



# Refining Collective Impact Measurement to Maximize Efficiencies in Humanitarian Efforts: an Exploration of Global Population Participation in the United Nations Sustainable Development Goals

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Refining Collective Impact Measurement to Maximize Efficiencies in Humanitarian Efforts:

An Exploration of Global Population Participation in the United Nations Sustainable  
Development Goals

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A Thesis in the Field of Anthropology and Archaeology  
for the Degree of Master of Liberal Arts in Extension Studies

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## Abstract

This thesis seeks to make a policy statement, a recommendation for greater efficiency in global collective impact. It examines the non-profit organization, Unify, as a case study and the United Nations Sustainable Development Goals (SDGs) as the current standard for a global system of measuring progress in overcoming humanity's greatest challenges. It addresses inefficiencies in the collective of humanitarian efforts within a global system that lacks consistent and effective standards as well as best practices of impact measurement, the percentage of the population actively engaging in bringing about solutions, and how the expanding reach of accessibility to increasingly evolved technology stands to affect both population engagement and impact measurement.

This is not to say that humanitarian efforts are without any efficiency whatsoever. Certainly, some individuals and organizations display extraordinary efficiency in their efforts. The focus of this paper is not meant to exacerbate the lack within the scope of global humanitarian efforts in comparison with all of the good that truly is being done in the world. The whole is only the sum of its parts and, as such, any efforts at all towards solutions are significant. Rather, this paper will address the possibilities of how efficiencies within humanitarian efforts might be realized on a global scale. This will be done by reviewing the relatively recent acknowledgement of global challenges at a state level and by the international community, looking at how progress within the identified goals is currently being measured, examining factors that could promote engagement of a greater number of individuals in humanitarian efforts globally, borrowing proven functionality from known international business models for systems of impact measurement, and looking at scalability and reach through the lens of technology.

## Dedication

“Blessed is the season which engages the whole world in a conspiracy of love.”

-Hamilton Wright Mable

To my mom, who made every step possible and who gave me the greatest gift, not only of life, but of, within that life, truly knowing that anything is possible.

And to Bapa, who taught me... in whatever world I've found myself, whatever damp dirt floor of a tin roof hut, or in the imagined safety of a cinderblock wall keeping out the chaos of streets where slightly wilted lettuce is the day's wage, or in a clean and sturdy seat at a table with esteemed dignitaries... it is, each and every moment, an honor to have such a close window into someone's life. The stranger's story is precious, as is my invitation to be present. And so, when I am tempted to be convinced that I am an outsider and to merely observe, I must remember to listen with my eyes and see with my heart.

## Acknowledgments

I would like to thank Dr. Doug Bond who aided in this entire process as my Thesis Advisor and served as a source of encouragement and belief in myself, Dr. Mary Jo DelVecchio Good whose example as a woman who has persevered in academia and in meaningful work in the world, incredible expertise and wise guidance were vital to this thesis and its completion, Dr. Arthur Kleinman for allowing me the opportunity to learn the careful work of the medical anthropologist who sets aside the piety of masterful education and empathetically explores the world of the patient to better understand one's work in context, Dr. Paul Farmer for taking a chance on me, welcoming me into the Partners in Health world, inspiring me to boldly prototype change, and teaching me that solutions are born of listening, Ben and Becky (and Annika) for including me as family and making these years in Boston full and memorable- without you many of these doors may not have opened when I arrived and I am eternally grateful you, your belief in me, and your generous spirit, and the staff of Unify.org, particularly Adil and Seth- you have become brothers and I am grateful for the chance to have served and learned beside you in a few iterations of a human attempt to make the world a better place.

## Table of Contents

|  |     |
|--|-----|
| Dedication .....   | iv  |
| Acknowledgements .....   | v   |
| Lists of Figures.....  | vii |
| I.    The Need for Refined Collective Impact Measurement .....                   | 1   |
| Current Collective Impact Progress & Definitions .....                           | 4   |
| History of the Sustainable Development Goals (SDGs) .....                        | 6   |
| II.   Unify as a Case Study .....  | 16  |
| A Cause Gone Viral: Unify’s Six-Year Journey for Global Impact ...               | 17  |
| Unify and the UN and the 17 <sup>th</sup> SDG: Partnership for the Goals .....   | 20  |
| III.  Looking Forward: Systems, Scalability, Measurement, and Efficiencies ..... | 22  |
| Applying International Business Models to Global Efforts .....                   | 25  |
| The Role of Technology: Global Increase of Smartphone Users .....                | 29  |
| The SDG App and WANGO .....  | 35  |
| IV.  Factors of Individual Participation in Collective Impact .....              | 43  |
| Psychology of Engagement: Luhmann and Erikson .....                              | 43  |
| History’s Lessons: Empathy, Innovation, and Connectedness .....                  | 49  |
| V.   Summary and Conclusions .....   | 58  |
| Bibliography .....   | 60  |

## Figures

|     |   |    |
|-----|---|----|
| 1.1 | The United Nations' 17 Sustainable Development Goals .....                    | 9  |
| 1.2 | The UN SDG's and Singularity University's GGC's Comparison Chart .....        | 12 |
| 1.3 | The SDG Knowledge Hub .....   | 14 |
| 1.4 | SDG 1 on the SDG Knowledge Hub .....  | 14 |
| 2.1 | Meditation hosted by Unify.org placed in Guinness Book of World Records ..... | 18 |
| 2.2 | Unify's 88 million person reach on Facebook .....                             | 19 |
| 2.3 | Letter from UN to Unify for role in Peace Day 2016 .....                      | 23 |
| 3.1 | UN Population Map .....   | 30 |
| 3.2 | SDGs In Action App .....  | 35 |
| 3.3 | SDGs In Action App: How it works .....  | 35 |
| 3.4 | GSMA 2018 Mobile Impact Report SDG Impact Scores Graph .....                  | 37 |

## Chapter I

### The Need for Refined Collective Impact Measurement

Each year, new studies are released that show what great or what little headway has been made in overcoming humanity's greatest challenges. Updates of whether the oceans are more or less polluted than the year before, or announcements of new laws passed that might finally offer equality, can be received in soundbites a few times a year in a momentary pause of consideration amidst the hasty fullness of everyone's busy lives. On the larger timeline of humanity, these challenges can be seen to have shifted over time. For instance, the smallpox that once plagued humankind is no longer a threat (CDC, 2016). Even the more recent deadly Ebola outbreak, that drew international attention and funding from private and public sectors alike, darkened humanity's door for a mere few months before it was declared no longer a threat (CDC, 2019). They are somewhat fluid, the things that can be considered global challenges worthy of humanitarian efforts, as the challenges change over time depending upon what is culturally relevant and what the most dominantly influential portion of the population within societies and governments is willing to deem a valid impending threat to humanity. There are, however, challenges that are longer-standing, easier for the majority of the population to identify and acknowledge, that cannot be solved overnight, that teeter in the balance between hope and hopelessness, and that beg the question of how much can be accomplished in a single lifetime, or with a single life, since the solutions depend on the collective efforts of many. Engaged in this line of thought, one might inquire: What are the greatest global challenges presently? How does the global population agree on the identification of those challenges? What can any

one person do about them? What systems are in place to gauge success, failure, and progress? Are those systems efficient and optimized, utilizing all that humanity currently has to work with? In addition to taking a deeper look at these questions, this thesis will seek to answer the following questions:

- 1) How might international business strategy that is taught as common practice in international business and in many MBA curricula be used to increase efficiencies in progress toward the SDGs?
- 2) How might the percentage of the global population's engagement in humanitarian efforts be increased by use of standardized systems of measurement and current advancements in technology, particularly through rapidly increasing global smartphone usage and the normalization of "apps"?

To answer these questions, this paper will cite the most recent progress in Collective Impact research as well as the history and rationale of the UN Sustainable Development Goals. It will introduce the non-profit organization, Unify, as a case study in Collective Impact in conjunction with the UN. It will then examine factors of individual participation in Collective Impact and the psychology of engagement on an individual level, as well as the overall system by which those individuals would be participating. What makes people believe they are valuable and be compelled toward contributing or taking potentially impacting action? A certain set of factors affects whether a person contributes effectively to their community, both locally and globally. Some of those factors are psychological. Some are societal. Can those factors be influenced, and if so, can it affect the outcome? If framed well, one could observe a successful model of increased population engagement and apply it to various current world situations, wherever there is tension or adversity, such as

the methods used in Rwanda, which, after their horrific and swift genocide, used psychological factors to engage a maximized percentage of the population in actions that could be said to highlight the best of humanity (The World Bank, 2009). Moreover, if an increasingly efficient system connecting all humanitarian efforts towards a common goal were to be in place globally, similar to that of the most successful international corporations as seen in global business strategy, and if a larger percentage of the global population was motivated to engage, it stands to reason that the collective progress of humanitarian efforts would be positively impacted and overall desired results would increase.

This paper will assume the following as logically necessary to refine collective impact measurement in order to maximize efficiencies in humanitarian efforts. The elements essential to measuring the collective impact of global humanitarian efforts breaks down four-fold:

- 1) The Global Challenges: How are they agreed upon, by whom, and how can they easily be identified as presently accurate at any given time?
- 2) The System: Including those of the collective of Non-Governmental Organizations (NGO's), for-benefit operations, and unofficial efforts, what structures for solutions are already in place and what are the efficiencies or lack of efficiencies of humanitarian efforts globally?
- 3) Measurement: How are efforts towards the solutions being documented, authenticated, tracked, and reported, what is being measured, to whom is the measurement information being made available, and how is the data accurately informing future action toward progress?
- 4) Engagement: What percentage of the global population is actively contributing

to solutions to the global challenges in a measurable way and how can that percentage be increased?

To begin, we will take a look at current findings in the Collective Impact space and what is needed by the global community for humanitarian efforts in the way of measurement.

### *Current Collective Impact Progress & Definitions*

When the question of what one person can do about global challenges is raised, it is important to look to what is known or theorized so far about collective impact, the factors that make it possible, the likelihood of individual engagement, and how impact will be measured. Although there is no single authority on the subject of Collective Impact, and the area of study is relatively new, the findings by a group of students at Stanford University in a 2011 paper have proven to be the most predominant resource to date for replicating successful structure of Collective Impact. In the paper, Five Conditions of Collective Impact were identified (Kania & Kramer, 2011):

- 1) Common Agenda
- 2) Shared Measurements
- 3) Mutually Reinforcing Activities
- 4) Continuous Communication
- 5) Backbone Support

Of the Five Conditions of Collective Impact, this paper will focus on the element of Shared Measurement. It is easier for small or local communities or groups who share a common goal to attach shared measurements to their desired outcomes. A subsequent article posted by the Stanford Social Innovation Review for the Collective Impact Forum in 2014, focuses even

more specifically on aligning collective impact initiatives, citing “Keys to Successful Alignment for Collective Impact Initiatives” which include (Boyle & Irby, 2014):

- 1) Start with a focus on the outcomes you want to achieve
- 2) Draw a big enough picture so that existing efforts see how they can connect and
- 3) Identify where there is more efficiency and power in working together than alone
- 4) Clarify the lines of communication and accountability

“Identifying where there is more efficiency and power in working together and why” is again key, and perhaps a first step, to supporting the need to improve efficiencies in global humanitarian efforts. Along with “Shared Measurement,” this becomes a foundational affirmation of the need for collective efforts and systems for measuring impact in the areas most important to a community, in this case, the global community. Since the 2011 Stanford paper was published, the groundwork laid in the writings has become foundational to a number of major movements and initiatives. A global consulting firm for reimagining social change, FSG, founded in 2000 by Harvard Business School Professor Michael E. Porter and Mark Kramer (one of the authors of the Stanford Collective Impact papers), launched a new endeavor in 2014 called the Collective Impact Forum (FSG, 2019). The Collective Impact Forum relies on the five conditions of Collective Impact, as identified in the Stanford Social Impact Review in 2011. In recent years FSG has used their strategies with organizations that include the Bill & Melinda Gates Foundation, Unilever, the U.S. Department of Education, and The World Bank (FSG, 2019). The study of Collective Impact is young and it remains to be seen what might be accomplished if more organizations and individuals begin adopting this or similar systems in order to efficiently and effectively meet larger scale needs for solutions. To date, the Collective Impact Forum’s You Tube channel has 769 subscribers.

### *History of the UN Sustainable Development Goals (SDGs)*

One of the questions this paper seeks to address is: How are the global challenges agreed upon, by whom, and how can they easily be identified as presently accurate at any given time? In the absence of a specific and accurate representation of the global population's consensus that can be easily tracked and viewed, the United Nations (UN) serves as a generally accepted authority and representation on global challenges. This is likely due in part to their position of perceived neutrality internationally, and also, in part, to the absence of any other entity taking the reins on the issues quite as vastly as they have. The global issues can admittedly be overwhelming for any one organization or entity to attempt to tackle.

The United Nations identified seventeen specific areas to which 193 countries agree attention is most urgently needed. Solutions and improvements in these areas are measured by the UN each year, but how they are measured is somewhat ambiguous and not entirely consistent between the seventeen. These seventeen areas are referred to collectively as the Sustainable Development Goals (SDGs). Fully grasping the justification and significance of the UN's Sustainable Development Goals (SDGs) requires borrowing context from the history of the Millennium Development Goals (MDG's) that preceded them. At a glance, one might assume that the SDGs picked up where the MDG's left off, since their respective goals and targets belonged to chronologically progressing groups of years. Some, however, see the SDGs as a necessary do-over after the painful lessons learned from the MDG's. Kunal Sood is Founder of the X-Fellows, a global community that "unites in action to solve some of the world's most urgent and grand challenges," (XFellows, 2018). Sood, who continues to work closely with the UN

regarding the SDGs, reflects that the SDGs were developed in answer to the widely perceived failures of the MDG's. At the time of their inception though, the MDG's were the only existing things of their kind: global goals that governments, organizations, and individuals could agree upon and drive intentional action toward, the measurement of the success of which could then be attempted.

The following is a brief history of the MDGs and how the SDGs were born. In 2000, the MDG's represented possibility towards collectively achieving solutions together. The World Health Organization described the MDGs in this overview posted on their site prior to 2015:

The United Nations Millennium Development Goals are eight goals that all 191 UN member states have agreed to try to achieve by the year 2015. The United Nations Millennium Declaration, signed in September 2000 commits world leaders to combat poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women. The MDGs are derived from this Declaration, and all have specific targets and indicators (WHO, 2018).

The UN then posted the following in 2015:

The eight Millennium Development Goals (MDGs) – which range from halving extreme poverty rates to halting the spread of HIV/AIDS and providing universal primary education, all by the target date of 2015 – form a blueprint agreed to by all the world's countries and all the world's leading development institutions. They have galvanized unprecedented efforts to meet the needs of the world's poorest. The UN is also working with governments, civil society and other partners to build on the momentum generated by the MDGs and carry on with an ambitious post-2015

development agenda (UN, 2018).

That post-2015 development agenda was set to be reviewed and decided upon at the United Nations General Assembly in September of 2015. The UN's 193 Member States as well as global civil society participated in forming the agreement in what is known as the UNGA Resolution A/RES/70/1. Paragraph 54 of the Resolution contains the 17 goals, and the related 169 targets, that are now known as the United Nations Sustainable Development Goals (SDGs) (UN General Assembly, 2015).

The 17 SDGs are:

- 1) No poverty
- 2) Zero hunger
- 3) Good health & wellbeing
- 4) Quality education
- 5) Gender equality
- 6) Clean water & sanitization
- 7) Affordable & clean energy
- 8) Decent work & economic growth
- 9) Industry, innovation, & infrastructure
- 10) Reduced inequalities
- 11) Sustainable cities & communities
- 12) Responsible consumption & production
- 13) Climate action
- 14) Life below water
- 15) Life above water

16) Peace, justice, & strong institutions

17) Partnership for the Goals

| <b>Sustainable Development Goals</b> |  |
|--------------------------------------|--|
| Goal 1.                              | End poverty in all its forms everywhere  |
| Goal 2.                              | End hunger, achieve food security and improved nutrition and promote sustainable agriculture   |
| Goal 3.                              | Ensure healthy lives and promote well-being for all at all ages  |
| Goal 4.                              | Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all   |
| Goal 5.                              | Achieve gender equality and empower all women and girls  |
| Goal 6.                              | Ensure availability and sustainable management of water and sanitation for all   |
| Goal 7.                              | Ensure access to affordable, reliable, sustainable and modern energy for all   |
| Goal 8.                              | Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all   |
| Goal 9.                              | Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation  |
| Goal 10.                             | Reduce inequality within and among countries   |
| Goal 11.                             | Make cities and human settlements inclusive, safe, resilient and sustainable   |
| Goal 12.                             | Ensure sustainable consumption and production patterns   |
| Goal 13.                             | Take urgent action to combat climate change and its impacts*   |
| Goal 14.                             | Conserve and sustainably use the oceans, seas and marine resources for sustainable development   |
| Goal 15.                             | Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss |
| Goal 16.                             | Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels            |
| Goal 17.                             | Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development   |

\* Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change.

Figure 1.1. *The United Nations' 17 Sustainable Development Goals*. States, “Acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate

change,” in reference to Goal 13.

Groups and organizations independent of the UN have launched their own sets of goals and accompanying programs to help the global population achieve what they believe to be the most necessary results. One such group is Singularity University (SU), whose mission statement is as follows: “to educate, empower, and inspire leaders to leverage exponential technologies to solve humanity’s grand challenges,” (Nail, 2018). In 2008 SU began developing what are now the twelve Grand Global Challenges (GGCs). The GGCs were formed with the following three outcomes in mind:

- 1) ensuring basic needs are met for all people,
- 2) sustaining and improving quality of life, and
- 3) mitigating future risks (Damm, Hann, 2016).

The twelve (12) GGCs, broken down into two categories, are identified as:

#### RESOURCE NEEDS:

- Energy: Ample, accessible and sustainable energy for the needs of humanity.
- Environment: Sustainable and equitable stewardship of Earth’s ecosystems for optimal functioning both globally and locally.
- Food: Consumption of sufficient, safe, and nutritious food to maintain healthy and active lives for all people at all times.
- Shelter: Secure, safe, and sustainable shelter for residence, recreation, and industry for all people at all times.
- Space: Safe and equitable use, and stewardship of, space resources and technologies for the benefit of humanity and our future as a multi-planetary species.
- Water: Ample and safe water for consumption, sanitation, industry, and recreation for all people at all times.

## SOCIETAL NEEDS:

- **Disaster Resilience:** Effective and efficient disaster risk reduction, emergency response, and rehabilitation that saves lives and livelihoods, minimizes economic loss, and builds resilience both globally and locally.
- **Governance:** Equitable participation of all people in formal and societal governance that is in accordance with principles of justice and individual rights, free from discrimination and identity-based prejudices, and able to meet the needs of an exponentially changing world.
- **Health:** Optimal physical and mental health, including access to cost-effective prevention, early diagnosis, and personalized therapy for individuals and communities.
- **Learning:** Access to information and experiences that build knowledge and skills for all people at all stages of their lives for personal fulfillment and benefit to society.
- **Prosperity:** Equitable access to economic and other opportunities for self-fulfillment where all people are free from poverty and able to thrive.
- **Security:** Safety of all people from physical and psychological harm, including in virtual worlds; and protection of physical, financial, digital systems (Singularity University, 2019).

The GGCs are nowhere near as widely known as the SDGs at this time, but they are on the map. Their presence goes to show that the SDGs are not merely political. They are not a fabrication of a collective of powerful and influential people. They are real topics that concern humanity, our prosperity, and our preservation. The GGCs remind us that the challenges are real, worth investigating further, and will likely take as many individuals as

possible to participate in bringing about solutions.




|  |                            |
|--|----------------------------|
| <b>NO POVERTY</b>                                | <b>PROSPERITY</b>          |
| <b>ZERO HUNGER</b>                               | <b>FOOD</b>                |
| <b>GOOD HEALTH &amp; WELLBEING</b>               | <b>HEALTH</b>              |
| <b>QUALITY EDUCATION</b>                         | <b>LEARNING</b>            |
| <b>GENDER EQUALITY</b>                           |                            |
| <b>CLEAN WATER &amp; SANITATION</b>              | <b>WATER</b>               |
| <b>AFFORDABLE &amp; CLEAN ENERGY</b>             | <b>ENERGY</b>              |
| <b>DECENT WORK &amp; ECONOMIC GROWTH</b>         |                            |
| <b>INDUSTRY, INNOVATION &amp; INFRASTRUCTURE</b> |                            |
| <b>REDUCED INEQUALITIES</b>                      |                            |
| <b>SUSTAINABLE CITIES &amp; COMMUNITIES</b>      |                            |
| <b>RESPONSIBLE CONSUMPTION &amp; PRODUCTION</b>  |                            |
| <b>CLIMATE ACTION</b>                            | <b>ENVIRONMENT</b>         |
| <b>LIFE BELOW WATER</b>                          |                            |
| <b>LIFE ABOVE WATER</b>                          |                            |
| <b>PEACE, JUSTICE &amp; STRONG INSTITUTIONS</b>  | <b>GOVERNANCE</b>          |
| <b>PARTNERSHIPS FOR THE GOALS</b>                |                            |
|  | <b>SHELTER</b>             |
|  | <b>SPACE</b>               |
|  | <b>SECURITY</b>            |
|  | <b>DISASTER RESILIENCE</b> |

Figure 1.2. The UN SDG's and Singularity University's GGC's Comparison Chart.

The SDGs have global attention and currently garner at least some effort. So how are they measured? Each SDG is governed by a committee and each committee has its own oversight of progress within that goal, although all goals must have updates reported. One major complaint at the conclusion of the MDGs was the lack of consistency of progress measurement between the various goals. Each seemed to operate independent of one another. The announcement of the SDGs came with an accompanying 169 targets, as well as 232 unique indicators (SDG Tracker, 2019). (A complete list of the 232 SGD indicators is publicly available via the UN website published on a document entitled “Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development,” document A/RES/71/313, (UN, 2018)). This seemed to give the impression of potential measurability, however, once again, there is not one single system being used across all goals. While the UN does not have a specific system of measurement in place for the SDGs, the IIDC (International Institute for Sustainable Development) launched a project in October of 2016 called “The SDG Knowledge Hub,” (IIDC, 2019). Self-proclaimed, this project “is an online resource center for news and commentary regarding the implementation of the United Nations’ 2030 Agenda for Sustainable Development, including all 17 Sustainable Development Goals (SDGs),” (IIDC, 2019). While it does not present a total “system” necessarily, the site does allow for tracking of momentum and progress within each individual SDG, breaking down progress within each between news, guest articles, policy briefs, and events (IIDC, 2019).



Figure 1.3. The SDG Knowledge Hub. Users can browse statistics by SDG.

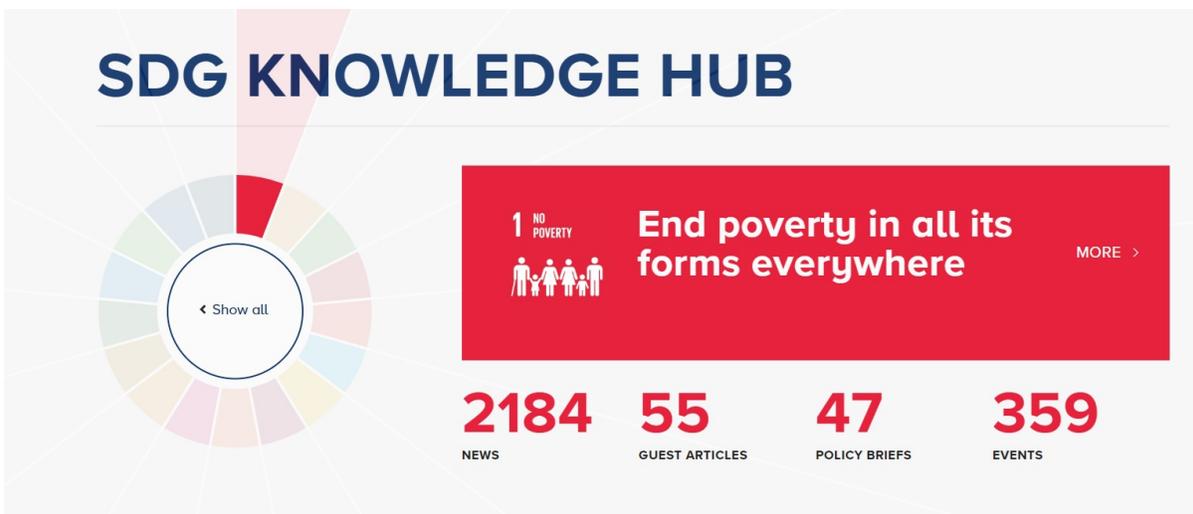


Figure 1.4. SDG 1 on the SDG Knowledge Hub. Highlights how many times the SDG has been featured in the news, displays pertinent articles, and shows policy briefs and events to keep interested parties up to speed.

As of June 2018, the UN began releasing their own information on each SDG via the “SDG Tracker,” available on a website bearing the same name (SDG Tracker, 2019). Information on this site is readily available for the public to view progress in each SDG. There are thirteen

(13) indicators within the six (6) targets of SDG 1, “End Poverty in all its Forms Everywhere.” On the SDG Tracker, for SDG 1, of the thirteen (13) indicators, four (4) include no data whatsoever, and instead state the message, “We are currently not aware of data for this indicator,” (SDG Tracker, 2019). Of the nine (9) indicators under SDG 1 that do show some sort of data, some include allusions to the ambiguity of the indicator along with the data, as is seen in reference to indicator 1.2.2, which is “proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions,” (SDG Tracker, 2019). The update on data tracking for indicator 1.2.2 begins by stating, “Here it is not clear what is meant by all its dimensions according to national definitions,” and then goes on to list some suggestions. None of the nine (9) indicators “with data” actually post measurable data in terms of concrete empirical measurement. In fact, all of the other interactive tracking graphs posted to the SDG Tracker site as of September of 2019, end in 2016 or 2017, prior to the site even being published, and do not seem to provide up to date progress even in non-empirical terms. The site self-purportedly remains holding “major data gaps,” and makes an open request for “high-quality data [they] have yet to include,” (SDG Tracker).

This is not to disparage the UN for a lack of data on progress within the SDGs. They should be applauded for their valiant efforts, organization, voice, inclusion, and action so far around what might otherwise seem like an insurmountable task. This is to make the case for the need for more efficient systems of measurement for humanity’s best collective assessment of the world’s challenges and how to overcome them, currently the SDGs. The collective population of the world having every necessary tool at their disposal to accomplish this will be outlined in the coming chapters.

## Chapter II

### Unify as a Case Study

In September of 2018, I had the opportunity to serve as the Executive Director of Unify's World Peace Day Campaign. I also wore a second hat for Unify as Line Producer for the 72-hour livestreamed World Peace Broadcast that would air both on YouTube and Facebook over Peace Day Weekend, September 21-23, 2018, and would feature prominent guests in humanitarian efforts and spiritual leadership spaces, such as Neale Donald Walsh, author of *Conversations with God*, the River Phoenix Center for Peacebuilding, United Religions Initiative, and Sam Beard, who initiated and chaired programs for seven different Presidents of the United States – Presidents Nixon, Ford, Carter, Reagan, Bush, Clinton and Bush. Unify's list of advisors and collaborators in its relatively short existence is star-studded and impressive. This was no doubt part of the draw of my involvement with the group earlier that year.

After a string of seemingly serendipitous introductions, I had landed in a large yurt-like structure in the hills of Boulder, Colorado, along with 45 individuals who were either described as, or described themselves as, visionaries. Each attendee's vocation was different, ranging from high profile filmmaker to coder to sustainability developer. Over the course of three days we would participate together in gratitude practices, prompted discussions, dance, and many various exercises geared towards innovating for solutions for humanity's greatest challenges. The event was informally named the Visionary Alliance. The use of this name was later discouraged, as it was thought to sound exclusive and therefore did not support the unspoken but appropriately assumed core value of radical inclusion (the origin of which was almost certainly the tenets of Burning Man, and a practical example of which would be the

overwhelmingly popular desire to make things open-source). After the event formerly known as the Visionary Alliance, which took place the first weekend in July 2018, a string of video conferences followed that would alter the course of my year. Rather than take another job I had been offered, I would instead take a few months off and freelance for Unify, putting my skills in leadership, management, administration, organization, and production to hard and fast work. I was about to learn what a modern, young, tech- and media-savvy non-profit looks like when it tackles a goal on a scale of global involvement.

*A Cause gone Viral: Unify's Six-Year Journey for Global Impact*

In 2012 a group of like-minded individuals came together and donated their time, energy and talents to the joint cause of rallying people around the world in a synchronized shared moment together. Much like the hype around Y2K in 1999, with the fear of unknown technological consequences that ensued, the convergence around December 21<sup>st</sup> of 2012 (also called the “2012 Phenomenon”(Sitler, 2006)) was the culmination of a range of beliefs surrounding the day, from promising to fatalistic, that drew massive global attention. Some believed, since the Mayan calendar didn't appear to go beyond that date, that the world would simply end, humans might disappear as in the stories of the rapture. Others held that it was not an end, but rather a beginning, a time when humans would finally come into the great awakening or perhaps be delivered out of suffering and despair.

Out of the masses, a small group of about 40 individuals crossed paths, each eager to be a part of something great and affect change in the world. They rallied over the course of just a few months leading up to December 21<sup>st</sup>, 2012, most of them volunteers, contributing countless hours outside of and above and beyond their full-time work weeks to launch and

manage a campaign. Their intention was simple: bring as many people together in solidarity as possible on that potentially pivotal day, December 21, 2012. They would focus on meditation as an activity that lends itself to easeful participation and would incite as much participation as possible from everyone they were able to reach through the growing avenues of social media.



## LARGEST GLOBAL MEDITATION IN HUMAN HISTORY

Figure 2.1. Meditation hosted by Unify.org placed in Guinness Book of World Records for most people attending together simultaneously. It boasted collaboration from celebrities such as Deepak Chopra and Gabby Bernstein.

Unify.org hosted a meditation that was placed in the Guinness Book of World Records for greatest number of people meditating together simultaneously. The following year their video marketing campaign for Standing Rock went viral and raised \$1M in a matter of weeks.

Per Executive Director Adil Kassam, as evidenced by supportive documents he keeps on file such as screenshots of particular data reports generated by Facebook over time, Unify.org has seen an 88M+ person “reach” between email and their social media channels, the largest of which is Facebook. (“Reach” is defined by leading marketing professionals as the “number of users who have come across particular content on a social media platform,” (Taylor, 2017)).

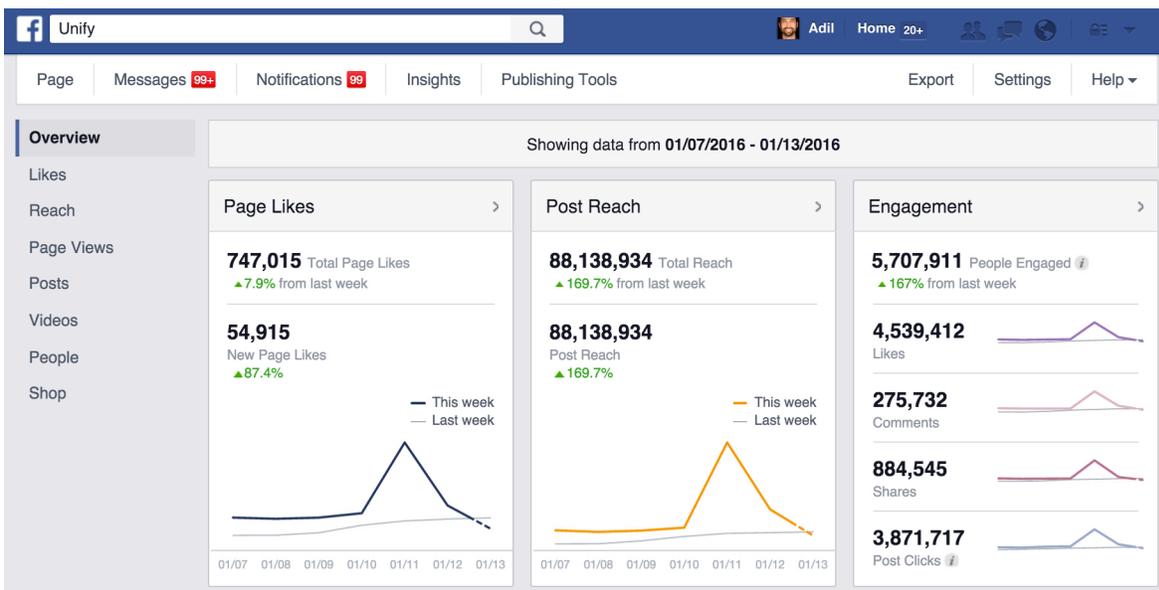


Figure 2.2. Unify’s 88 Million person reach in 2016. This number tends to vary and spike depending upon content, according to Unify.

Reach is an incredibly significant metric at this stage in the development of systems of impact measurement because the raw data on the simplest expression of action, in this case the act of “coming across content” is already being measured in detail for each and every piece of content on a global scale within these apps. The direction and scalability of the tracking and types of actions tracked remains malleable. The role of tech advancement will be elaborated on in Chapter III.

*Unify, the UN, and the 17<sup>th</sup> SDG: Partnership for the Goals*

Perhaps the most compelling aspect of Unify regarding their relationship with the UN is their embodiment of SDG #17: Partnership for the Goals. The function of Unify, depending on who you ask, is to gather as many individuals as possible in convergences around an agreed purpose, and then to spark related action for a cause. Usually this culminates in a synchronized meditation and a map posted online with events around the world where people can participate in their local community. Unify's ability to measure impact in relation to these convergences has been challenged beyond local event attendance and social media reach metrics. This may be, in part, because beneath the layer of their singular function, Unify seeks to satisfy many objectives at one time, spending their energies rallying people around causes that they see as worthy and that already have a decent momentum, such as Water Day and Earth Day and Yoga Day. Notably, the UN acknowledged Unify's role in reaching millions of people in 2016 for peace, which is SDG #16, and was also the UN's theme for Peace Day 2016. Unify may have been at a height of participation that year in a cycle that ebbs and flows. Due to a changing of people, positions, and alliances within the UN, the partnership that continued was slightly less profound in 2017 and 2018, however the organization continues to built audience and partnerships, as well as maintains a focus on holding a container in which conscious movements can happen as the collective population moves towards greater awareness of the global needs and the intrinsic value of each human to make a difference.



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AND  
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October 10, 2016

Dear Adil,

I wanted to extend my personal thanks to you and your team for the fruitful collaboration in our activities to celebrate the UN International Day of Peace. I was very pleased to see that this year's event was a great success. Our collective efforts were instrumental in getting the message of peace out to the world at a critical time.

Below are a few notable highlights from the collaborative work undertaken in the days leading up to the International Day of Peace:

- Our combined efforts around Peace Day reached approximately 2 billion people across social media platforms (Facebook, Twitter, Instagram, Snapchat, etc) with the message of 24 hours of non-violence leading up to and on Peace Day.
- From events to hashtags, the message of non-violence was heard around the globe with upwards of 100,000 posts on Instagram and over 300,000 tweets.
- The United Nations observed the International Day of Peace on 16 September with a major youth event – with the participation of the Secretary-General and Madame Ban. It was moderated by UN Messenger of Peace Michael Douglas and held - for the first time - in the UN General Assembly Hall. The event brought together students, Nobel Peace Prize laureates, the United Nations Messengers of Peace, Ambassadors, and the Special Envoy's delegation of digital Peace Ambassadors.
- At the request of President Juan Manuel Santos, His Eminence Timothy Cardinal Dolan rang the bells of St. Patrick's Cathedral in solidarity with the people of Colombia on September 26<sup>th</sup>, the day the Colombian government and the FARC signed the peace treaty in Cartagena. Following the signing of the treaty, President Santos was awarded the Nobel Peace Prize for his role in catalyzing peace in Colombia.
- Ringo Starr and Fonseca joined forces to re-launch the Peace Day song *Now The Time Has Come* just days before the vote to encourage passing the peace referendum.

I know the messages shared on the International Day of Peace will undoubtedly resonate in the minds of people across the world for years to come.

I look forward to working with you in the future, and thank you again for the partnership.

Warm regards,  
A handwritten signature in black ink, appearing to read 'Ray'.

Figure 2.3. Letter from the UN to Unify thanking them for their partnership and documenting statistics of reach for Peace Day in 2016 including a “2 billion” reach across all platforms.

## Chapter III

### Looking Forward: Systems, Scalability, Measurement, and Efficiencies

The possibilities of increasing efficiencies in humanitarian efforts by way of a global system of accountability, resource share, and a standard unit of measurement can be explored by looking at where these are present in the for-profit world and yield successful outcomes, versus where they are lacking in the non-profit sector and results are less than desirable. The Collective Impact Forum boldly declares on the home page of their website, “Too many organizations are working in isolation from one another. Collective impact brings people together, in a structured way, to achieve social change,” (Collective Impact Forum, 2014). A video produced by the same group states (Collective Impact Forum, 2014):

When individual organizations attempt to tackle the most daunting problems, success stories are all too rare. ... One particularly effective means of [organizational] collaboration is Collective Impact. Using the Collective Impact approach, a number of complex social challenges have been addressed, and some remarkable results have been achieved. ... The world’s toughest challenges aren’t going away. In fact, many experts predict they will continue to grow in both number and complexity. Solving these problems requires a range of expertise from a number of diverse organizations.

It is well-known that we cannot solve every global challenge overnight. Several organizations and groups around the world go to great lengths to find solutions. Singularity University, for example, rallies the brightest and most innovative minds each year, by process of rigorous application, to attend a think tank style nine-week intensive at NASA to impact the challenges at hand with education and creativity (Singularity University,

2019). The most common player in the game of humanitarian efforts must be the Non-Governmental Organization (NGO). Each NGO files for its status with its respective governing body and is required to state a specific purpose they will serve in their operations. This is not only to prove they have a valid reason for escaping taxation, but also to include a level of accountability for the actions of the NGO. For these reasons, an NGO's focus will often times be very narrow in scope. This is extremely helpful in observing a need, raising funds to meet that need, and then meeting the need. This model, as helpful as it is in a narrow scope, lacks efficacy on a global impact scale because systems of accountability, global open-source resource share, and a scale used consistently by which to measure results are not in place at any higher level than the individual NGO. Therefore, the Red Cross, Partners In Health, Oxfam, and World Vision, while all serving similar and overlapping purposes, do not have consistent collective resource-share or a collective standard or common goal to which to collectively rise. If these NGOs were not NGOs, but were in the commercial marketplace, these missing elements would be present in one vital ingredient: competition. In the corporate sector, the almighty dollar drives the constant improvement of a product, applicability to the consumer, the psychology of engagement (otherwise known as Marketing). In so doing, natural efficiencies emerge in order to keep up or to maintain or gain market share. For instance, an international company specializing in manufacturing tools will require consistent communication between their common departments located in different countries. If the company has offices in Dallas, Shanghai, and Milan, the heads of the respective sales departments meet with some frequency to discuss what is working well, what is posing a challenge and how they are attempting to overcome it, and what innovations are on the table or are working well so far in that area.

With this practice, the company ensures consistency between locations and steady improvement overall. Though perhaps called by other names, there will always be accountability, resource share, and a scale of measurability present in companies engaging in these international business practices. Additionally, the presence of a competitor who also manufactures and sells tools only increases the efficiency in that market, since the competition between them for their respective market share is the driving force. Market competition is healthy and good for the consumer because it keeps quality high and pricing low. The challenge then for the NGO model is the lack of the built-in drive provided by the almighty dollar. An NGO is not set up to earn; it is set up to accomplish, or even to try to accomplish, its goals. It spends a great deal of its resource chasing the dollar that will hopefully eventually come in and fund the vision that was cast last quarter or last year. For this reason, at its foundation the structure of the NGO is set toward narrow scope, is without a larger collective standard system from which to draw and to which to contribute, and lacks competition as a driver. The result is less than optimal efficiency.

Another issue, and I believe it to be a key issue, is the system of scarcity that is built into the foundation of a non-profit, NGO, charity, etc. At the core, NGOs are set up to rely on donations in order to exist to do their good work. As a child I would work with groups to raise money for aid and mission trips to other countries, mostly impoverished and very much in need. I spent time in these countries with families who lived as communities in village dumps and in orphanages and “slums.” On the outskirts of Nairobi, I worked with a woman whose annual project was starting micro businesses with women in Kenya, teaching them how to invest, buy, sell, store, barter, etc. Their progress, success, or failure would be followed up on a year later. As an adult, I have long found it ironic that I relied

on the donations of individuals either to me directly or to the larger organizations I was working with, just to land on foreign ground and impart my Western wisdom to the local people on how to become self-sustaining. I have heard of groups emerging that start a trade school or vocational school that earns money and the money can go to fund the visions for the humanitarian work. The entire structure is built with the humanitarian work in mind, but that work is not started until an income-generating system is in place. Hearing about for-profit businesses is also more commonplace now than ever, where a business operates as a business, but also has a greater purpose that they commit to, whether in time and energy, resources, money, or any combination of those things. Again, in that model the income generation is solid before any giving happens, and it is out of the abundance of earnings that the humanitarian efforts are made. There are certainly times for emergencies when resources are so urgently needed that funds must be sent, however if the non-profit structure didn't already exist in my worldview and I was just introduced to it now for the first time, I do not know that I would recommend it as a sustainable model itself. That is not to condemn the non-profit model. I hope it is clear from the larger tone of this paper the level to which my heart swells with gratitude for the countless men and women who serve tirelessly to affect real change in the world where it is needed most. These comments, this whole paper, is meant for an opportunity to take a different look, share perspectives, and perhaps contribute to the next generation's solutions without binding them to our ways.

### *Applying International Business Models to Global Humanitarian Efforts*

One of the questions this paper seeks to answer is, "How might international business strategy that is taught as common practice in international business and in many

MBA curricula be used to increase efficiencies in progress toward the SDGs?” William Easterly, author of “The White Man’s Burden,” wrote on his thoughts on the future of western aid: “A big problem with foreign aid has been its aspiration to a utopian blueprint to fix the world’s complex problems. ... If the utopian goal distracted attention away from holding aid agencies accountable for tangible outcomes, then step one is to give up the utopian goal,” (Easterly, 2006).

An essential supportive piece to this thesis is the borrowing of certain known business model efficiencies, particularly those implemented in international companies participating in a highly competitive marketplace, and considering applying those efficiencies in a system for NGO’s and individuals for humanitarian efforts. Utopian goals for solutions to the world’s most complex problems should not be mutually exclusive of or a distraction from accountability for achieving measurable and tangible outcomes. However, if an individual or entity is to be held accountable for those outcomes, a system of measurement would need to be in place. Current business models for successful corporate global strategy include building department-to-department efficiencies between overseas offices. It includes communication on a regular basis comparing what is working and what is innovating, avoiding being dogmatic about experimental solutions, remaining flexible in relevance to the different customers of the business’s various locations. This can be applied to global efforts and can be built on to find efficiencies for the efforts that are already underway, as well as those that are to come.

NGO’s alone cannot be held accountable for overcoming the challenges that face our world. Governments also play an important role in participating, approving, and funding efforts. Additionally, and very differently, the efforts of individuals who work independently

to meet humanitarian needs globally make up a great deal of overall progress, although for lack of a method of tracking, it is challenging to assess the impact of individual engagement, or small independent group engagement, outside of NGO and governmental efforts. In his book “Pathologies of Power,” Dr. Paul Farmer makes a compelling plea to simplify the complexities of some of the world’s most major challenges: “It is not acceptable for those of us fortunate enough to have ties to universities and other “resource-rich” institutions to throw up our hands and bemoan the place-to-place complexity. Underlying this complexity is a series of very simple first principles regarding human rights...” He goes on to explain that the United Nations, The World Health Organization, and the organizations that work with them are called to certain levels of work, such as with governments, whereas individuals enjoy the effortless benefit of a unique opportunity to interact on a much more personal level, with a different vantage point, and therefore with an entirely different set of responsibilities, such as speaking up for change where change is needed or telling the true story in context (Farmer, p.229, 2005). Farmer also points out the flaws of the charity model, “The approach of charity further presupposes that there will always be those who have and those who have not. This may or may not be true, but, again, there are costs to viewing the problem in this light,” (Farmer, p.153, 2005).

Non-Profit Organizations, or Non-Governmental Organizations, function by raising money each fiscal year to attempt to satisfy an outcome that is measured against a vision, a vision typically isolated and specific to that organization. In contrast, corporations use a number of metrics to ensure they are making the most for their bottom line. They can afford and must afford to create efficiencies that benefit them. In fact, in order to stay competitive in the marketplace and retain or increase their market share, they

cannot afford not to employ these efficiencies. The non-negotiability placed on these efficiencies in the for-profit sector is something from which to learn. If these practices were applied, particularly international business practices, to NGO's and humanitarian efforts on the whole, overall increased efficiency would stand to be gained.

International business strategy teaches certain practices to ensure efficiencies within a global corporation, not only so that the core competencies of the company are consistent between various and diverse locations, but also so that the product or service being delivered remains relevant to the immediate population in those various locations. This requires constant attention to what must remain the same and flexibility with regard what might need to change. In this way, a fulfillment center in Dallas, TX, USA has the same baseline of practices within their operations as the fulfillment center in New Delhi, India, however the practices will differ where the demands of local culture are concerned. Over time the practices might also differ where market demand shifts for any number of reasons. The department heads will communicate often about what is working well, what is innovating, and what might need to change. They can borrow ideas from one another, all the while remaining true to the mission and vision of the company and ensuring no single location has to endure the burden of "reinventing the wheel" to solve a problem with which another location has already dealt. This is the kind of efficiency from which the non-profit world could greatly benefit. No global system of humanitarian efforts presently exists that could be likened to that of global corporate efficiencies and international business models. If a system of communication were in place that allowed for accountability, resource share, and a scale of measurability between all humanitarian efforts, it stands to reason the outcome would be greater efficiency and the results delivered would be exponentially

greater. The outcome: more readily available solutions, and therefore, a better world.

All of this points back to open source data, a direction in which some believe we are already moving. Coincidentally, the UN's SDG Tracker was set up as an open source platform, a fact that can offer the opportunity to evaluate the pros and cons of a system of open source data, and the factors present that may or may not allow an open source platform to be successful in collecting, validating, and preserving the integrity of data.

An efficient system or tool alone is not enough to create change, however. The increased participation of people is paramount to an increase in the success rate of global humanitarian efforts. Whatever tools for efficiency are put in place, whatever tools are available, the global impact is higher if the tools are used by a greater number of people globally, so this, too, must be an equal objective.

#### *The Role of Technology: Global Increase of Smartphone Users*

Another primary question of this paper is, "How might the percentage of the global population's engagement in humanitarian efforts be increased by use of standardized systems of measurement and current advancements in technology, particularly through rapidly increasing global smartphone usage and the normalization of "apps"?" In January of 2019, CNBC published an article with the headline, "Nearly three quarters of the world will use just their smartphones to access the internet by 2025," (Handley, 2019). The article featured a report published by the World Advertising Research Center which stated, "Almost three quarters (72.6 percent) of internet users will access the web solely via their smartphones by 2025, equivalent to nearly 3.7 billion people," (Handley, 2019), and "the world's population is increasingly being connected to mobile broadband networks," (Ericsson 2017). That smart

phone usage represents over half of the world’s current global population, and over 45% of the UN’s 2025 population prediction, including third world and impoverished countries, (UN, 2019). That figure does not take into account those smartphone users who would have smartphones but would not exclusively use them as the only device on which they access the internet, so in effect that number would be even higher. “By 2020 it is expected that the number of smartphone subscriptions will [increase] to more than 6 billion around the globe,” (Price, Maor, & Shachaf, 2018). According to these figures, projections would point to well over 75% of the world’s population using smartphones with internet in 2025 (This paper uses UN population reports to assess the global population, (UN, 2019)).

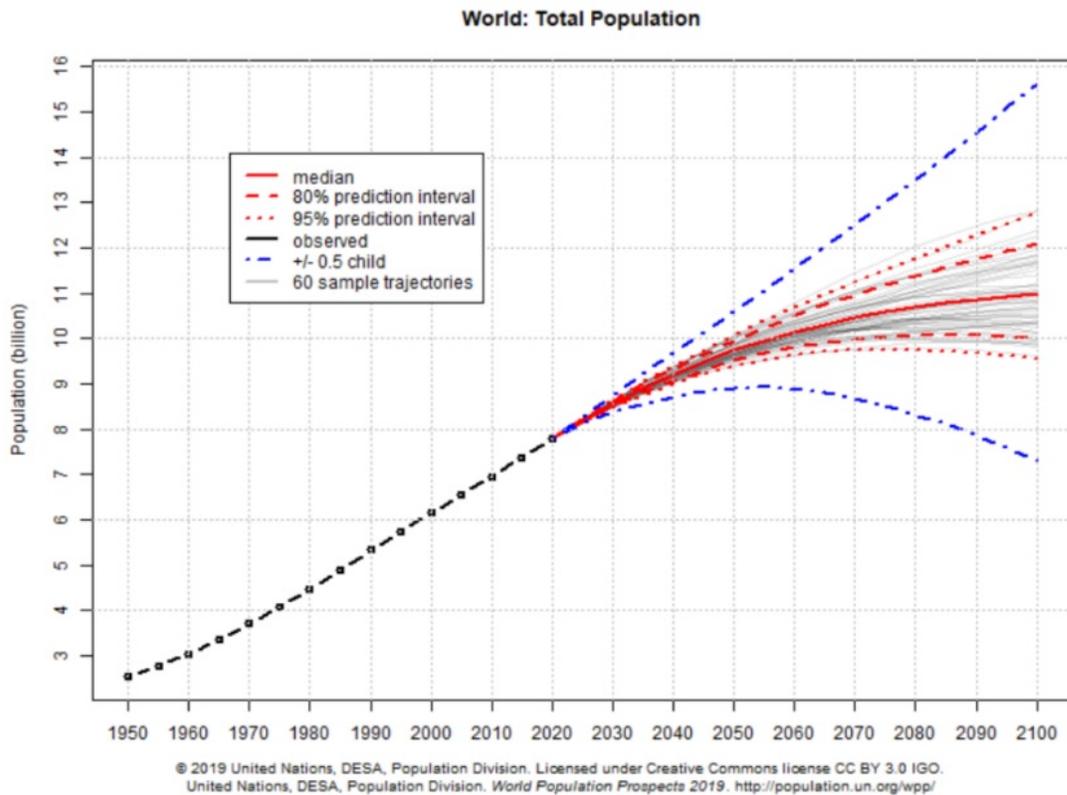


Figure 3.1. UN Population map. Showing world population predictions through 2100.

The Erikson Mobility Report released in 2017 estimates there will be 6.8 billion smartphone subscriptions worldwide by 2022 (Erikson, 2017). And these are just a small sampling of the overwhelming data supporting similar projections. Within the past two (2) years, a blitz of findings and predictions have been published indicating a future of unparalleled growth in smartphone, app, and internet usage, as well as accessibility. The following are several current examples:

- 1) Just over 1.3 billion are forecast to access the internet via smartphone and PC by 2025, according to a report published Thursday by the World Advertising Research Center (WARC) (Handley, 2019).
- 2) “Approximately 7.2 billion humans live on planet Earth. A portion of this population is expected to own or share more than 5 billion cellphones by 2019. Two and a half billion of these phones will be smartphones. Phone ownership is increasing rapidly in many countries, including China, India, and Brazil, as well as in some African nations. For example, 44 percent of Kenyans now own smartphones,” (Preece, 2017).
- 3) “With the development of sophisticated smartphones in the last decade, and the reduction in their costs, there are now more than four billion smartphones around the globe (Ericsson Mobility Report, 2017).
- 4) “It took over five years to get the first billion smartphone subscribers in 2012, and less than two years to get the next billion subscribers. By 2020 it is expected that the number of smartphone subscriptions will double again to more than 6 billion around the globe. The largest increase will be seen in the Middle East and Africa, where smartphone subscriptions will increase by more than 200% in the next six

years, while the largest increase in number will occur in Asia, with an increase of 1.7 billion smartphone users over the next 5 years,” (Price, Maor, & Shachaf, 2018).

The numbers are not all exactly the same, and to be fair, the comparisons are not all apples to apples. Some data evaluated is concerning mobile phone users, not just smartphone users, and some data is looking at the number of phones produced and sold while others are looking at quantity of mobile line accounts. However, across the board, it is undeniable that all signs point towards a continued rapid increase in smartphone usage worldwide.

This consensus of predictions is significant not only because it displays the reality of rapidly increasing accessibility of each individual on the planet to information and connection to exponential numbers of people, but also because of the impact participation in social networks has been shown to have on civic engagement. In 2014, a study was done to examine the impact of advancing technology on civic engagement. They defined “civic engagement” as including “all the ways in which individuals participate in public life, how they learn, how they get involved in various problems and contexts beyond anyone’s privacy or intimacy,” and went on to explain that “social networks provide different ways to record, share and enhance this kind of attention,” (Bala, 2014). It would stand to reason that the greater number of smartphone users there are, the greater the number of social network participants there would be, should social networks remain a prominent part of social interaction. It would also stand to reason, based on the 2014 study, that this increase in interactions with technology could lead to “enhancements” in social network attention that would promote individuals “getting involved in various problems and contexts” as a part of their civic engagement. Another article on civic engagement found an interesting correlation

between social network users and their propensity to become involved as a contributor to their community:

“Analysis revealed that people, who are more engaged in e-social networks are significantly more likely to make donation or support people and political organizations. The analysis also shows that more active users are more likely to participate in public or civic campaigns, and to address the politicians. Talking about specific networked activities, users who are more often publishing material and contributing to events organized by others, are also more likely to participate in public or civic campaigns or public organizations and movements. These findings could be explained by few facts. Firstly, e-social networks are a medium in which individuals reach the new information about different civic initiatives and opportunities for engagement. Therefore, it is not surprising that more active users have more opportunities to participate. Secondly, e-social networks are increasingly becoming a place, where different civic initiatives are actually being implemented, for this reason more active users have more opportunities to take part in them,” (Jurkevičienė, Butkevičienė, 2018).

These findings by Jurkevičienė and Butkevičienė are highly significant because they take the evidence for collective impact via technology one step further by indicating that not only will the measurement of activity and progress be easier because of the ability to track through apps, but that each individual already engaged in social media has a higher likelihood of being a contributor of those actions being tracked. So, participation increases and the tracking of the participation increases.

An additional step beyond mere smartphone accessibility, number of users, and social

network participation is the way users participate on those smartphones, and in many instances in those social networks. Along with the rise of smartphones, one can see the rise of apps, as in this excerpt from “Beyond Social Chit Chat,” an article published in 2017 that outlines the practical reasons for enormous and unexpected growth of some apps:

One significant development in the formation of social networks has been the use of mobile messaging applications for Smartphones, such as the market leader WhatsApp. Created in 2009 by Koum and Acton, former employees of Yahoo, WhatsApp was originally conceived as a cheaper alternative to SMS (Short Message Service), but it has developed from a simple communication tool into a cross-platform instant messaging service, enabling users to send longer texts and exchange images, videos, messages and sound files via their internet connection. It was acquired by Facebook in 2014 and, according to its website, is currently used by more than one billion people worldwide. The reasons for its appeal lies in its simplicity, relative inconspicuousness, convenience and low cost. It may also be a symbol of conformity or a desire for social acceptance and communality. In 2016, WhatsApp dropped its subscription charge and it is now free to download and send messages. It has gained more popularity in informal educational settings as a collaborative virtual learning space, giving learners the freedom and flexibility to interact away from the four walls of the institution (Tyler, 2019).

Apps are an integral part of smartphone usage and must be examined accordingly. Until another technology moves on the scene to replace the way people use apps, apps should absolutely be considered when exploring options for using tech to measure collective impact. Of course, having an app is not the same as engaging individuals to use the app.

## The SDGs App and WANGO

The next logical step for anyone who wants to rally action of a particular population, riding the wave of these advancements in technology, is to build an app. In the 1990's websites served as a perception of validation of companies and organizations being legitimate (however flawed that was in practicality) and served as portals for action on the part of the patron. Now social media pages are moving into the validation space (is that new clothing line really a thing if it doesn't have an Instagram account?) and the new portals for action are unequivocally apps. While the UN does not appear to be behind the app, the necessary groups caught on to the trend, and seeing a need, launched the "SDGs in Action" app, in both android and iPhone app stores in September of 2016 (SDGsinAction, 2016).

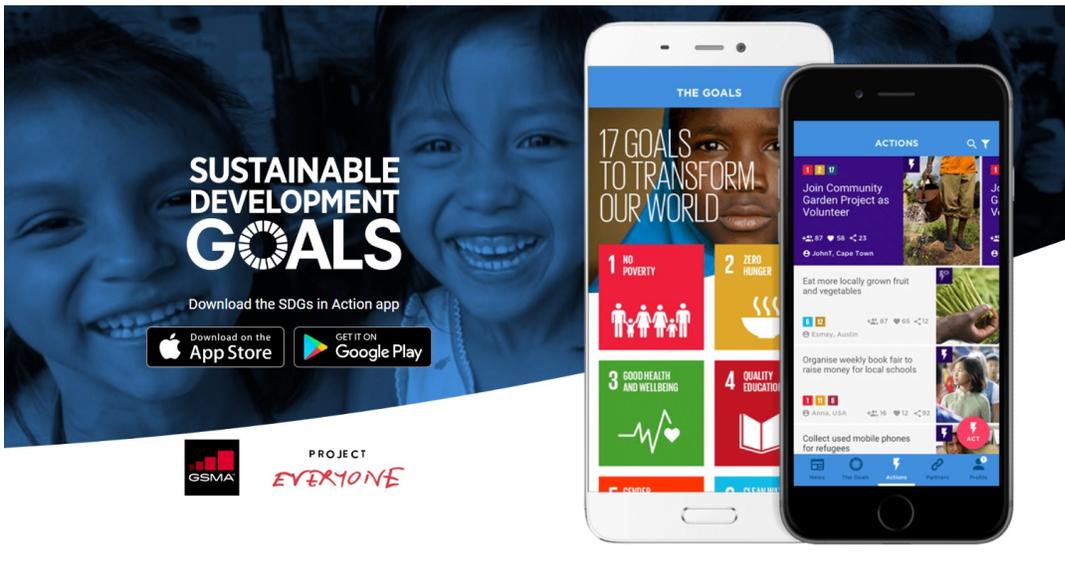


Figure 3.2. SDGs In Action App. Available for download with over 50,000 downloads on android to date.

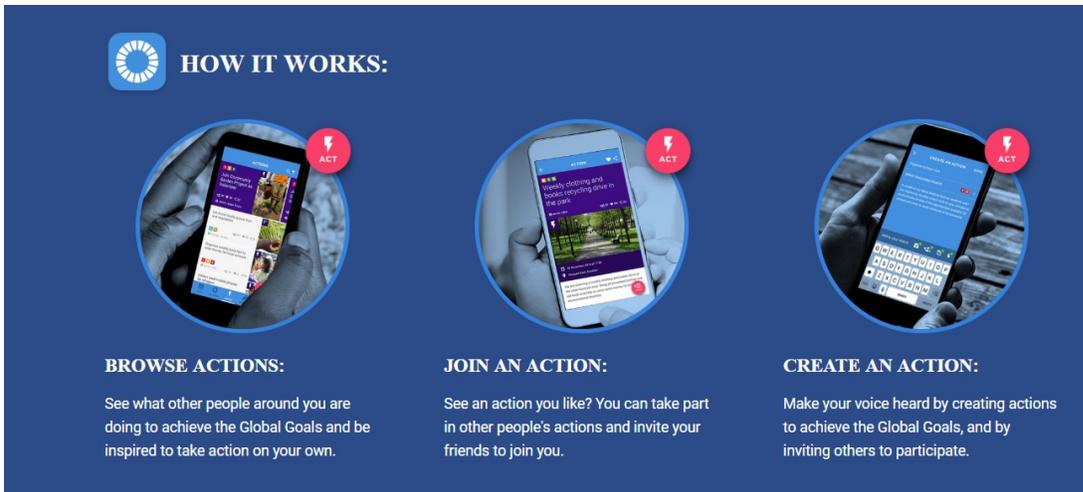


Figure 3.3. SDGs In Action App: How it works. Browse, join, or create actions for the SDGs.

The app was a collaborative effort of “Project Everyone, a non-profit for global campaign to spread the messaging of the Global Goals” and “the GSMA, which represents the interests of nearly 800 mobile operators worldwide,” (SDGs in Action, 2016). The GSMA, who likely has some affect on nearly every stage of mobile development, also just released a “ 2018 Mobile Industry Impact Report” on the SDGs, including a section on “The Mobile Industry’s Impact on the SDGs,” (GSMA, 2018). In this report the GSMA establishes and graphs the relationship between two things: 1) progress on the implementation of the SDGs (or SDG Index), and 2) enablers of mobile internet adoption (or the Mobile Connectivity Index), (GSMA, 2018). The report goes on to show the impact that the “enablers of mobile internet adoption” within the mobile industry have had on every single one of the SDGs, on a scale of 1-100, (GSMA, 2018). In explanation of the scoring model, GSMA states the following:

“The GSMA has developed a methodology to measure and track annually the impact of the mobile industry across all 17 SDGs. For each goal, an ‘impact score’ is

calculated out of 100. A score of 0 means the industry is having no impact at all, while a score of 100 means the industry is doing everything in its capacity to contribute to that SDG,” (GSMA, 2018).

What would the scores be on each of the SDGs if one was to measure whether individuals, organizations, and the collective of humanity were doing “everything in [their] capacity to contribute to that SDG,?” The GSMA’s mobility report, while not specifically addressing the advancement of each particular SDG, is yet a shining example of how data already at the disposal of individuals, companies, and organizations, can be used to measure and track action, effort, progress, and change. With their constant eye on the progress of the SDGs, the GSMA was an appropriate party to collaborate with Project Everyone on the making of the SDG’s in Action app.

### SDG Impact scores

Normalised score (out of 100)

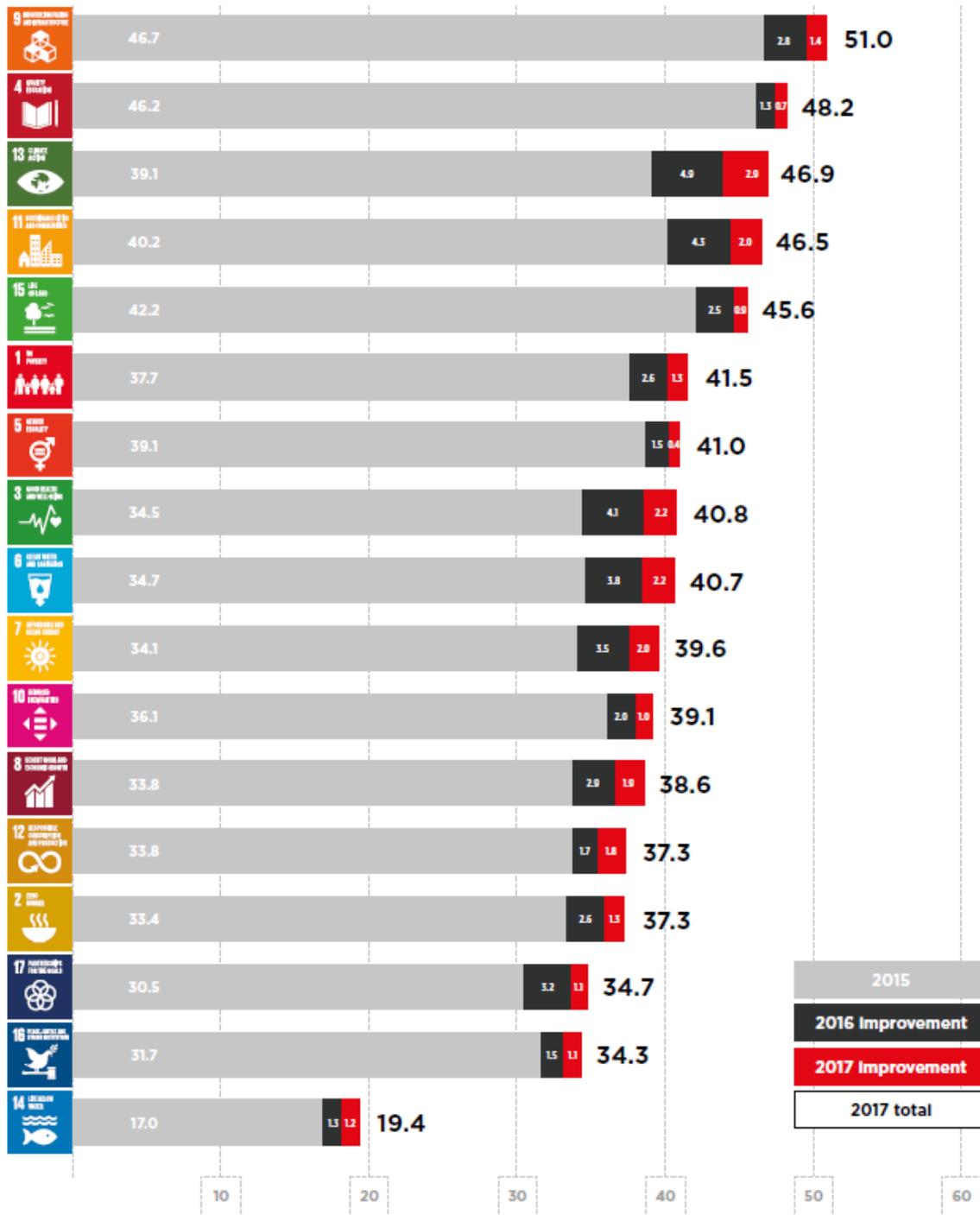


Figure 3.4. GSMA 2018 Mobile Impact Report SDG Impact Scores Graph

The app seems to have been created with the right idea in mind, as evidenced by its inviting description in the app stores:

“Download the SDG’s in Action app and take action to help the Sustainable Development Goals – the world’s to-do list to end poverty, reduce inequalities, and tackle climate change – become a reality. Learn about the 17 SDGs, get news on your favorite goals, find out what you can do, how you can take action to help achieve them, create your own events, actions, and invite others to join you in sustainable actions and events,” (SDGs in Action, 2016).

The description touches on key parts that, again, would be factors in successfully garnering global participation and measuring individual and collective impact. Those factors include: relevant information on the issues, connecting the dots showing how their participation and action can and does make a difference, the ability to connect with others who care about similar things, the ability to create events and actions, and the ability to invite connections to see your participation and decide if they want to participate themselves. The app description even boasts that they have recently “added new chat bot function in support of UN Climate Campaign,” (SDGs in Action, 2016). Although the iPhone App Store doesn’t list how many downloads the app has had on that platform, the Android App Store reflects over 50,000 downloads. Merely twelve (12) reviews of the app have been left in the iPhone App Store, with an average rating of 3.5 stars. Among other things, like offering versions of the app in six (6) different languages, the app offers videos, facts and figures, targets, the latest in sustainable development news, and the ability to join up with local events in your area (although at the time of this paper that feature did not appear to be working). With all of

these capabilities, and with so many in the world knowing that things like climate change and poverty are real and serious challenges, why are more people not participating in the SDGs in Action app? It could be for many reasons. The app is the first of its kind, so its role is naturally that of a first iteration, through which the learning comes. The app deals only with the SDGs, and carries that as its name, so participation is limited to individuals who already relate the needs of humanity specifically with that term, then potentially excluding those individuals who do not. The app has no “gaming” features, which are almost required for app success (“Games made up 80 percent of the gross revenue generated by Apple’s App Store and more than 91 percent of Google Play revenue in the first quarter of 2017,” (Kadir, 2018)). Among other inhibiting factors, such as marketing and brand recognition, the gaming factor may be a key contributor to its lack of virality. The gaming app stats suggest that “integrating gamification design-elements and features that make Gaming apps so successful” could help with an app’s retention of users once a user has been introduced to an app, (Kadir, 2017). Many current big-name apps “have successfully used swiped-based gamification to add an addictive element to the user experience,” (Kadir, 2017). Perhaps a next iteration app will speak a language that makes it easy for app users to engage. In the meantime, the SDGs in Action app is another positive step towards creating systems for efficiency and measurement within humanitarian efforts and is at the very least a template in practice.

Through the seemingly inevitable and rapidly exponential increase in smartphone usage worldwide, the increasingly available access to internet and connectivity through apps, and because of the probability of those active on social media to participate in civic activities, the path that technology and society are collectively paving is clear. Many unknowns still exist, however, including what innovative mechanisms will be created to usher the collective

population into this next phase and explore what humanity is capable of with technology and connectivity.

In order to fully examine the possibilities of engaging a greater number of individuals in an efficient system for humanitarian efforts, however, the current percentage of the global population actively participating in these efforts will need to be measured. Unfortunately, at this time no global system of measurement for participation in humanitarian efforts exists. However, an organization does exist that might offer a template on which to build. The World Association of Non-Governmental Organizations (WANGO) is “an international organization uniting NGOs worldwide in the cause of advancing peace and global well being,” (WANGO, 2019). WANGO helps to provide the mechanism and support needed for NGOs to connect, partner, share, inspire, and multiply their contributions to solve humanity’s basic problems. WANGO states on their website:

Initiated in 2000 by a handful of international NGOs and prominent visionaries, WANGO has quickly become one of the premier international bodies for non-governmental organizations that are committed to the ideals of universal peace, justice, and well being for all humanity. Concerned with universal values shared across the barriers of politics, culture, religion, race and ethnicity, the founding organizations and individuals envisioned an organization that would enable NGOs to work in partnership across those barriers, thereby weaving a selfless social fabric essential to establishing a worldwide culture of peace. By optimizing resources and sharing vital information, WANGO provides a means for NGOs to become more effective in completing their vital tasks. With its global network of NGOs, as well as affiliates drawn from the ranks of governmental and intergovernmental bodies, business, and universities, WANGO has become an international leader in tackling issues of

serious global concern (WANGO, 2019).

Although the site states the organization “optimizes resources” and “shares vital information” to make NGOs more effective, WANGO does not state how this is done or reveal any methods or structures that support that active mission. WANGO currently reflects a membership of over 54,000 organizations between “over 120 nations,” the tally for which can be assessed by calculating the individual totals of each region on their map search feature of their organization directory (WANGO, 2019). Even with over half of those organizations being represented by North American NGOs, such strong membership could indicate that WANGO offers something of value or satisfies a pain point for NGOs. An organization like WANGO would be in a perfect position to track the participation they are aiding their members in achieving. WANGO’s mission of “uniting NGOs worldwide in the cause of advancing peace and global well-being” by “helping to provide the mechanism and support needed for NGOs to connect, partner and multiply their contributions to solve humanity's basic problems” absolutely aligns with many of the factors necessary to achieve collective impact measurement on a global scale. Participation data from more than 54,000 NGOs worldwide could finally begin to offer some insights into what is resonating with people globally and compelling individuals to contribute through time, money, and action to the greatest needs in their global community.

## Chapter IV

### Factors of Individual Participation in Collective Impact

No current system exists to measure the percentage of the global population participating in global humanitarian efforts. If such a system were to exist, much like in the case of the app scenario, the very next step would be to evaluate and encourage engagement in that system. Even with an optimally efficient global system of humanitarian efforts, engagement and participation would still be essential. This paper hypothesizes that psychological factors such as imagination, play, and empathy being present increase the probability of the individual to actively engage in global humanitarian efforts both in their local and global communities. Further, it examines some psychological elements that might affect the number of individuals globally engaged in humanitarian efforts as they are deemed relevant to the participant.

#### *Psychology of Engagement: Luhrmann and Erikson*

A person will only engage insofar as they believe they are valuable enough to contribute and the cause is valuable enough to contribute to. An individual being compelled to engage will be contingent upon both environmental and psychological factors. Tanya Marie Luhrmann's work in the area of psychological anthropology on perceived reality and imagination, specifically where it includes perception of self, God, truth, what one is "supposed" to do, offers a psychological foundation for participation based on perceived reality. She has published many papers on "hearing" the voice of God or factors that compel belief, as well as the psychological aspects of engagement. In her book "When God Talks Back," Luhrmann describes in fascinating detail the psychological

skill required to develop a “new theory of mind” as well as a “psychological capacity called absorption that allows [one] to experience that which is not materially present,” (Luhrmann, 2012). Additionally, Luhrmann writes an entire chapter on “the skill of prayer.” In this chapter, she reveals that the only useful scale from which she found valuable results in her study with the evangelical groups and prayer was the Tellegen Absorption Scale. The subject of prayer may seem to be unrelated to this paper, however prayer and meditation are two of the most widely popular methods of gathering a virtual and international collective, according to the case study subject, Unify, having had millions present in a single moment around the globe connected by way of holding a shared intention. In such a case, psychological factors are present that encourage participation even on that most subtle yet provenly measurable level (hence the Guinness Book of World Records record set in 2016). What is deeply noteworthy here is that a high score on the absorption scale was correlated to the individual’s ability to meet the “demands of the use of one’s imagination,” (Luhrmann, p.195-196, 2012). The more highly someone scores on the absorption scale, “the better [one is] at empathy, which demands that [one] understand what someone else experiences in his or her world, and the way another person thinks or feels,” (Luhrmann, p. 200, 2012). These skills allow one to experience imagined aspects of life more palpably. “Absorption seems to be the basic, necessary skill, the shared capacity of mind that allows what we choose to attend to become more salient than the everyday context in which we are embedded,” (Luhrmann, p. 201, 2012). Luhrmann states in the preface of her book that she wanted to “explore the way that people make meaning,” (Luhrmann, 2012). Her work in general tends to honor the individual’s experience as valid, as an effective anthropologist, and since she has so long worked with

the concept of perceived reality and understands its importance. Luhrmann's work examined a people group who were compelled to participate in their local community, including belief, attendance, and prayer among other things, based on a number of societal and psychological factors. She found imagination and empathy among the most profound of those factors to be correlated with that participation, and more specifically with the ability to effectively participate.

A person's belief that they are valuable and that they are likely to participate in their local community (and beyond that, to the global community), as well as having a propensity towards solutions, can directly be correlated to imagination and play being present and active in the individual. Erik Erikson said at Harvard's 1972 annual Godkin Lecture, "The opposite of play is death." Erikson is well known for his work in developmental studies and identity development versus identity crisis, (Storr, 1977). What might be lesser-known is the kind of work that he composed later in his career, the kind that Carol Hren Hoare brought to light in her work of Erikson's unpublished papers. Erikson examined childlikeness, imagination and play as it impacts the individual's relationships and community, as well as their own well-being. Erikson had the unique opportunity to follow up in their adulthood with subjects of a prior study of his 40 years earlier when they had been only 12 years of age (Hoare, p. 127, 2001). "He found that those who had been able to play freely as youths... had renewed themselves throughout the many years... and showed amazing resilience," (Hoare, p. 127, 2001). This sparked an entire new area of study for Erikson in conjunction with his profound work on development.

The correlation of imagination, play, and empathy being present in individuals to

the tendency of those individuals to be active contributors to their local communities is reasonable to infer from Erik Erikson's work on imagination and play, as well as from other current studies that have been done on the importance of empathy in being actively solution-oriented. Erikson's work regarding play in adulthood revealed foundational concepts offering that adults tend to reject childlikeness and the related forms of imaginative play, even though engaging in imaginative play and having attributes of childlikeness, such as a sense of wonder and trust, were found to be vital to healthy identity development, (Hoare, 2002). Further research by creativity experts Michele and Robert Root-Bernstein has drawn a connection between incidence of childhood "worldplay" and success and creativity in mature endeavors, (Root-Bernstein, 2006). Similarly, Erikson found "manifestations of personal, family, and societal problems" to be directly related to "play disruption and inhibition," (Hoare, p. 119, 2001).

Adults who are disconnected from the idea of limitless imagination (particularly where it is due to limiting "imaginative play" to being appropriate only in childhood) are resistant to engage in imaginative play in adulthood, and when play is allowed in adulthood, adults typically only allow it in terms of competitive play (Hoare, pp. 114, 2001). Studies have shown that imaginative play and a lack of imaginative play are directly correlated to successful behavior and criminal behavior, respectively (Hoare, pp. 113, 2001). A direct link exists between the cultivation and allowance of imaginative play in childhood and stability in development in both childhood and adulthood (Hoare, pp. 114, 2001). However, imagination and play is not exclusively necessary in childhood to be of value. Erikson also went to great lengths in his writings to emphasize the value of choosing play as an adult, even going so far as to say that work can be an outlet for adult play (Hoare,

p. 130, 2001). He wrote, “leeway is the ‘soul of adult play,’ the genuine gift of ‘free to be, you and me,’ a safe harbor for work, imagination, and creativity,” (Hoare, p. 130, 2001).

Oxford Professor Anthony Storr began writing for The New York Times in conjunction with the time that Erikson opted to convert his Harvard Godkin Lecture to a published book entitled “Toys and Reasons,” (Storr, 1977). Professor Storr offered insight to the publishing: “[Erikson’s] Toys and Reasons is concerned with the relation of play with reality; with man’s ability to conceptualize and the process of creation; with ritualization and with the influence of our inner work of images upon our varying ways of life and our political assumptions,” (Storr, 1977). In realizing the benefits of imagination and play, however, the individual’s engagement might have the capability of going even a step further to engaging their solution-oriented abilities. Storr noted another of Erikson’s points regarding the use of play in individuals that goes beyond relating play to reality: “Erikson shows that the play of children is not merely expressive of their conflicts and problems but also an attempt to find symbolic solutions,” (Storr, 1977). When applied to a societal context, this indicates that imagination and play being present as psychological factors could lead to contributions of solutions.

Similar to Luhrmann, Erikson realized the value in the individual’s ability to construct reality through their imagination. “Erikson saw adult visual ideas as the individual’s construction of reality, a partial but future-projecting reality,” (Hoare, p. 125, 2001). This indicates that an individual employing their imagination may be able to imagine a solution not yet present and project it as a reality, a potentially highly valuable contribution to a local or global community. Additional studies have shown that adults engaging in imaginative play can see other exponential benefits as well. Michele and

Robert Root-Bernstein discovered five main probabilities for play (“worldplay”) as a benefit in adulthood (Root-Bernstein, 2009):

- 1) “First, worldplay may exercise imaginative capacities including imaging, empathizing, and modeling that we have explored elsewhere as tools for thinking.
- 2) Second, worldplay may exercise the capacity for continued imaginative play, especially in older children and teens, well after the intense exploration of make-believe in early childhood typically fades.
- 3) Third, worldplay may exercise the capacity for problem solving within a self-consistent, alternate, modeled system—regardless of that system’s fantastical or realistic make-believe context.
- 4) Fourth, because worldplay ties the daring, rule-breaking/rule-making effervescence of play to the exigencies of convergent problem solving, it may nurture both the ability and the audacity to imagine potentially new and effective solutions to perennial human challenges.
- 5) Fifth, the virtual imagination is one in which the conceived idea remains personal, inarticulate, and functionally ephemeral (although often embedded in memory). The creative imagination instantiates the virtual and makes it communicable to local or global society in some durable and formal way through mediums of culture as diverse as visual art, music, dance, experiment, hypothesis, and technological invention.”

In short, play can offer: critical thinking tools, empathy, capacity for more play, ability to problem-solve, the propensity to have “the audacity to imagine potentially new and

effective solutions to perennial human challenges,” and the ability to communicate what is in the virtual imagination “to local or global society.” This is exactly the recipe for global contribution that the world needs and that a global system for efficiencies to humanities greatest challenges would hope for.

Erikson also drew a conclusion about the individual’s ability to “actuate” themselves and those around them, which Hoare summarizes:

“[The] adult intentionally “polarises” the self. ... This was [Erikson’s] way of thinking about how, just as one can make light waves vibrate, a person uses the energy of self actively to provide energizing actuality for the self and for others. Wary of reifying the physical space between persons, “polarise” meant energy of self when interacting with others across that space. As light rays brighten and vibrate, the validating energy of self invigorates and animates another,” (Hoare, p. 125, 2001).

This is a reminder of the effects that a person with imagination and play can have not only directly through their contribution, but on other individuals and the community as a whole.

### *History’s Lessons: Empathy, Innovation, and Collaboration*

The fact of the individual contributing to the impact of the whole is essential to the framework of collective impact. Examples in history can showcase times when a people group was compelled to do a thing or called upon for individual contribution to a collective effort, requiring empathy, innovation, and connectedness. One example of the value of individual contribution can be seen in Franklin D. Roosevelt’s Oglethorpe University speech in Atlanta, GA in 1932, calling on the individual creativity and giftings, innovations

and ideas of America's entire population, citing that it would take the engagement of a maximum number of people in order to find solutions that could have the opportunity to rise to the top. He stated not all of their ideas would be used or would succeed, but that the collective of the individual ideas and innovations were what was needed to move the country forward. Out of the collective of the individual ideas the country would certainly find what would advance it. His words were primarily in response to the state of the economy at the time, yet they resonate nearly 100 years later. Roosevelt stated, "...the country demands bold, persistent experimentation. It is common sense to take a method and try it: If it fails, admit it frankly and try another. But above all, try something," (Roosevelt, 1932). He speaks here to the vital need for innovation and was before his time in addressing something that was not yet popularized at the time of his speech called rapid prototyping. Tom Chi, Co-Founder of GoogleX and creator of Google Glass, coined the phrase and teaches the process on TED (Technology, Entertainment, Design) Talks and in workshops around the world (Lakhiani, 2015). Rapid prototyping embraces the reality that failure is inevitable in the process of success. Chi teaches four rules of rapid prototyping (Chi, 2012):

- 1) Find the quickest path to experience.
- 2) Doing is the best kind of thinking.
- 3) Use materials that move at the speed of thought to maximize your rate of learning.

Although Chi speaks as an engineer and inventor, he is just as much a coach on how perspective can influence innovation. He identifies that book learning can introduce a person to the sphere of human knowledge, however expansive learning requires taking that

knowledge into the infinite realm of possibility (Chi, 2012). Tom Chi closes out his 2012 TED Talk by telling the audience now that they know about rapid prototyping, he cannot wait to see what they do with it, (Chi, 2012). Similarly, Roosevelt closes out his 1932 speech with a charge to the country, “We need enthusiasm, imagination and the ability to face facts, even unpleasant ones, bravely. We need to correct, by drastic means if necessary, the faults in our economic system from which we now suffer. We need the courage of the young. Yours is not the task of making your way in the world, but the task of remaking the world which you will find before you. May every one of us be granted the courage, the faith and the vision to give the best that is in us to that remaking!” (Roosevelt, 1932). The situation at the time of Roosevelt’s speech was widely understood and felt to be economic, however today the same charge might be given concerning any one of the challenges that are facing humankind. In fact, any one of the SDGs’ central issues could serve as the basis for inquiry for how innovation and rapid prototyping, free from fear of failure, might propel humanity towards solutions even faster than expected.

Google might be the most recent face of innovation, however before Google, and before any of Franklin D. Roosevelt’s speeches, an iconic era of innovation was beginning. In 1902, what is now the 3M Corporation started as the Minnesota Mining and Manufacturing Company in Two Harbors, MN, (3M, 2019). After finding their mining had failed to yield the mineral they were after, they were faced with having to fold. Yet the company proudly declares their dedication to “the spirit of innovation and collaboration” as a core competency, and in that spirit they did something ahead of their time not yet popularized in the modern business world- they decided to pivot, (3M, 2019). Today 3M has over 60,000 products that are regularly used in homes and workplaces with

a reach of over 200 countries, (3M, 2019). Having contributed such things to modern society as scotch tape, WD40, and sticky notes, 3M remains “committed to creating the technology and products that advance every company, enhance every home and improve every life,” (3M, 2019). In a 1994 interview, one 3M employee shared, “One key ingredient that has allowed 3M to be innovative ...over a sustained period of time, has been its selectivity and aggressiveness in identifying and investing in significant technology platforms that are applicable to many markets. The microreplication technology platform is a very notable example of this strategy. We have been continually developing and investing into [the] platform for at least 10 or 15 years.” (Garud, 2011).

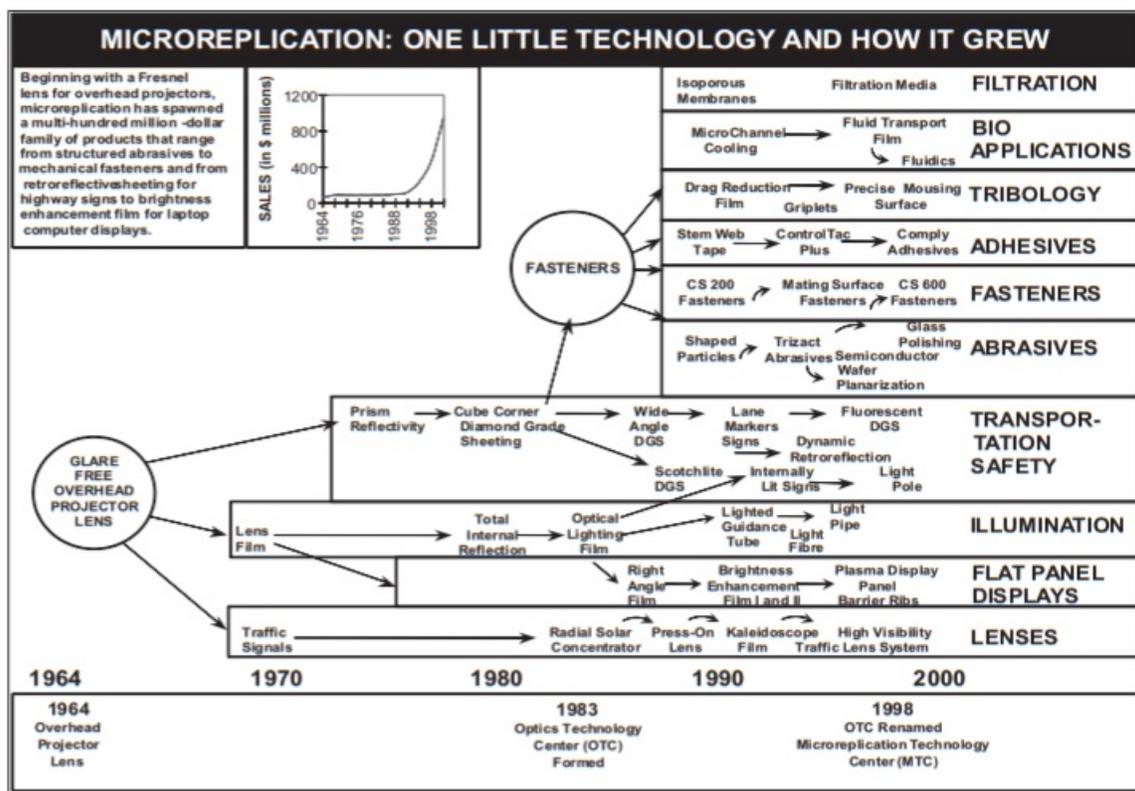


Figure 1. Innovations from the Microreplication Technology Platform Over Time. Source: 3M Corporation

Figure 4.1. 3M example of innovation progress over time, reflecting what is possible with a commitment to innovation and collaboration (Garud, 2011).

Another 3M employee said, “I’ll now make a confession: the 15% part of the 15% rule is essentially meaningless. Some of our technical people use much more than 15% of their time on projects of their own choosing. Some use less than that; some use none at all... The number is not so important as the message, which is this: the system has some slack in it. If you have a good idea, and the commitment to squirrel away time to work on it ...then go for it,” (Garud, 2011).

3M’s model in and of itself was innovative. Companies were not accustomed to hiring on and paying inventors and stocking laboratories to just see what might come up. By 1914, 3M only had one exclusive product, the Three-M-ite™ Abrasive Cloth (3M, 2019). However, this did not discourage the 3M crew, but rather fueled their fires for creativity. In 1925, a 3M lab assistant who had been testing abrasive sample in an auto body shop realized the need for what is now masking tape (3M, 2019). 3M has been looked to in the business world for decades as a leader in innovation, a company that broke trend and expensively and patiently chose innovation and imagination by hiring a team of inventors to play and discover in labs. Taking this risk paid off, bringing much success and a vast array of lasting contributions to society in ways that have changed daily life around the globe. Although the example of 3M is a business example, it shows how innovation being present as a core value in a people group or community allows for increased contribution by participating individuals who are members of that people group/community. If the global community surrounding humanitarian efforts were to value and employ this level of innovation, without fear of failure and no matter how it breaks trend, one can only imagine what might be accomplished to overcome humanity’s greatest challenges.

Beyond innovation, the role of empathy is also a key factor in whether or not an individual will contribute to their local and global community, and potentially to solutions. Innovation might be assumed to require an element of imagination, yet as was seen in Luhmann's work, imagination and empathy are both consistent with the skill of absorption. Might they occur together by nature? Harvard Professor and Physicist Dr. Lisa Randall wrote a paper entitled, "Seeing Dark Matter as the Key to the Universe- and to Human Empathy." In this paper, she speaks to several relevant points, such as the difficulty of empathy, the challenge of a person stepping out of their frame of reference, and the cruciality of empathy to the progress of both science and society (Randall, 2015). "We can't help but see the world from our limited point of view," she says, "Our limited perspective makes us forget that the human experience is a vast locus of points of which we are but one," (Randall, 2015). Randall discusses how when people "synthesize different perspectives, observations, and experiences" it is "the very act at the heart of creativity, which will be essential to solving the increasingly complex problems that beset our world." Thus, the vital need for empathy to be in the midst of human innovation. Randall is not the only physicist to draw parallels between what is happening in humanity to what is observed in our micro and macro universe. There is also physics research to support the individual part influencing the whole or the collective (read works by David Z. Albert or if you are feeling that sense of childlike wonder that Erikson recommends, maybe even Madeline L'Engle).

Another brilliant and influential woman who taught the world a little more about empathy is Rachel Carson. Her book "Silent Spring" was published in 1962, at a time

when speaking out against giant conglomerates like Monsanto could (and did) get one publicly labeled and shamed as a “communist,” (Griswold, 2012). Eliza Griswold recounts the struggle in a New York Times feature article on the 50 year anniversary of the books publishing:

“The personal attacks against Carson were stunning. She was accused of being a communist sympathizer and dismissed as a spinster with an affinity for cats. In one threatening letter to Houghton Mifflin, Velsicol’s general counsel insinuated that there were “sinister influences” in Carson’s work: she was some kind of agricultural propagandist in the employ of the Soviet Union, he implied, and her intention was to reduce Western countries’ ability to produce food, to achieve “east-curtain parity,” (Griswold, 2012).

Carson received her Masters of Arts from Johns Hopkins University in 1932, coincidentally the same year of Roosevelt’s speech beckoning each individual’s talents and ideas (Lear, 2015). Although higher education was perhaps not the most inviting environment for a woman in 1931, that year she began teaching at the University of Maryland, which she would do for five years before leaving to join “the U.S. Fish and Wildlife Service in 1936,” (Rachel Carson Biography, 2014). It was there that Carson began to put together the puzzle pieces of what had been happening all over the country. In the first chapter of her book, she states, “This is an era of specialists, each of whom sees his own problem and is unaware of or intolerant of the larger frame into which it fits. It is also an era dominated by industry, in which the right to make a dollar at whatever costs is seldom challenged,” (Carson, 1962). Carson brilliantly saw something that no one else at

the time could see- the big picture. She was not blatantly against insecticides, but she wanted people to be educated and have a choice whether to be exposed to them:

“It is not my contention that chemical insecticides must never be used. I do content that we have put poisonous and biologically potent chemicals indiscriminately into the hands of persons largely or wholly ignorant of their potentials for harm. We have subjected enormous numbers of people to contact with these poisons, without their consent and often without their knowledge. If the Bill of Rights contains no guarantee that a citizen shall be secure against lethal poisons distributed either by private individuals or by public officials, it is surely only because our forefathers, despite their considerable wisdom and foresight, could conceive of no such problem,” (Carson, 1962).

Carson made strides for healing our ecosystems by condemning “the indiscriminate use of pesticides, especially DDT” [which was] later banned. The book led to a presidential commission [by President John F. Kennedy] that largely endorsed her findings, and helped shape a growing environmental consciousness,” (Rachel Carson Biography, 2014). It is not that Carson made original discoveries during that time. “Much of the data and case studies that Carson drew from weren’t new; the scientific community had known of these findings for some time, but Carson was the first to put them all together for the general public,” (Griswold, 2012).

Carson also gave another gift. She taught the world about connectedness beyond what the mind was already trained to comprehend. She had been reading reports of DDT contamination in remote creeks where no DDT had been sprayed. Carson introduced the world to the notion of how underground water networks are connected like veins in a body,

and can therefore very efficiently spread contamination, (Carson, 1962). If we think of the earth in terms of connectedness of waterways throughout, such as veins in a body, this reframes how we might look at putting things in the ground, whether it be waste, hazardous waste, or other substances. Carson warned:

“Groundwater is always on the move. ...It travels by unseen waterways until here and there it comes to the surface as a spring, or perhaps it is tapped to feed a well. But mostly it contributes to streams and so to rivers. Except for what enters streams directly as rain or surface runoff, all the running water of the earth’s surface was at one time groundwater. And so, in a very real and frightening sense, pollution of the groundwater is pollution of water everywhere,” (Carson, 1962).

In 1963, the year before breast cancer finally took her, “Carson made her appearance before the Senate subcommittee. In her testimony, Carson didn’t just highlight the problems that she identified in “Silent Spring”; she presented the policy recommendations she’d been working on for the past five years,” (Griswold, 2012). Today DDT is illegal in the US. And environmental awareness is on the rise. Rachel Carson may well have been the pioneer of that level of empathy and awareness. Rachel Carson did not have access to the internet for research. She did not have social media and email lists of students and followers to disseminate information. Much as Dr. Paul Farmer urged in “Pathologies of Power” for the individual to speak up for what they see from each person’s unique position, Carson simply spoke the truth of her findings and the vitally important meaning therein, using only the methods she had her disposal.

## Chapter V

### Summary and Conclusions

This paper has examined the need for refinement in the area of collective impact measurement. It has looked at Unify.org as a case study, discussed the future of systems, scalability, measurement and efficiencies, and reviewed psychological components that are present when an individual engages in participation with humanitarian effort, specifically imagination, play, and empathy, as psychological factors of individual participation in local or global communities for collective impact. It has also looked at the global trend in technology toward smartphone usage, and how its increase at a rapid rate in the coming years, perhaps coupled with the vast commonplace use and availability of apps, might contribute to greater participation in humanitarian efforts around the globe.

Several things are clear:

- 1) The need for refined collective impact measurement exists and the current data gaps are much greater than necessary given the tools at humanity's disposal.
- 2) Unify.org is a great example of how an organization or group of individuals can utilize the current cultural progressions in technology to reach a greater number of individuals for a common goal and track participation. If it can be done on a small scale, it can be scaled and done on a larger scale.
- 3) Efficiencies in humanitarian efforts can benefit by way of a global system of accountability, resource share, and a standard system of measurement.
- 4) The non-profit, private, and NGO sectors can look to international business strategy for communication and systems models that may provide better optimization and opportunities for collaboration, as well as an opportunity to draw

parallels to market drivers with incentives to participants in humanitarian efforts.

- 5) Smartphones will be the international norm by 2025, and as such are slated to be the fastest way to reach the greatest number of people around the planet at one time, likely more than half of the world's population.
- 6) All apps are not created equal: apps created for the furtherance of humanitarian efforts might consider gamifying to meet the needs of the user and increase retention.
- 7) Participation in successful solutions is ideally made up of the following components: imagination, play, empathy, story-telling, and innovation. Creators of future systems may find greater success by integrating these psychological and deeply human factors into their systems.

The SDGs are the closest thing humanity has to collective agreed upon definitions of the most pressing global goals. No system exists for tracking progress towards these goals other than the SDG tracker, which is far from all-inclusive and does not include up to date information. Unify.org has achieved tracking the most subtle interaction, social media reach, as it relates to collective meditation and awareness of the world's greatest challenges. This indicates a future ability to measure collective impact, particularly through social media reach or similar or future technologies. Organizations such as Unify.org are working to move individuals and groups towards participation in seeing the SDGs met, though they are not all currently functioning with open accountability, resource share, and a standard system of measurement, all of which could increase efficiencies. Additionally, NGOs and non-profit organizations can look to international business management models to help facilitate these

efficiencies, not only within each individual organization, but within and between the network of organizations as well. WANGO could be one place to start since they already have a substantial catalog of membership of non-profit organizations around the globe.

Unify.org is well positioned to utilize app technology as a method of engagement for their audience in the future, and as a catalyst for global participation in solutions to the SDGs. Because of the vast smartphone use predicted by the year 2025 and beyond, it is feasible that half of the world's population could intentionally connect and engage in an action or actions that were structured to bring about betterment in the areas of the SDGs. Other organizations may choose to tackle similar endeavors. As Roosevelt indicated in his speech, it will take many ideas to find the ones that will lead us forward into our future. The period of the SDGs will eventually expire and something else will take their place. If the individuals, non-profits, and NGOs of the world work together now to create systems that increase efficiencies for humanitarian efforts, then not only can we move more efficiently towards a better future, but the challenges in the future that arise can be met with a prepared collective force of action.

Technology has the ability to program elements to engage users based on psychological factors. Imagination and play, empathy, innovation, and connectedness can all be thoughtfully employed in apps or any other method of delivery to engage an individual. At the rate of the technological advancements these past many years, there is no telling what can be accomplished by one and by many in the years to come. The United Nations' 2030 Agenda is bold and necessary, and the year 2030 is fast approaching. Like Franklin Roosevelt said, we need each and every one. We may not use every idea, but it will take presenting every idea to find the ones that will work. To the future innovators... The future is truly yours.

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