



Volunteering and the Digital World: Extending the Power of Volunteering through New Technologies

VOLUNTEERING TOGETHER TO ENABLE CHANGE
AND CREATE A BETTER WORLD CONTEXT PAPER

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Volunteering Together to Enable Change and Create a Better World.

The COVID-19 pandemic has emphasised how volunteers as agents of change provide the practical action that builds hope and resilience, improves lives and strengthens communities. The pandemic has resulted in the postponement of the October 2020 IAVE World Volunteer Conference hosted by the Emirates Foundation in Abu Dhabi until the autumn of 2021. However, the conference theme chosen for 2020 of 'volunteering together to enable change and create a better world' has never been more relevant or more real.

As part of the preparations for the conference the Emirates Foundation had agreed to support the writing of seven context papers on the conference sub themes. This project has continued in order to provide for greater consideration of the issues, particularly with relevance to volunteering and COVID-19, and to enable wider dissemination of knowledge that will add value to those supporting and developing volunteering around the world.

The context papers seek to bring forward current thinking and any relevant research, highlighting case studies to demonstrate impact. The papers will be published and available between July and December 2020. In addition, an incredibly special series of online Forums is being organized to enable the sharing of knowledge and discussion of the issues. The papers and the Forums provide information and insight on the following key topics:

- ▶ Volunteerism and Community Resilience – Locally Owned Solutions Delivering Impact
- ▶ Future Leadership – the Role of Youth Volunteers
- ▶ Tolerance and Inclusion – Volunteering Enabling Community Cohesion and Embracing Diversity
- ▶ Volunteering and the Digital World – Extending the Power of Volunteering through New Technologies
- ▶ Corporate Volunteering – Delivering Business Objectives through a Values Focused Mission
- ▶ Measurement and Impact – Providing the Evidence that Volunteering is Good for Society and Good for You
- ▶ Volunteering 2030 – New Paradigms

Introduction

Over the last two decades the use of digital technology has become central to how, where and when people volunteer. In 2020 our dependence on digital technology intensified when governments across the world locked down their citizens in an effort to curb the spread of COVID-19. Traditional forms of volunteering were disrupted, forcing volunteers and volunteer involving organizations to find new ways to continue their activities

The revolution triggered by digital technology is not a development that one can support or reject. It is a cultural change that needs to be shaped. This paper identifies a number of ways in which digital technology is simultaneously empowering and challenging volunteering.

The first section introduces key issues in the digital landscape and looks at implications for volunteering. This is followed by three case studies that illustrate how digital technology is used in resource-poor communities, and in middle and high income contexts. The third section examines critical issues and debates in this field, while the last section presents future trends likely to impact on volunteering in a digital world.

The Digital Technology Landscape and Volunteering

The fourth industrial revolution, climate change, increasing inequality, poverty, migration, and COVID-19 have all created a global environment characterised by disruption. **Responses to COVID-19 have produced new attitudes about connecting with others thanks to mobile telecommunications and other digital platforms. Within this environment, volunteers of all descriptions are actively using digital technology.**

The digital ecosystem is driven by private sector internet service providers, technology companies and governments, among others. While anyone can create content, offer services, and sell products on the internet, powerful interests shape the nature, reach and costs of internet provision. At the grassroots level, factors such as the quality and reach of network coverage, the cost of data, network ownership and repressive actions by authoritarian governments determine whether and how internet connectivity and usage functions in different communities.

How are volunteer involving organisations using digital technology?

For volunteer involving organizations (VIOs) digital technology has revolutionised work processes as well as volunteer action. At the same time, VIOs have often resisted the full integration of digital tools into their operations owing to other priorities, financial constraints, and a reluctance to invest in operational retooling. Organizational challenges include a lack of IT knowledge; questions of data protection; how to manage social media; and the handling of false information or hate speech, to name a few.¹ Nevertheless VIOs are gravitating towards software that improves volunteer management, and *crowdfunding* campaigns are being incorporated into organizational funding strategies.

In the face of COVID-19 digital tools have provided a lifeline linking volunteers virtually within their communities and with partner organisations to mitigate the impact of the pandemic. For example, using Facebook, WhatsApp and other platforms, volunteers run initiatives dealing with COVID-related challenges such as food insecurity, increased gender-based violence, and deteriorating mental health.

Storytelling, videos, and pictures are powerful ways in which VIOs can share information about their activities, thereby reinforcing the authenticity and transparency of their programs.² Advocacy work and campaigning is increasingly making use of websites, social media, and mobile apps. For example, in Madagascar, a team of young people have built an app in the local language to monitor and curb corruption in the distribution of government relief funding for COVID-19.

Digital technology offers VIOs the flexibility to create short and long-term volunteer opportunities, and to target different types of volunteers as their organisational needs change. Online volunteer activities are generally described as *virtual volunteering* (also as *e-volunteering* or *remote volunteering*).

They include website development and maintenance, fundraising, translation, or database management.³ Short-term voluntary activities such as rapid research or creating social media content, are usually referred to as *virtual micro-volunteering*.

It is thus becoming clear that the **boundaries between volunteering on-site and online are becoming increasingly blurred and the use of digital technology is widening the space for different types of volunteering.**

Participation and active citizenship

Digital technology plays a powerful role in opening up new forms of participation and in fostering active citizenship. The possibilities of mobilizing opinion, sharing information, and commenting on political, social, and other issues via social media (also called *microblogging*) has created a new sphere of influence between private and public opinion. Sometimes participation in a fundraising campaign or an online petition is perceived as a superficial form of volunteering, which is why some call it “Clicktivism” or “Slacktivism”⁴. While these online activities may require little commitment and effort from the respondent, these new forms of participation can produce high levels of mobilization around climate change and other issues.

Digital infrastructures and tools open up volunteering opportunities in areas that were previously hardly accessible to citizens. For example, the concept of *citizen science* enables voluntary participation in scientific research. In Kenya for instance the *Uwezo* project has worked with volunteers in a citizen-led data collection project to measure and officially recognize literacy and numeracy in communities.⁵

Moreover, activists, volunteers and non-profit organizations use digital infrastructure to hold states more accountable to their citizens and thereby alter the relationship between the state and civil society. Participatory budgeting initiatives such as those undertaken in the Dominican Republic some years ago involve citizens in the decision-making about municipal budget allocation.⁶ Transparency and open knowledge initiatives help citizens to exercise their rights more easily via websites and various online forums to obtain better information about governmental action ([see case study 2](#)).

At the same time **digital transformation has itself become a field for engagement and volunteer activities.** Open-source and civic-tech projects make it possible for civil society to get involved in questions of digital governance, for example, about network policy, neutrality, data protection and transparency. In these ways the development of a digital ecosystem in service of the common good has become a political demand among civil society actors in many countries.

Artificial intelligence and robots

Artificial Intelligence (AI) involves computers doing things that have traditionally required human intelligence. This includes creating, classifying, analysing, and drawing predictions from data. It also involves acting on data, learning from new data, and creating something new, based on the data that AI accesses and improves over time.

AI can produce results once thought only possible by a human mind,⁷ such as creating music, booking an appointment in a hair salon or making a reservation for dinner in a restaurant.⁸ In the latter cases the AI placing the call was able to navigate issues such as a scarcity of appointment times and a misunderstanding by the restaurant of how many people were in the party. The human recipient of the call had no idea they were talking to a computer.

While some progress in *robotic technologies* is currently only visible in the commercial sector, or at the experimental phase, some has already been adopted in the volunteering sector. For example, rescuers with the Red Cross in Mexico used a robotic snake to identify local earthquake victims buried in rubble.⁹ It stands to reason that the number of examples will continue to grow. For example, robots are performing surgery where they are seeing and manipulating with incredible precision, and robotic exoskeletons are aiding the rehabilitation of those with spinal cord injuries.¹⁰

AI may replace certain types of volunteering activities. For example, driverless cars can replace volunteers who transport visually disabled people; robots can read to children or the elderly. As is the case in the paid labour market, AI application analysis may reduce bias in the recruitment process **or enhance the efforts of volunteers by enabling them to focus on specific elements of their role, thereby increasing their productivity.** AI has already been tested to assign the “appropriate task” to volunteers in elder assistance, in order to obtain better outcomes from their services while maximizing the volunteers’ level of satisfaction.¹² ([see case study 3](#)).

Case Studies: Solidarity platforms, creative online activism, and artificial intelligence

This section presents three case studies that illustrate how volunteers use digital technology in different contexts: a solidarity platform in support of resource-poor households; civic actors using digital technology in middle-income contexts; and the potential of artificial intelligence as a force for change in volunteering.

Case Study 1

Community Connect – A platform for solidarity in a time of COVID-19 (South Africa)



Community Connect is a South African volunteer-driven digital platform that was launched in response to widespread food insecurity under the COVID-19 lockdown.¹ The initiative offers beneficiaries the agency and power to direct what their households need, instead of receiving a one-size-fits-all food parcel. The platform is a people-to-people initiative that connects households with a support network of individual donors, volunteer groups, and NGOs or government agencies. Through the platform, givers express solidarity with vulnerable fellow citizens and act on that recognition.

How it works

By July 2020 Community Connect had 1,000 participants responding to households in need. Using Google Sheets and Google Forms, it built a digital platform to run its operations with a small number of volunteer administrators. Recipients can opt for a food parcel, a voucher, or a cash transfer. Donors can choose to make once-off donations or repeated donations over a three-month period. Owing to the demand, provincial registers were created to widen access to individual donors and local food distribution agencies. To strengthen its impact, the platform also draws donations from local residents' associations, faith-based feeding schemes, and other initiatives. The volunteers are invited to share whatever skills they can contribute to the initiative.

Underpinned by the drive for solidarity, the Community Connect platform aims to preserve the autonomy of participants, the dignity of the giving and receiving process, and the ability of recipients and donors to choose what is supplied. The initiative does not have a website, preferring to run as a dynamic evolving project responsive to changing needs.

Impact on volunteering

The initiative enabled people to volunteer despite the restrictions on movement, and to establish connections across the country. Donors from working-class communities participated alongside those from wealthier communities and in this way the initiative transcended geographic, socio-economic, religious, racial and class barriers. **Community Connect represents an example of an informal 'pop-up' volunteer response to the hunger produced by COVID-19.**

Case Study 2

AskTheState – Fostering active citizenship through open information (Germany)



The German Internet platform and campaigning initiative *FragDenStaat.de* (“Ask the State”)¹³ has revolutionised the way citizens can exercise their right to freedom of information using digital technology, social media, and a good deal of humour! Democracy needs a public sphere and a well-informed and active civil society, and the founders and activists of *FragDenStaat* argue that if knowledge is power, open knowledge means empowerment. This constitutes a basis for the social and political change fundamental for democracy, participation, active citizenship, and volunteering.¹⁴

How it works

Like many other countries¹⁵ Germany passed a Freedom of Information Act (FIA) in 2006. This made it possible for anyone to request documents from government ministries and other authorities regardless of the motive for the request. However, the process confronts the reticence of government authorities to make the information freely available.

FragDenStaat functions as an intermediary between citizens and government authorities. Members of the public put requests for information into pre-formulated letters on the *FragDenStaat* website, which publishes the questions and answers online. As a result, the number of requests made under the German FIA doubled within the project’s founding year. As of August 2020, more than 140,000 enquiries have been sent to different authorities via *FragDenStaat*.

The platform is complemented by several creative campaigns for more freedom of information. For example, it ran a secret competition to find out which ministry responds fastest to requests for information. Activists used their own internet platforms to send requests for information to each of the Federal ministries. When some of the ministries discovered the competition, they responded in a competitive spirit: instead of requiring a couple of weeks in which to respond, they answered within a day! After *FragDenStaat* announced the result on Twitter, the winning ministry responded with a gif: A football star celebrating his victory.

Impact on volunteering

FragDenStaat represents an outstanding example of how creativity can lead to more humane communication between citizens and authorities. Through the innovative use of digital infrastructure, the strength of crowdsourcing and collective action, the initiative has fundamentally altered the relationship between civil society actors and the German state. **It has provided citizens with a powerful tool to exercise their right to information, obtain the information necessary for their active citizenship and volunteering activities, and to hold government to account.**

Case Study 3

PARO Seal – An interactive robot assisting voluntary work in healthcare



PARO is an interactive robot powered by Artificial Intelligence (AI) that has been assisting caregivers in Japan and across Europe since 2003 and in North America since 2008. The healthcare sector represents an interesting lens through which we can examine the intersection of technology and volunteer engagement, and PARO foreshadows what is to come. According to various studies, people are becoming more comfortable with the notion of being assisted by robotic and AI technologies.¹⁶

How it works

The PARO Seal¹⁷ has various sensors - tactile, light, auditory, temperature, and posture - which enable it to perceive people and its environment. It can recognise the direction of voice and words such as its name, greetings, and praise. PARO learns to behave in ways that the user prefers, and to respond to its name. For example, if you stroke it, PARO will remember its previous action and try to repeat the action to be stroked. If you hit it, PARO remembers its previous action and tries not to repeat it.

Care homes that use medical devices such as PARO often engage volunteers. As with volunteers, PARO becomes engaged with patients - primarily those suffering with dementia - to reduce wandering, loneliness and agitation, ease depression and improve relaxation.

Impact on volunteering

Managers in such care homes were interviewed about how this modern technology has impacted on volunteer engagement. The presence of PARO did not reduce the quantity of time volunteers spent with patients. **In some cases, the presence of PARO created new volunteer opportunities following various media events. Volunteers did not see PARO as a threat, but rather saw it as a support to what they were doing.** Reasons cited include: PARO's presence calmed the patient, making the volunteer's job easier; PARO benefited patients when volunteers (or staff) were not available to provide emotional support; and sometimes PARO could get a positive response from some residents when volunteers were not able to.

While PARO the seal may represent only the tip of the robotic and AI technology iceberg, the results from its deployment signal in a small way what we can expect from more advanced technology currently in development.

Critical Issues and Debates

A persistent digital divide

Information and Communications Technology for Development (ICT4D) is a relatively new term for using digital technology to increase access to education, health, and other services in resource-poor communities. ICT4D can help prevent deforestation, or reduce and recycle plastic waste, depending on how the applications are created and by whom. However, the divide between North and South, and within communities between rich and poor, continues to constrain the full potential of digital transformation in development.

The digital divide was initially conceptualised in terms of access to computers, the internet, mobile phones and social media. Figures for July 2020 show that 66% of the world's urban population use mobile phones, while internet penetration is 55% and social media penetration is 51%.¹⁸ These figures represent a 2.4% increase over the previous year, and were produced following the start of the COVID-19 pandemic. However, they reflect digital access only in urban contexts, thereby demonstrating the lack of information about digital prevalence in rural areas. This in itself is a feature of the digital divide.

Despite evidence of the growing uptake of digital technology worldwide, it is necessary to look more closely at the factors that facilitate and constrain access. One such lens identifies the “five ‘A’s of technology access”.¹⁹ These are:

- ▶ Availability – to whom is the technology (un)available?
- ▶ Affordability – for whom is the technology (un)affordable?
- ▶ Awareness – who is (un)aware of the technology?
- ▶ Abilities – who has the digital literacy to use the technology?
- ▶ Agency – who has the self-belief to use the technology?

‘Agency’ and ‘ability’ are particularly important to women who may confront issues of power and inequality in their homes, the workplace, and other contexts. However, all five factors are necessary to address imbalances in the access to and use of digital technologies.

A further constraining factor is a lack of political will among governments that fail to create the enabling environment necessary for universal access to telecommunications networks.²⁰ In many countries, governments treat telecommunications as a ready source of revenue with the result that access tends to be concentrated in resource-rich communities. Over-regulation can constrain the reach of private sector players seeking to extend reliable networks, but at the same time regulation is necessary to prevent private sector collusion.

The persistence of a digital divide is thus driven not only by imbalances in North-South economic and power relations; it is also a result of inequality, gender imbalances and national governments not delivering the digital infrastructure necessary for their citizens to participate fully in a digital world.

What drives volunteers to use digital platforms?

The literature suggests that many users of social media search for human relationships and are drawn to digital platforms that give them a social identity. People can build a sense of belonging through their association with particular causes or organizations.²¹ This raises questions about how to structure virtual relationships that aim to add value to struggles for social justice and development.

One approach is for VIOs to clearly express their values online and motivate volunteers to support projects positioned in social, humanitarian, or environmental spaces. Recent research indicates that **“the reputation and image of NGOs in social networks that support social projects is positively identified by volunteers ... [and will] promote and improve collaboration between volunteers”**.²² VIOs can build trust, show respect for their stakeholders, and unequivocally demonstrate how their values shape their work.

For example, Ushahidi, a Kenya-based organization, is an open source web application for information and interactive mapping, and frames its value proposition as follows: “We believe that if marginalized people are able to easily communicate to those who aim to serve them, then those organizations and governments can more effectively respond to their communities’ immediate needs while simultaneously bringing global attention to their problems through the aggregation of their voices.”²³

Bias, discrimination, and implications for the volunteering sector

Contrary to common perception, digital technology, the internet, and AI are not neutral spaces. Think of Wikipedia, a global online encyclopaedia that appears to collect “neutral” knowledge. The English version is dominated by male volunteer editors, which produces a bias against women’s perspectives across the content. There is even an article on Wikipedia about its own gender bias.²⁴ In recognition of such bias, an initiative called Herstory was formed in 2016 to help close the gender knowledge gap on Arabic Wikipedia. Young volunteers produce content about gender equality and the rights of women and girls.²⁵

Critical to the use of ICT4D is the importance of involving local communities in the creation of applications that are designed to support projects in grassroots contexts. Success factors include drawing on indigenous knowledge and consulting the local volunteers about which design will work best. For example, a Cambodian community worked closely with a Cambodia-based company called Web Essentials to develop the Prey Lang anti-deforestation app that enables volunteers to collect evidence of deforestation using smartphones. It is designed for literate and illiterate community members and was trialled by local communities prior to its release.²⁶

Gender features strongly in how the internet and other platforms are used, particularly by women living in challenging circumstances. Knowledge networking is cited as one of the most important forms of support that digital technology can offer, particularly in supporting women’s action in governance, democracy, and gender-based violence. For example, a small group of women volunteers in Orange

Farm, South Africa, use mobile phones to collect evidence from victims of gender-based violence. The volunteers take photos of abused women, record their accounts of what happened, collect witness descriptions, and use the evidence to report cases at the local police station.²⁷

Women's use of digital technology can be constrained by more than poor connectivity: in some cases men prevent women from using ICT at home; there is the risk of trolling on social media; and online abuse can translate into offline threats and violence. Mobile phones with tracking devices can be used to restrict women's mobility but can also ensure their safety and security.

This shows that volunteering in a digital world faces the same power structures and forms of discrimination as it does in the offline world.

Are volunteers being replaced by technology?

A common fear is that paid jobs or volunteer opportunities will be replaced by technology. More importantly though, is the question of whether or not an organization's mission may actually be better served by replacing volunteers with machines and AI. Consider the following two examples.

In many parts of the world, volunteers are engaged as firefighters. In a world where a robot could enter a burning building without being affected by high temperatures, smoke and poisonous gases, the benefits of replacing a volunteer with a robot are obvious. Not only is a robot able to outperform a human in saving people trapped inside, but it can also protect the safety of the volunteer firefighters. Although not humanoid in its appearance, a robotic firefighter was part of the solution in extinguishing the fire at Notre Dame de Paris in April 2019.²⁸ This example suggests that the firefighters were not replaced by the robot(s), but supported by the machines.

A common volunteer opportunity in many countries is to provide people with transportation to medical appointments. Unsurprisingly, people respond with various degrees of pushback to the notion of self-driving cars replacing volunteers. This has mostly been due to the emotional support that the volunteer usually provides during the drive. From the viewpoint of the person being assisted, however, independence is the most prized virtue, enabling them to have control over their lives. Steve Mann is legally blind and has been helping Google test its self-driving car, using it without anyone else in the car. "Going where I need to go in a vehicle without having to make arrangements with other drivers or a family member, it just let me be a whole person again."²⁹

Digital transformation will reach into the ways in which volunteers serve. The fear of volunteers being replaced by robots is justified, but artificial intelligence also presents opportunities for new roles and personal growth in the world of volunteering.

The Future of Volunteering in a Digital World

The speed with which digital transformation is impacting on everyday life suggests that it will rapidly influence the future of volunteering. The analysis and examples in this paper point to a number of *expectations* about how digital technology is likely to (further) reshape the volunteering sector, and the issues this is likely to raise.

Digitalization in the context of COVID-19

Governments worldwide restricted people's mobility and reduced physical public space in their efforts to contain the COVID-19 pandemic. Consequently, the voluntary sector saw an extraordinary increase in online volunteering. Worldwide, volunteers, activists and organizations had to move their activities from offline to online – be it “Fridays for Future” protests in Argentina, the board meetings of a rabbit breeding association in Denmark or delivering training online in Vietnam. Furthermore, thousands of volunteers helped fight the pandemic virtually, for example, through an online awareness and hygiene campaign in Cameroon.³⁰

As the impact of the pandemic takes hold we can expect to see accelerated demand for investment in digital infrastructure and an upsurge of innovative online formats for volunteer activities. Time will tell whether and how VIOs transfer digital technologies into their operations and structures, and which new forms of volunteer involvement will emerge. Are recruitment, matching and placement processes likely to continue, but in entirely new forms? Will we see many more instances of informal volunteer cooperation through digital technology such as the Community Connect example in our first case study?

International volunteering and COVID-19

COVID-19 suspended the inherent logic of international volunteering: *Going abroad*. This has tremendous consequences for the programmes, activities and funding of international volunteer sending organizations. Archimede Sekamana, Executive Director of Rwanda Volunteer Network, anticipates that digital trends will play a much bigger role in North-South partnerships: “If we need ten volunteers, we could use two on the ground and eight working virtually”. When the virtual volunteers are located in other countries, new challenges emerge because it is difficult for volunteers to learn virtually about the social conditions and culture in another context, which they have not personally experienced.

Sekamana is also concerned that there will be funding cuts for international volunteer programmes: “hence, we need to create a virtual friendship, but that won’t be as impactful as having volunteers placed with organisations in our country”. In this sense **the international volunteering sector and the drive for Volunteering for Development will have to redefine itself against the backdrop of COVID-19.**

Decentralization of volunteer engagement

Mobile apps and internet platforms will continue to decentralize volunteer engagement. Although long-term volunteering will still play a central role globally, public action that is organized online in swarms and networks will become ever more prevalent. Following the 2010 earthquake in New Zealand, a Facebook page called the “Student Base for Earthquake Clean Up” engaged over 10,000 volunteers to help clean up the city.³¹ These types of uncoordinated, sporadic and collective actions, together with *flash mobs* and boycotts, have already become powerful methods of engagement. **Digital technology makes it possible to embed voluntary work in different aspects of life because it is no longer tied to time or location.**

Younger people who prefer to avoid rigid structures associated with traditional volunteer involvement, are able to use the internet to support a variety of charitable projects. Some scholars call them “*the new volunteers*”.³² The prevalence of digital technology is likely to mobilize more of these “new volunteers” in future. This will challenge VIOs to adopt innovative approaches to volunteer engagement, particularly when they seek to recruit young people.

The potential of mapping, geotagging, and open source projects

Many new forms of volunteering use mapping and geotagging platforms. For example, the Kenya-based *Ushahidi* platform has engaged volunteers in mapping election-related violence in Kenya, as well as natural disasters and relief efforts in Haiti, Nepal and elsewhere. The *Litterari* platform enables people to easily upload geotagged images of litter to contribute to a database that can be used to track and trace sources and problem areas.

These platforms support the notion of *micro-volunteering* where people give briefly of their time to gather data that contributes to significant datasets. The same goes for *open source* projects that are based on a software development model that is decentralized and encourages open collaboration between volunteers, organizations, and private companies. **As those apps and platforms become easier to create and are used more intuitively, “new volunteers” all over the world will apply them to issues of political, ecological, and societal concern.** Mapping technology is also considered one of the major trends that will positively impact the development sector in the next five years.

A new definition of volunteering?

The boundaries that make up our understanding of what it is to be a volunteer may become increasingly blurred. Many projects are launched to address a specific problem that concerns people in their everyday lives. Throughout this paper we have presented examples that challenge a fundamental premise of the volunteering sector: the classic separation between givers (volunteers or donors) and receivers (target groups, beneficiaries, recipients). For example, when users expand a digital map with information about the accessibility of public places for wheelchair users³³ they are giver and receiver at the same time. Hence, the definitions of being a volunteer may need to be broadened.

Augmentation and replacement of human effort

It is likely that organizations will find ways to augment human efforts through new technologies. Real examples of these in the volunteering sector include the previously mentioned 'snake' that can aid in volunteer rescue efforts, mapping software and companion robots.

Inevitably though, new technologies change the landscape, making some volunteer roles redundant and creating new ones. In many organizations, the volunteer role of stuffing donation campaign envelopes has been replaced by robots, some so small that they look like printers and can sit on a filing cabinet. At the same time, new volunteer roles have emerged in the face of the Drone Pilot or PARO Seal Assistant as shown in [case study 3](#).

Security, (data) protection and volunteer safety

False information, hate speech and government surveillance are increasingly becoming a threat to volunteers and activists. Pro-gay activists in Ghana or citizens who assist refugees in Europe are increasingly being threatened on social media; in some cases their names are put on "enemy lists" by far-right organisations. VIOs and civil society must find solutions, together with tech-firms and governments, to strengthen the protection of citizens and volunteers. Online threats can quickly become a real danger, as the murder of many environmental and indigenous activists has shown. The NGO called *Access Now* runs a digital security helpline whereby civil society groups and human rights defenders, especially those working in authoritarian contexts, are assisted to improve their digital security practices. If somebody is attacked, *Access Now* provides him/her with emergency assistance.

Questions of data protection and secure digital infrastructure have to be prioritised for all VIOs and other volunteer initiatives.

Crafting the digital world we want to live in...

In a world in which the (digital) measurement, recording, and rating of individual performance is fast increasing, we must envisage that such practices could creep into the volunteering sector. Imagine volunteers' ideas, profiles and ratings being available online; similarly, ratings of VIOs. Do we want such practices operating in a field that is generally characterized by principles of trust, reciprocity, and solidarity?

The volunteering sector has to become more actively engaged in a discussion about the implications of digital transformation. It should engage in shaping the use of digital technology and infrastructure in the public interest. This produces an increased need for more digital education so that volunteers and VIOs can keep up with technical developments and become more active in this space. If they do not, they will leave the field open to the big tech firms and to politicians who might have different priorities.

Conclusion

This paper identifies a number of ways in which volunteering is changing within the increasing prevalence of digital technology and innovation.

It recognises the growth of “new volunteers” who are able to embed voluntary work in different spheres of life because it is no longer tied to time or location. This suggests that **the boundaries between volunteering on-site and online are becoming increasingly blurred and the use of digital technology is widening the space for different types of volunteering.**

The classic separation between “giver” and “receiver” is being challenged. This raises the need to craft new roles for volunteers, for example, volunteers caring for people dependent on their assistance. This prospect is increased by innovation in artificial intelligence.

In public spaces the spread of technology makes it possible to mobilize volunteers differently in support of citizen-led projects focused on social justice and other issues. Digital technology also provides volunteers with the flexibility to launch and close projects without having to rely on VIOs to mediate that process.

VIOs are thus challenged to embrace digital transformation within their programme and operational strategies and to increase their alignment with the contextual changes produced by the use of digital technology.

Digital technology is simultaneously empowering and challenging volunteering in all spheres. It holds out the opportunity for innovation and greater impact, provided that digital transformation is embraced in the strategic development of volunteer involving organizations. **Following COVID-19 there is simply no longer a choice about whether or not to participate in the digital world. It is a necessity.**

Digital World is a contemporary expression to describes the importance, use and availability of digital tools and other technologies to communicate on the Internet, digital devices, smart devices. It expresses that almost the entire world is connected with digital technology.

Digital Transformation refers to the ongoing process of significant changes and effects on everyday life in the economy and in society through the use of digital technologies.

Digital Revolution is the shift from mechanical and analogue electronic technology to digital electronics which began in the latter half of the 20th century. It changed our entire reality of life at least as fundamentally as the industrial revolution of the 19th century.

Digitization essentially refers to taking analog information and encoding it into zeroes and ones so that computers can store, process, and transmit such information.

Digitalization doesn't have a clear definition and is often used synonymously with 'digitization'. Some scholars use digitalization to describe how many domains of social life are restructured around digital communication and media infrastructures.

Digital technology is the branch of scientific or engineering knowledge that deals with the creation and practical use of digital or computerized devices, methods, systems, etc.

References

- Alonso-Cañadas, J., Galán-Valdivieso, F., Saraité-Sariene, L., and Caba-Perez, M. D. C. (2019). cited in Saura, J.R.S., Palos-Sanchez, P., Velicia-Martin, F. (2020). "What drives volunteers to accept a digital platform that supports NGO projects?" *Front. Psychol.* 31. <https://doi.org/10.3389/fpsyg.2020.00429>.
- Cesta, A., Cortellessa, G., De Benedictis, R. & Fracasso, F. (2017). *A Tool for Managing Elderly Volunteering Activities in Small Organizations*. In: Esposito F., Basili R., Ferilli S., Lisi F. (eds) *AI*IA 2017 Advances in Artificial Intelligence*. *AI*IA 2017. Lecture Notes in Computer Science*, vol 10640. https://doi.org/10.1007/978-3-319-70169-1_34.
- DataReportal (2020): *Digital 2020: July Global Statshot*, <https://datareportal.com/reports/digital-2020-july-global-statshot>, [Latest access 14/08/2020].
- Forstrom, J. (2019). "Eight eight great examples of ICT4D projects to inspire". Retrieved from <https://www.web-essentials.co/blog/eight-great-examples-of-ict4d-projects.html> [Latest access 14/08/2020].
- Gray, J., Lämmerhirt, D. & Bounegru, L. (2016). *Changing What Counts: How Can Citizen-Generated and Civil Society Data Be Used as an Advocacy Tool to Change Official Data Collection?* Retrieved from <https://ssrn.com/abstract=2742871>
- Gul, M. (2020). *Future leadership: the role of youth volunteers*. International Association of Volunteer Effort (IAVE) and Emirates Foundation.
- IFRC (2018). *Robotic Snakes Crawled for Survivals after Mexico City's Deadly Earthquake*, <http://media.ifrc.org/innovation/2018/05/23/robotic-snakes-crawled-for-survivals-after-mexico-citys-deadly-earthquake/> [Latest access 14/08/2020].
- Japan Times (2018): *Over 80% of Japanese positive about robotic nursing care*, 15/11/2018, <https://www.japantimes.co.jp/news/2018/11/15/national/80-japanese-positive-robotic-nursing-care/> [Latest access 14/08/2020].
- Kwon, O. & Wen, Y. (2010). cited in Saura, J.R.S., Palos-Sanchez, P., Velicia-Martin, F. (2020). "What drives volunteers to accept a digital platform that supports NGO projects?" *Front. Psychol.* 31. <https://doi.org/10.3389/fpsyg.2020.00429>.
- Matuschek, K. & Lange, V. (2018). *Engagement im digitalen Zeitalter*. Friedrich Ebert Stiftung, Bonn.
- Murray, V. & Harrison, Y. (2002). *Virtual Volunteering: Current Status and Future Prospects*. Canadian Centre for Philantropy: Ontario.
- Polli, F. (2019). *Using AI to Eliminate Bias from Hiring*. *Harvard Business Review*. <https://hbr.org/2019/10/using-ai-to-eliminate-bias-from-hiring> [Latest access 14/08/2020].
- Popular Mechanics (2019). *Meet the Robot Firefighter That Battled the Notre Dame Blaze*. Retrieved from <https://www.popularmechanics.com/technology/robots/a27183452/robot-firefighter-notre-dame-colossus/>, [Latest access 14/08/2020].
- Semsrott, Nico (2019): *Aktivismus vs. Passivismus*, presentation at TINCON Berlin 2019, <https://www.youtube.com/watch?v=2dZtUbY-9QU&t=1554s> [Latest access 14/08/2020].

- Stiftung Mercator Schweiz (2018). *Freiwilliges Engagement in einer digitalisierten Welt*. Digitalisierung und Gesellschaft. Stiftung Mercator Schweiz: Zürich.
- Turing A.M. (1950). "Computing machinery and intelligence". *Mind*, Volume LIX, Issue 236, p. 433-460. <https://doi.org/10.1093/mind/LIX.236.433>.
- UNV (2020). *Volunteering online during lockdown to fight COVID-19*. Retrieved from <https://www.unv.org/News/Volunteering-online-during-lockdown-fight-COVID-19> [Latest access 14/08/2020].
- Vota, W. (2019). 'The Digital Divide is Not Binary: The Five A's of Technology Access', <https://www.ictworks.org/digital-divide-technology-access/#.XzMI7SgzY2w>, [Latest access 14/08/2020].
- Wired (2016). *Meet the Blind Man Who Convinced Google Its Self-Driving Car Is Finally Ready*. Retrieved from <https://www.wired.com/video/watch/meet-the-blind-man-who-convinced-google-its-self-driving-car-is-finally-ready>, [Latest access 14/08/2020].

Notes

¹ Matuschek/Lange, 2018, p. 6

² Stiftung Mercator Schweiz, 2018

³ Murray/Harrison, 2002

⁴ These terms combine the words “slacker” or “click” with “activism”, and are pejorative descriptions of “feel-good” measures in support of a social issue or cause.

⁵ Gray/Lämmerhirt/Bounegru, 2016

⁶ Jon Barnes presentation on Progressio to Forum RPPL group meeting, 3 August 2020.

⁷ In 1950, A.M. Turing – a computer scientist – posed the question, “Can machines think?” and predicted that by 2020 we would not be able to distinguish between communications from a machine and another human. This result passes what is known as the “Turing test”. See Turing (1950).

⁸ A Compendium of AI-Composed Pop Songs. Available at <https://www.scientificamerican.com/article/a-compedium-of-ai-composed-pop-songs/>

⁹ IFCR, 2018.

¹⁰ An exoskeleton is an external frame that can be worn to support the body, either to help a person overcome an injury or to enhance their biological capacities. Powered by a system of electric motors, the frame gives limbs extra movement, strength and endurance. <https://www.sciencedirect.com/topics/nursing-and-health-professions/exoskeleton-rehabilitation>

¹¹ Polli, 2019

¹² Cesta et al, 2017

¹³ www.fragdenstaat.de, the initiative is part of the Open Knowledge Foundation (OKF) Germany: www.okfn.de/en.

¹⁴ Semsrott, 2019

¹⁵ Wikipedia list “Freedom of Information Laws by Country”: https://en.wikipedia.org/wiki/Freedom_of_information_laws_by_country.

¹⁶ According to a survey by a nursing care service provider, over 80 percent of people in Japan, for example, hold positive views about receiving nursing care from robots (Japan Times 2018)

¹⁷ www.parorobots.com

¹⁸ Data Reportal, 2020

¹⁹ Wayan , 2019

²⁰ Interview on 11 August 2020 with Arthur Goldstuck, South Africa

²¹ Kwon/Wen, 2010

²² Alonso-Cañadas et al. (2019) cited in Saura et al., 2020

²³ Ushahidi, which translates to ‘testimony’ in Swahili, describes its purpose as follows: “We are a social enterprise that provides software and services to numerous sectors and civil society to help improve the bottom up flow of information”. <https://www.usahidi.com>

²⁴ https://en.wikipedia.org/wiki/Gender_bias_on_Wikipedia

²⁵ Gul, M., 2020

²⁶ Forstrom, 2019

²⁷ Interview conducted on 27 July 2020 with Mrs Rose Thamae, Director of “Let Us Grow”, South Africa.

²⁸ Popular Mechanics, 2019

²⁹ Wired, 2016

³⁰ UNV, 2020

³¹ <https://sva.org.nz/our-story/>

³² Stiftung Mercator Schweiz, 2018, p. 11

³³ www.wheelmap.org

About Emirates Foundation



Emirates Foundation is an independent national organization set up by the Abu Dhabi Government to facilitate public-private funded initiatives for the empowerment of youth across the UAE, putting them at the forefront of economic, social and human capital development. Emirates Foundation's works to have empowered and engaged youth contributing towards shaping the future of the UAE. The organization works in partnership with the private and public sectors to encourage social responsibility and enhance youth capacities through programs that meet their needs towards achieving sustainable community development.

The Emirates Foundation has 3 key priorities:

- ▶ To develop youth competencies through empowerment and raising awareness
- ▶ To encourage social responsibility within the private and public sectors
- ▶ To provide all administrative services according to standards of quality, effectiveness, transparency and innovation.

To learn more about Emirates Foundation, Please visit their website at www.emiratesfoundation.ae/ef

About IAVE



International
Association for
Volunteer
Effort

The International Association for Volunteer Effort (IAVE) exists to promote, strengthen and celebrate volunteering in all of the myriad ways it happens throughout the world. With members in 70+ countries, IAVE is the connective tissue of a global network of leaders of volunteering, NGOs, businesses, governments and academic institutions that share a belief in the power of volunteers to make a significant strategic contribution to resolving the world's most pressing problems.

IAVE has four core functions:

- ▶ **Convening.** IAVE brings together leaders from across the field through a series of virtual and in-person events, such as the biennial World Volunteer Conference and regional conferences.
- ▶ **Advocacy.** IAVE serves as a global voice for volunteering, working closely with the United Nations, international NGOs and global companies to call attention to the strategic importance of volunteering as a way to solve problems and improve the quality of life for all.
- ▶ **Knowledge development.** IAVE is a recognized knowledge leader for the global volunteer community, conducting research and providing in-depth reports on current trends and challenges.
- ▶ **Network Development.** IAVE brings together key constituencies to share with and learn from one another – the Global Corporate Volunteer Council and the Global Network of Volunteering Leadership.

To learn more about IAVE, Please visit their website at www.iave.org

About the Authors



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Helene Perold is the director of Helene Perold & Associates, a South Africa-based consultancy established in 1993. An evaluator, researcher, publisher and strategist, Helene has worked in the fields of volunteering, youth development, community service, education, public health and communication. In 2003 Helene founded VOSESA (Volunteer and Service Enquiry Southern Africa), a non-profit research organisation that for ten years worked to build an evidence base about volunteering and civic service in Southern Africa. Through its research and publications, VOSESA became recognised regionally and internationally as a knowledge leader in the field. (Selected studies are available at www.vosesa.org.za.) Helene has served as a research fellow at the Brown School of Social Work at Washington University, St Louis, USA, and as a senior research fellow at the Center for Social Development in Africa, University of Johannesburg, South Africa.



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Tony Goodrow is the founder and CEO of Better Impact, a software company that has been helping the nonprofit and governmental sector in over 20 countries since 2001. He has spoken at volunteer sector conferences on five continents, including IAVE conferences in Europe, Asia and Latin America, focusing on topics such as technology trends in the volunteer sector and new perspectives in data collection. He brings to this panel discussion his combined insights into present and future technology offerings and the operations of volunteer engaging organisations.

About the Sub-theme

Volunteering and the Digital World – Extending the Power of Volunteering through New Technologies

As technology evolves it is being harnessed to give greater access to volunteer involvement and enhance how volunteers carry out their roles. Going to the computer or phone to find out how to connect to volunteering opportunities is the norm, virtual volunteering is a growing trend. Social media creates an instant global sharing of who volunteers are and what they are doing. New technologies such as artificial intelligence will bring further change and challenge as to how these new digital opportunities can also support and develop volunteering.



International
Association for
Volunteer
Effort

VOLUNTEERING TOGETHER TO ENABLE CHANGE AND CREATE A BETTER WORLD

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