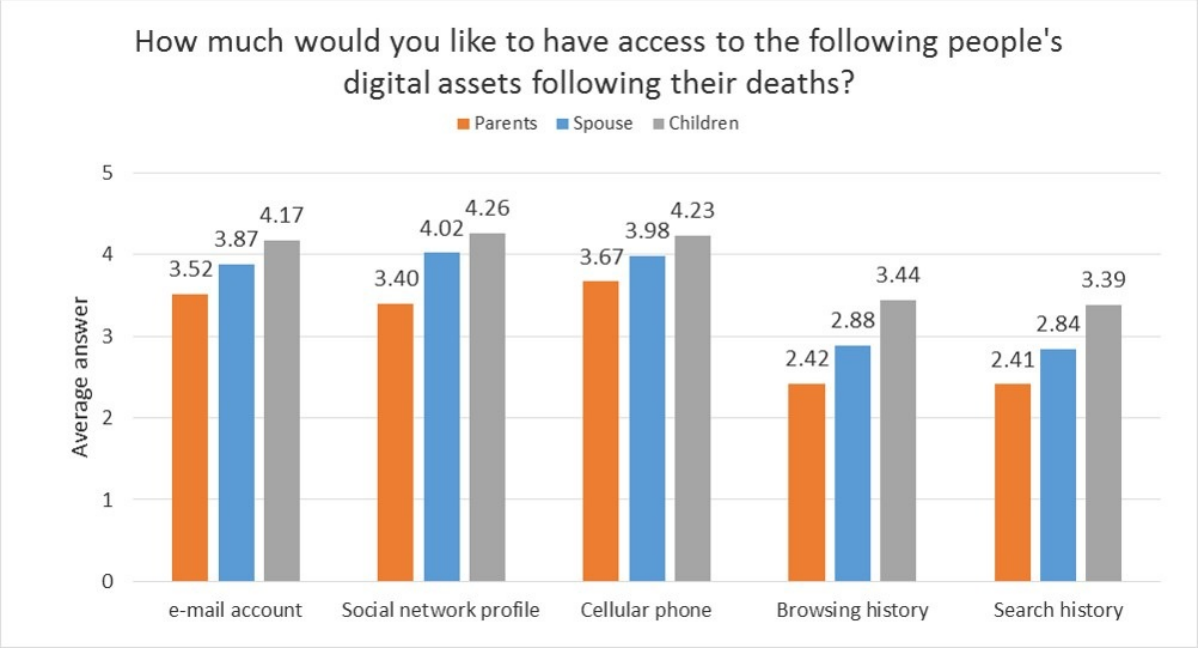


Figure 2. For each of the digital assets, and categories of relatives, we created a weighted average answer that included all the other replies. When presented this way, a distinction is made obvious between the attitudes towards spouses vs. parents, vs. children.

The Right of Minors to Post-Mortem Privacy

We asked the respondents if ISPs should be required by law to give parents/legal guardians access to the digital assets of their minor children or wards (under 18 years of age in Israel) after death. This information could help ISPs decide whether or not to create legally binding contracts with their minor users, and is also of use in developing government policy and regulation on the matter. Overall, 218 respondents replied to this question, either claiming that access should be given to parents only with their child's prior consent, or arguing that access should be given to parents even without the child's prior consent or acknowledgement of the issue. While we specifically asked only parents and legal guardians

of minors to answer this question, many childless respondents and parents of adults provided answers as well. We therefore divided the respondents according to two main categories – with children and without children – but could not divide them according to parents of minors and adults.

Of the parents, only 16.9% believed their children are allowed the right for post-mortem privacy, whereas 83.1% objected. In the group of the non-parents, the results were much more ambiguous, with 42% allowing children post-mortem privacy, and 58% objecting to it. Overall, when both groups are taken into account, 74.8% are pro-regulation that will require ISPs to give parents access to their deceased children's digital assets even without their consent, and 25.2% are against such regulation (see Figure 3.).

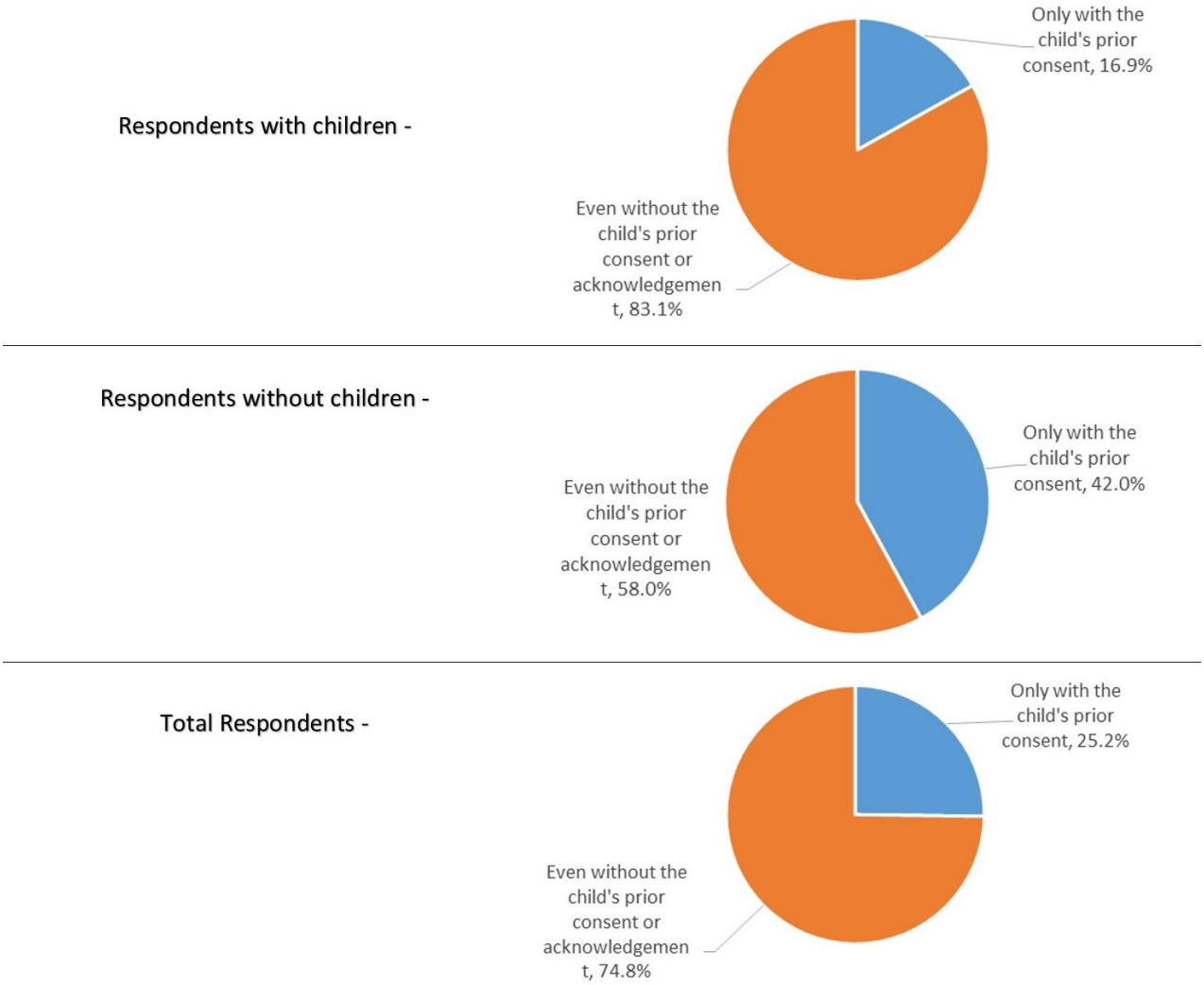


Figure 3. Should ISPs be required by law to give parents / legal guardians access to the digital assets of their minor children (under 18 years of age in Israel) after death? Overall, 218 respondents replied to this question. The respondents were divided according to two main categories: with children and without children.

Adults and Post-Mortem Privacy

How should ISPs regard the requests of first degree relatives to gain access to the departed's digital assets, in cases where the deceased has left no instructions regarding said assets? Of all the respondents to the survey, 421 answered this question, with 70.8% indicating that in such a case, ISPs should give access to relatives of first degree (parents, children

and spouse), as opposed to 29.2% who objected to granting access to anyone at all, if no instructions were left (see Figure 4.).

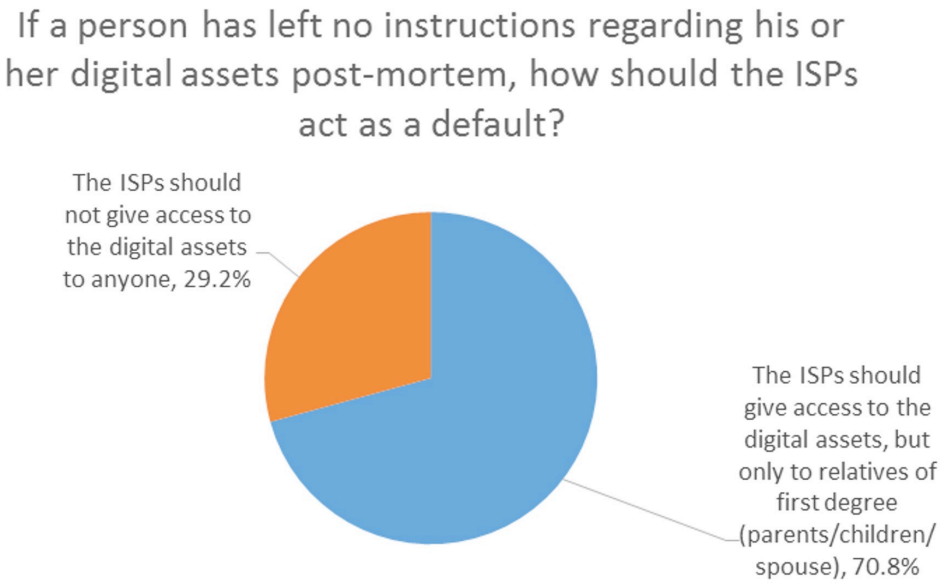


Figure 4. What should the ISPs default policy be, when addressing requests from relatives of deceased users to gain access to their accounts, in cases where the deceased has left no instructions regarding said assets?

Reciprocity

We have asked the respondents about both their wishes to gain access to the digital legacies of their relatives after their death (as discussed in this paper), as well as their willingness to grant their relatives similar access to their own digital legacies posthumously.

Due to space limitations, questions of the second type will not be addressed fully in this paper. In brief, preliminary (unpublished) results reveal that the two main trends discussed so far remain consistent: people are significantly more willing for their spouses to gain access to their digital legacies than their parents and/or children; also, while people are generally reciprocal in their approach (a large majority of those who wish for access to their relatives' digital legacies, are also willing to grant access to their own legacies), this tendency is significantly smaller when it comes to sharing their website surfing history and browser search history, with only ~65% exhibiting reciprocity in these areas.

Discussion

While there have been anecdotal stories about families struggling to gain control over their deceased loved ones' digital legacies, the phenomenon has not yet manifested itself on a broader scale. We believe, however, that with each passing year, more people will be exposed to this dilemma, as their life partners and relatives pass away, leaving behind unavailable digital legacies.

Wish for Access

In all of the cases where people wished to be granted access to their loved ones' digital legacy, the wish to gain access to children's digital legacies was greater than that of spouses' legacies, which was greater still than that of parents' legacies. We believe this stems from the view that the death of a spouse or a parent – while terrible on a personal level – is usually perceived as the result of old age, as a natural part of life. The death of a child, however, is always considered a tragedy. In some cases, a child's death is the result of suicide or acts of violence or bullying in school or online, in which case it is easy to understand why the parents would want to shed light on the circumstances that led to his or her demise. The child's death throws the parents into a "whirlpool of grief" and dissolution (Rubin and Malkinson 2001, 219–240), which enhances the parent's wish to preserve any part of the legacy left to them. In addition, the death of a child is considered to be an extremely (possibly the most) devastating experience, more than the death of a spouse or parent (Christ et al. 2003). We therefore believe that this greater loss leads to the parental wish to cling to any tidbit available to them following the death of their child, to a greater degree than following the death of a spouse/parent (this is not to belittle the tremendous loss these too may suffer).

There was a clear difference between the respondents' approach towards social networks, e-mail accounts and cellular phones, as opposed to website surfing and search history. We believe this difference is based on two synergistic approaches by the surviving relatives: the wish to gain insight intothe deceased's life and preserve important aspects of it, as discussed by Unruh (Unruh 1983); and apprehension of uncovering unknown aspects that might tarnish the image the loved one left behind.

As indicated in a past research about teenagers and their virtual possessions by Jodi Forlizzi et al, social networks and e-mail accounts are used daily "in order to manage… [a] presentation of self to multiple audience" (Odom, Zimmerman and Forlizzi 2011, 1491–1500). It is therefore clear that other people see those digital legacies as representative of the deceased's persona and generated image, and would like to preserve those aspects of his or her life that were promoted actively when the person was alive. Search history, on the other hand, is more indicative of the aspects that this person might have preferred to keep private, and did not choose to actively share even with his or her loved ones.

Regardless of the reasons behind the respondents' answers, it is clear that there is a gap between the current policies enacted by various ISPs and the wish expressed by the public to gain access to their loved ones' digital legacies and representations after their death.

Post-Mortem Privacy

Which is more important: the privilege of privacy, even after death, or the wishes of the living to be granted access to all aspects of the deceased's life? This dilemma has ethical implications and must be resolved in a well-regulated and transparent manner by the ISPs and legal authorities. However, these entities should also pay heed to the sentiments expressed by the public on this issue, and find solutions accordingly.

We wish to clarify that we do not dismiss nor disregard the wishes of people for post-mortem privacy, as these are perfectly understandable and legitimate wishes and should be respected or considered, at the very least. We do believe, however, that most relatives who find themselves locked out of the digital legacies of their loved ones are put in this position not due to the deceased's explicit wish for post-mortem privacy, but due to the deceased's lack of knowledge or awareness regarding his or her digital legacy issues and/or the ISPs policies in this regard.

In order to uncover public opinion on this matter, we asked the respondents whether ISPs should grant access by default to first-order relatives of the deceased, in case no prior consent or acknowledgment were given. In two different questions we separated cases of minors from adults. In both cases, the results were strikingly similar and highly

significant. Of all the respondents, 74.8% believed parents or legal guardians should gain access to the digital legacy of a deceased minor child or ward. Similarly, 70.8% believed that first-degree relatives should gain access to the digital legacy of a deceased adult.

These results indicate that while the ISPs policies prohibit the granting of access to relatives of the deceased, a majority of the public feels differently, and believes that access should be granted by default to first-degree relatives, particularly in the case of minors.

A possible solution could be to change the default ISPs policy from opt-out to opt-in, similar to the organ donation system. In some countries, organ donation is not the default, unless the deceased has left explicit instructions in the matter. In other countries, organ donation is the default, unless the deceased has left explicit instructions otherwise (Johnson 2003). Currently, most ISPs policies act in the first manner: access is not granted to relatives, unless the deceased has left explicit instructions otherwise. We assert that the second type of policy – providing access to relatives unless the deceased has left explicit instructions otherwise – should be considered the default, and its implications should be analyzed in depth.

Privacy

Prior to reviewing the results of this survey, we believed that the digital legacy assets people would hold most dear to them would be the contents of their emails, their social network accounts and their cellular phones. The results, however, seem to indicate that people hold their web surfing history and search history as even more private, and therefore are less willing for their loved ones to have access to it. This seems to be the case when the reciprocity angle is taken into account, as the surveyed were also more reluctant in their wishes to gain access to the web surfing history and search history of their relatives and loved ones, which seems to suggest they, too, perceive them as more private. This issue needs to be considered carefully by ISPs, should they redesign their policies.

Reciprocity

Even though reciprocity has been present in most answers, it has not been in all. We believe these findings reveal the complexity and sensitive nature of these issues, as there is no one "right" answer: when reciprocity was looked into, some answers revealed that even some of the people who wish to gain access to the digital legacies of their loved ones, are not necessarily willing for their loved ones to gain access to their own digital legacies, particularly in the two "forbidden" fields of surfing and search history. We believe this highlights the need to find a new solution, one which will allow each and every ISP user to clearly state his or her wishes in this regard, and for each category in the legacy in itself, as there isn't a "one solution fits all" to this sensitive matter.

Research Limitations

Although more than 500 participants answered the questions in the survey, there is a very real possibility of bias, for three reasons. First, due to the online nature of the survey, it is clear that the participants are at least adept at using computers and connecting to the Internet. Secondly, 338 participants (66%) have joined the survey either through Vered (Rose) Shavit's blog, which deals with digital legacies, death and grief (Shavit, Digital Dust 2013), or from a link that was shared by Shavit throughout her social networks. This means that many participants might have prior knowledge of these topics. Those people who are "in the know" of such information, have often experienced bereavement and grieving themselves, and are thus biased by personal experience.

Further research would need to be conducted on a larger sample size, preferably from other countries as well, since this survey only targeted the Israeli public.

Conclusions

In the past decade there have been several instances in which grieving families were left without access to their loved one's digital legacies. This issue caused the families further pain and anguish, and prompted lawsuits against the ISPs which denied the families access to the deceased's account. However, most ISPs are still adamant that no access should be granted to relatives of the deceased, as such access would violate the terms of use that the deceased signed upon when opening the account, leading to a violation of his/her privacy.

We believe that this issue is not as uncommon as it may seem, and that many families will discover during the next decade or two that they too cannot have access to their loved ones' digital legacies. In order to verify our hypothesis, we conducted a first-of-a-kind online survey among the Israeli public, inquiring into their positions and wishes concerning digital assets and legacies.

The results confirmed our hypothesis: the public largely believes that first-degree relatives should be granted access to the deceased's digital legacies posthumously, even more so in the case of minors. Moreover, parents, spouses and even children state their wish to have access to the deceased's digital legacies posthumously. It is therefore clear that there is a gap between the policies enacted by the ISPs, and the wishes of the public.

While we urge ISPs to take note of the public's opinions and feelings on the matter of digital legacies, we are aware that the solution to the problem cannot be resolved based on public opinion alone. This issue is highly complex, and involves legal, technical, ethical, philosophical and financial aspects that need to be addressed. We hope that this paper will lead to active discussion and further research that will explore this field more deeply, and eventually bring about a change in the present policies. We believe such a change should occur sooner rather than later, as in each year that passes, more people will face similar dilemmas.

Biographical notes:

Ever since her brother, Tal Shavit, was killed when hit by a car on March 2nd 2011, Vered Shavit has delved into the realm of Digital Death. She has been writing and conducting independent research about the virtual, online and digital aspects of modern deaths. She has gained expertise in these fields and has become a lecturer on the subject, appearing in the media numerous times to speak about it. Contact: death.in.digital.era@gmail.com

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