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Enhancing Fundraising Through Emerging Technologies:

Nonprofit Applications of Artificial Intelligence

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Abstract

Artificial Intelligence is a relatively new technology that is beginning to be adopted by fundraisers in the nonprofit sector. At the same time the area of philanthropy is changing. Emerging technologies such as social media, online giving, and mobile donations are being implemented by many organizations. As a result, there is need within the social sector to educate nonprofit fundraising professionals about the benefits, drawbacks and potential applications of Artificial Intelligence, which when integrated with all such strategies can improve results. In addition, nonprofit leaders also need to be educated about why their organizations should implement the technology sooner rather than later.

This project examines the benefits, drawbacks and capabilities of Artificial Intelligence. It also proves that emerging technologies have increased efficiency and effectiveness in nonprofit fundraising departments. The results conclude that larger organizations with donor database size of 10k + should implement AI-enabled fundraising software sooner rather than later. In addition, emerging technologies such as social media serve as strong communication and solicitation tools. Smaller organizations should wait until this technology is further developed at which point there will likely be a price reduction and the potential drawbacks will have been worked out.

There is a need in the philanthropy community for systems that are proactive vs. reactive. CRMs of the future that are equipped with AI-technology will help fundraisers narrow extensive lists of prospects to individuals who meet three requirements: Affinity, Affluence, and Access. These systems are already present in the market today. As these systems are further developed we will likely see these systems be able to collect donor data from emerging technologies such as social media and online giving.

Key Terms: Artificial Intelligence, Nonprofit Technology Effectiveness, CRM, Fundraising efficiency, Online Giving, Mobile Donations, Social Media

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Section 1. Introduction

Artificial Intelligence is a relatively older concept in today's technologically advanced society. The term refers to a computer's ability to replicate human intelligence and activity (Favatas, 2018). From health care to the nonprofit sector, these systems are enabling organizations to be more efficient and effective by leveraging data first, algorithmic based practices (Favatas, 2018)." The terms Machine Learning (ML) and Artificial Intelligence (AI) are pretty much synonymous. The main difference as Marr argued is that Artificial Intelligence is the broader concept of machines being able to carry out tasks in a way that we would consider smart and Machine Learning is the a current application of AI based around the idea that we should really just be able to give machines access to data and let them learn for themselves (Marr, 2018)." For the purposes of this research report, however the terms are considered to be synonymous.

While the concept of AI is old, the applications of it in the nonprofit sector are rather new. For years, the nonprofit sector has been one not known for implementing new technological innovations. Barriers to entry like cost, and the fact that many are concerned about change and failure of these systems hamper innovation. However, more and more nonprofits are beginning to explore how these systems can impact their organization in a positive manner. The purpose of this study is to explain the possible capabilities of AI/Machine Learning and how they will further enhance nonprofit fundraising. In addition, research was conducted on how other emerging technologies such as social media, online giving, and mobile donations have or are helping

fundraisers be more effective and efficient. As the application of AI is relatively new in the nonprofit sector, there is little research available showcasing the different tasks it can perform. In addition, it is important to educate philanthropy professionals about how these technologies can increase the overall efficiency and effectiveness of their departments.

The report is organized into seven sections:

1. Introduction to the Subject
2. Literature Review
3. Methods and Approaches
4. Data Analysis
5. Implications and Recommendations
6. Conclusions
7. List of References

Section 2: Literature Review

According to the Nonprofit Technology and Staffing Report of 2016, "by a small margin, nonprofits felt they did not have a sufficient amount of skilled staff and staff training for effective technology use (NTEN, 2016)." Nonprofit fundraisers need to gain an understanding of how these systems can best be used to increase their departments' efficiency and effectiveness. The term "effectiveness" is defined according to the literature as "the amount of money available to spend on an organization's mission, as a result of its fundraising efforts (Wallestad, 2017)." The term, "efficiency" as used throughout this report is defined as "how effectively nonprofits use staff and financial resources for fundraising (Yi, 2010)." In this section, research was gathered from multiple sources to determine how emerging technologies have/ have not contributed to greater efficiency and effectiveness. An additional review of the literature was conducted to illustrate how machine learning and Artificial Intelligence (AI) is and will continue to impact the area of nonprofit fundraising.

Online Giving

The World Wide Web has existed for 27 years and in that time it has advanced our society in ways we could never have imagined. In the case of the nonprofit sector it has helped nonprofits with everything from fundraising to program delivery. According to Blackbaud's 2017 Charitable Giving Report, online fundraising has increased in nonprofit organizations over the past six years (Blackbaud, 2017). Faith Based organizations grew their donations by 18.1% from 2016 to 2017(Blackbaud, 2017).

Despite a shift in age and demographic of donors, online giving continues to grow. In fact overall online giving grew the most in the past year by 7.6% (Yandow, 2017). Unfortunately though as Yandow argued, "gifts made over the Internet are much smaller than average; donors only give ⅓ as much online as they do overall (Yandow, 2017)." Many nonprofits try to spend no more than 5% of their annual budget on fundraising. Thus Return on Investment (ROI) is of utmost importance. ROI is a major determinant of whether or not an organization's fundraising is efficient and effective via online efforts. Yandow argued, that while nonprofits are introducing new donors to the organization these donors may be ones who contribute less to the organization. However, at the end of the day, online giving saves nonprofits time and energy, which should be devoted to further increasing the efficiency and effectiveness of nonprofit fundraising departments.

Studies reveal that online giving is a trend here to stay. In her article Yandow states, " 1 in every 4 fundraising dollars from individuals is raised online (Yandow, 2017)." While online giving certainly has had a positive impact on organizations the question remains is online giving worth it for organizations. Many would say yes. However, as Yandow argued, "the push towards efficiency may cause organizations more harm in the long run (Yandow, 2017)." While it consumes time and energy, Yandow suggests, "going offline to pursue these relationships (Yandow, 2017)." In addition, Hart argued that the Internet "enhances the solicitation efforts of nonprofits by providing efficient and effective communications tools (Hart, 2002)." Hart and Yandow both argue that online giving is an effective fundraising tool. As long as donors and nonprofits seek an efficient and effective way to give, online giving will be a preferred method (Yandow, 2017). However in its current state as Yandow argued, online giving is efficient but not

as efficient as it can be. In the future, AI will be able to take online donor data entered into CRMs and create a list of individuals fundraisers should speak to and possibly move up the donor pipeline.

Social Media

Creating consistent communications between donors and nonprofits requires both time and talent. Thus, over time nonprofits have begun to adopt social media as a strategy to make the process more efficient. As Dixon and Keyes argue, "social media has yet to be proven as an effective, stand alone fundraising tool (Dixon & Keyes, 2013) As a Georgetown University survey on Digital Persuasion notes, this perception has changed over time. The 2016 study revealed that 82% of respondents agreed that social media is effective in getting people to talk about a cause or organization (Weathers, 2017)." Interestingly, the study revealed that only 55% of respondents recognized its role in driving donations (Weathers, 2017). "At the same time, the study found that 54% of respondents were more likely to support a cause online rather than offline due to the convenience factor (Weathers, 2017)." Despite these statistics, nonprofits find social media effective for raising money during campaigns. For example, "in the fall of 2013, employees at For Love of Children spent 24-hours on Facebook promoting their organization in a one day giving challenge (Dixon & Keyes, 2013)." By the end of the workday, the organization had raised $114,000 and brought in an influx of new donors to the organization (Dixon & Keyes, 2013). This is just one of many examples of the effectiveness of social media.

Crowdfunding, a subset of social media is the process of raising money for a program or product from a variety of donors online. The model was originally intended to

be used to fund entrepreneurial projects but has since been adopted successfully into the nonprofit sector. An example of a successful crowdfunding campaign is the 2016-2017 ALS Ice Bucket Challenge (Deighton, 2014). In a roughly one month period from July 29 to August 20, the organization raised nearly $30 million more than the previous year (Deighton, 2014). When social media is used to crowdfund as in the case of the ALS ice bucket challenge, organizations increase the effectiveness of their fundraising efforts (Deighton, 2014). It is important for fundraisers to note that social media has been proven to be more effective as a communications tool rather it is a means of raising large amounts of money.

Artificial Intelligence's Capabilities

Most of the current Customer Relationship Management systems on the market don't include AI/machine learning. The process of running reports, and determining which individuals a fundraiser should move up the donor pipeline or solicit a donation is both time and energy consuming. Artificial Intelligence or Machine Learning can help make the process more efficient helping fundraisers contact the right people at the right time. This technology has been available to nonprofits since 2012. In his article, Lenczner describes a system he built known as "AJAH" which collects information from Canada's version of the 990, the T3010 and analyzes these forms to withdraw information on foundations/funders and the types of organizations they support (Lenczner and Phillips, 2012). In addition, the system is able to collect information on corporation's donations (Lenczner and Phillips, 2012). As Lenczner and Phillips argued, "this information, if properly analyzed could give nonprofits the ability to identify new funders, better predict their behaviors, and make more robust revenue plans (Lenczner & Phillips, 2012)." The

system already has the capability to go through 22,000 social media accounts of Canadian nonprofits (Lenczner &Phillips, 2012). What previously took months, these systems can do in a matter of hours. Think of the potential impact these systems would have on a large nonprofit fundraising portfolio with many thousands of records. As Lenczner argued, "systematic use of funding data can provide the necessary information to illuminate the objectives and patterns of funders, thereby allowing charities to reduce the energy and guesswork of fundraising (Lenczner & Phillips, 2012)." Technologies such as online giving and social media have revolutionized the field. The capability to mine data has existed over the past six years. With a limited amount of resources to fight for, nonprofits need the most talented staff, and systems to keep ahead of the game. In some of the larger organizations, donor records can reach 20,000. For these types of organizations, AI's data mining capability would help them spend more time speaking to donors as opposed to combing through data.

When asked the question what is Artificial Intelligence most people conjure up the idea of a robot performing what were once human tasks. In our digital world, this is starting to become more of a reality. As Gilmore argued, one area AI can assist nonprofits is by using "bots" to "address online cart abandonment (Gilmore, 2017)." These bots would establish two-way communication between website visitors and the organization. As Waters suggests, "to maximize the internet's ability to cultivate relationship with donors, nonprofits need to incorporate more two-way communication strategies into their websites (Waters, 2007) For nonprofits, websites are often the first time they have the opportunity to interact with prospective donors or volunteers. The two-way communication capability AI systems can create would help nonprofits answer any

question a donor might have at any time of day. Wallace quotes the chief data scientist at Crisis Text Line in her article, "the true end game of Artificial Intelligence is thinking like a human would think at the speed or better than a human would think (Wallace, 2018)." For two-way communication this means that AI-enabled bots would already have thought of the potential questions a donor might ask and have pre-written answers to them. Currently, a human being sits on the other end of these two-way communication systems. AI-enabled two-way communication systems would free up time for nonprofit employees allowing them to work on more pressing matters.

Bots' capabilities extend past two-way communication. As Kanter and Fine argue, " Bots can help raise awareness and increase engagement, identify potential donors, and respond to inquiries and questions (Kanter and Fine, 2018). In terms of raising awareness and increasing donor engagement, the article cites examples like "Yeshi"- a virtual reality image of a girl in Ethiopia created by "Charity: Water" to educate potential donors (Kanter and Fine, 2018). She gives donor prospects an explanation of her daily routine and provides a "smart" conversation by asking and answering questions with a variety of images, maps, text, and videos (Kanter and Fine, 2018). As Kanter and Fine argue:

" Bots used in these ways are really just a more advanced set of tools for doing what nonprofit workers do today. What would be truly transformative would be to use technology to change how we raise money (Kanter and Fine, 2018)."

In addition to its data mining capability, AI-enabled CRM's of the future will be able to connect a nonprofit's donor/member records to that individual when they visit a website and chat with a bot. As Gilmore argued, "Artificial Intelligence and machine learning

will ensure that customer chat bots know context regarding each individual situation so the conversation is more useful for the buyer (Gilmore, 2017)." This is just one way AI-enabled CRM's will be useful to organizations. As Gilmore argued, "For these new technologies to become within reach for the average nonprofit arts organization, much development is needed (Gilmore, 2017)." Technologies such as social media, CRMs and Artificial Intelligence can be considered emerging technologies. As demonstrated throughout this literature review they have been helpful to nonprofits in achieving their fundraising goals but are still very much so in the development phase. In addition, Gilmore argued that, "Users must know why they are using their system and define a clear strategy within it to derive the most value from it and reach defined organizational goals (Gilmore, 2017)." Artificial Intelligence/machine learning is a technology that will be very useful when connected to a nonprofit's CRM system. While this technology will certainly help fundraisers be more efficient and effective, they should learn about all the potential applications of AI and machine learning. This knowledge will help them understand how the system can help them reach their philanthropic goals.

Critiques of Artificial Intelligence/Machine Learning

Much of the literature on the subject of Artificial Intelligence's use in the nonprofit fundraising area is positive. However, Andrew Means the director of Uptake.org argued, "like any tool, if it's misused, it's going to cause harm (Wallace, 2018). Means argued that "the scale of harm can be quite large it goes unchecked. But that also means that the scale of benefit can be larger than ever before as well (Wallace, 2018)." Artificial Intelligence/ machine learning is already beginning to have a large impact on philanthropy. Therefore, it is essential that fundraisers understand the

capabilities of these systems in order to build an implementation plan for their organizations.

According to Kanter and Fine, "Today's fundraising is nearly always transactional, and except at the top-donor level, rarely about building lasting relationships (Kanter and Fine, 2018)." Some fundraisers say they work in this manner, because it "works"(Kanter and Fine, 2018). In their article, Kanter and Fine reference the *M+R 2016, Benchmarks' Survey* of online fundraising which reports that " With open rates, click-through rates, and response rates all declining, this increase in email revenue, comes down to volume (more people, and more messages) (Kanter and Fine, 2018)." Thus, the reason why only 40% of donors give to a cause more than once, and why only 10 % of donors are still giving to a particular cause after 5 years (Kanter and Fine, 2018)." According to Kanter and Fine:

" This is a titanic failure. And if we're not careful, automation could put fundraising transactionalism on steroids, when it should make it easier for us to spend more time building lasting relationships with supporters (Kanter and Fine, 2018)."

It is important for fundraisers to focus primarily on either cultivation or transactionalism, in order for nonprofits to be self-sustainable. However, even if transactionalism is dominant, it is still important to continue stewarding their existing donors. As Kanter and Fine argued:

" Automation, if misused, could turn donor cultivation into donor manipulation. It cracks open the door for fundraisers to use the information they gather through

Chatbots and other conversational technology to manipulate people into giving more than they would have otherwise (Kanter and Fine, 2018)."

Chatbots of the future could potentially manipulate these individuals into giving more than they can afford. However, as Kanter and Fine argue, "These concerns are legitimate, however they should not prevent us from seizing this moment to reimagine a brand-new field of fundraising (Kanter and Fine, 2018)." As Kanter and Fine and others note, "Artificial Intelligence can tailor communications to the particular interests of donors in a more efficient way, because the algorithm is faster, and better, than the human brain at analyzing past conversations or gathering publicly available information.

Artificial Intelligence/Machine learning starts and ends with data. As Computer scientist Ali Farhidi argued:

"AIs are only as effective as the data they are fed. Data is the golden key. The minute the data are lacking, it's going to cause trouble. We know a butterfly is smaller than an elephant but if no one took the time to write that, it's tough for a machine to learn it (Engelking, 2017)

Artificial Intelligence is not a solution for any nonprofit trying to raise more donations quickly. In order for nonprofits to get the most out of it, they need to supply it with good data. Without good data as Farhidi states, AI is less effective (Engelking, 2017).

Critics also note that "the applications of AI methods can lead to devices and systems that are untrustworthy and sometimes dangerous (Parnas, 2017)." Parnas argued that "imitating humans is rarely the best way for a computer to perform a task (Parnas, 2017). In fact, imitating humans may result in programs that are untrustworthy and

dangerous (Parnas, 2017)." These types of programs are likely to cause problems for nonprofits and for-profit companies that adopt AI-enabled technologies or software. Parnas also argued that "these systems may err because of incomplete or biased experience (Parnas, 2017)." This reflects back to Farhidi's argument in Engelhart that if AI systems don't have good data they will be less effective and may causes errors because of incomplete experience. Steven Russell, a computer scientist at the University of California, Berkeley argued:

" Machines and robots that outperform humans across the board could self-improve beyond our control (Parnas, 2017)."

This argument is somewhat extreme but it is a common argument of AI experts. As these systems grow stronger in the next few years they could potentially begin operating beyond our control. The more immediate risks associated with AI include:

" The potential of cybersecurity threats to smart cities, infrastructure and industries that become overdependent on AI, and the threat of new technologies like drones and other autonomous weapons systems that will allow lethal machines to make decisions alone (Anticipating Artificial Intelligence : 2016)**."**

The benefits of Artificial Intelligence certainly outweigh the drawbacks. Guihot, Matthew, and Zuihor argue that there is a "pressing need for government to not only play a guiding part in the development of Artificial Intelligence for the broader benefit of humankind, but it must also regulate and address the very real and present problems associated with current AI technology(Guihot, Matthew and Zuihor, 2017)."

Section 3: Methods and Approaches

This project included three different methods of data collection to obtain both quantitative and qualitative data. Research for this project consisted of an academic literature review, expert interviews, and a survey of how technology has enhanced efficiency and effectiveness in nonprofit fundraising departments. This project focused its work on two main research questions: How have emerging technologies like social media increased efficiency and effectiveness in nonprofit fundraising and how can Artificial Intelligence's capabilities be applied to the area of philanthropy. The following questions were addressed during research:

1. How has technology in general helped your organization increase the effectiveness and efficiency of its fundraising efforts?

2. How have you seen social media impact the field of fundraising?

3. How do you define the term Artificial Intelligence?

4. Based on AI's capabilities discussed, how do you see it being beneficial to your organization?

Primary Data

Expert Interviews: For this report the primary data research consisted of expert interviews with four nonprofit fundraising professionals serving organizations located in the Bay Area, Midwest, and East coast, one Venture Capitalist who has made a significant investment in an Artificial Intelligence startup, and one Salesforce

implementation expert whose target market is the nonprofit sector. Five out of the six

interviewees were personal contacts that I spoke to via Zoom. The interviews follow the

guidelines of Participatory Action Research. One interviewee was initially contacted via

email and LinkedIn and spoken to via Zoom. Each interview followed a semi-structured

interview format and most interviewees were asked similar questions that are noted in

Appendix A. During the interviews with the Venture capitalist and Salesforce

implementation expert, a different set of questions were asked. Their comments and

answers are included in the data analysis section. These questions are noted in Appendix

A. The list of expert interviewees may be found in Appendix B. In consideration of one

of my interviewee's request to remain anonymous, her name, private information and

nonprofit organization will remain confidential. The name "Jane Smith" is a pseudonym

for this individual.

Survey

 For this report, a survey was conducted of nonprofit fundraising professionals across the

country. The survey covered topics such as the average age of donors, most prevalent

utility of social media, and average contribution amount. Respondents were contacted via

email and LinkedIn. Many were personal contacts as well as MNA alumni, current part-

time MNA students, and personal connections of my contacts in the area of philanthropy.

The organizations range from small, mid-sized and large organizations to higher

education institutions located in the Midwest, East coast and Bay Area. The survey was

sent out via anonymous link on LinkedIn to both my personal contacts and the MNA

Alumni community. Qualtrics was used to design and distribute the survey. The

questions in the survey were designed to assess the impact of emerging technologies such

as social media, online giving and mobile donations as well as the best use for social media (cultivation, solicitation, or stewardship). The questions were a combination of multiple choice and fill-in the blank. For certain questions such as the average age of a donor via social media, respondents were asked to estimate. In addition, respondents were also asked to estimate the average amount of dollars they felt these technologies would raise in the near future. On other questions such as "How much did donors contribute to your last crowdfunding campaign?" respondents were asked to give exact figures. There were two objectives for this survey. The first was to use the data to build a chart to show the average donation range nonprofit fundraisers should expect when using one of the three main platforms (social media, online giving, or mobile donations). These three platforms were chosen based on the literature, which explained them as typical technologies used by nonprofit fundraisers. The second objective was to understand whether fundraisers found social media to be more effective as a Solicitation, Cultivation, Stewardship or Communications tool.

Secondary Data

Literature Review: The secondary data for this report includes a comprehensive review of the literature, which proved that emerging technologies are increasing efficiency and effectiveness in nonprofit fundraising, and outlined the benefits, drawbacks, and capabilities of Artificial Intelligence. The Primary literature included research from various peer-reviewed sources as well as articles from journals such as the Chronicle of Philanthropy and Stanford Social Innovation Review (SSRI) and studies such as the Nonprofit Technology and Staffing Report of 2017 as well as Blackbaud's 2017 Charitable Giving Report. The literature review covers topics such as the increase in

online donations, nonprofits' use of social media, Artificial Intelligence's capabilities and critiques of Artificial Intelligence. The survey questions and design may be found below.

Figure 1: Survey Questions

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Understanding How Emerging Technologies Build Efficiency and Effectiveness in Nonprofit Fundraising-Survey

1. What do you estimate is the average age of donors who give to your organization via Social Media?

2. What is the average donation your organization has raised per donor through Social Media in the last year? (Please use your most successful campaign for your response)

3. What is the average donation new technologies, such as Venmo or PayPal, have brought to your organization?

4. Has your organization implemented mobile donations into its fundraising efforts?

5. If your donors have the ability to text to donate, what is the contribution amount you typically receive?

6. Thinking back on your last crowd-funding campaign, how much did your organization raise?

7. Have new social media websites such as Instagram or Snapchat impacted your organization's fundraising efforts?

8. If you answered yes to question 7, do these new applications work better as a cultivation, stewardship, or solicitation tool? Please elaborate if you can.

9. How much do you see these applications being able to help you raise in the next 12 months?

Section 4. Data Analysis

This section discusses a primary analysis that synthesizes the results from expert interviews. The interview questions for each expert interview can be found Appendix A.

Expert Interviews: Summary

Rod Linhares, Director of Development, Archdiocese of San Francisco, Interview: June 8, 2018

Rod Linhares currently serves as the Director of Development at the Archdiocese of San Francisco. Rod has had a successful 28-year career in fundraising working extensively within the greater church and several parishes in the Archdiocese. He believes that collaboration and a mission driven focus are integral to an organization's ability to support and assist those it serves.

1. How has technology in general helped your organization increase the effectiveness and efficiency of its fundraising efforts?

Mr. Linhares stated the Archdiocese is not necessarily an organization up with the times. He feels that many organizations are stuck in the past in terms of using technology to increase the efficiency and effectiveness of their fundraising efforts. However, Mr. Linhares is helping the Archdiocese make changes. Implementing social media into the organization's fundraising efforts has had a significant positive impact. Newer technologies such as Facebook Live have helped the organization show its donor community the impact their dollars have had. In addition, Mr. Linhares also discussed that technology has helped the organization with everything from communication with donors to strengthening relationships. In addition, online fundraising, the ability to log into to Customer Relationship Management (CRM) systems from anywhere, to gather

background information on donors at any time, and video have proven to increase the efficiency and effectiveness of the Archdioceses' fundraising efforts. Video has also helped the organization with storytelling and messaging. Mr. Linhares is a big believer in the power of video and is amazed that more organizations don't utilize as much as they should.

2. Has Social Media had a positive or negative Impact on your fundraising efforts?

During the interview, Mr. Linhares stated social media has had a very positive impact in many ways primarily through the dissemination of information. In the past week, Mr. Linhares conducted a Facebook Live segment for one particular fundraising campaign and received excellent feedback on it. During the interview, he stated, "Social Media has allowed us to *humanize* a couple of individuals through very basic storytelling via video (Rod Linhares, personal communication, June 8, 2018)." Mr. Linhares also spoke to its "ability to segment marketing and communications to audiences based on their age demographic" and how it has helped the Archdiocese target the right audience for different fundraising campaigns. He also discussed the fact that the younger generation of donors is moving away from using Facebook. Thus he and the Archdiocese have begun to use applications like Twitter and Instagram to provide unfiltered messages to their followers. Mr. Linhares, concluded by stating that "social media has had a great impact on his organization's marketing and communications and really telling the message, the way the organization would like to have the message told."

3. In which donor segment do you see AI technology being most useful? The annual fund, major gifts, or corporate giving?

Mr. Linhares sees AI technology being most useful in the organization's major gifts and annual fund programs. He stated that "this is where AI and machine learning comes into play. These systems will likely have a significant impact on the major gifts area of

fundraising. An addition of information on a major gift prospect can have a much larger delta in terms of the amount one can ask for and receive (Rod Linhares, Archdiocese of SF, June 08, 2018)."

4. How is your CRM Data currently organized (donor segmentation)?

Mr. Linhares discussed the fact that his organization's CRM data is segmented/organized differently than most organizations. In his past development positions, he has seen this data organized by area of interest, level of support, amount of time they've supported the organization, etc. The Archdiocese segments donor data based on the parish they belong to. Mr. Linhares remarked that this is likely due to the fact that the organization is slightly behind the times.

5. Has your organization changed fundraising Systems recently? What current CRM System do you use? And how does your organization collect donor capacity data?

Yes. The Archdiocese of San Francisco is currently transitioning between CRM systems. Their previous system, Razor's Edge a platform widely used by a number of nonprofits was negatively impacting the organization. Mr. Linhares stated that because the system wasn't interconnected to different departments such as finance and accounting often times important/useful information about was not relayed to the development team. Thus the strategic decision to slowly transition from Razor's Edge to Salesforce' s system was made. As Mr. Linhares discussed during his interview, he feels this transition will help the organization increase its efficiency and effectiveness. Mr. Linhares stated, "interconnectedness is important for the Archdiocese. Our current CRM system doesn't have the ability to connect our parishes with the Archdiocese' system. Thus we don't

always know if the parish has asked a particular donor for a major gift. The transition from Razor's Edge to Salesforce will increase that interconnectedness and help us be more effective in our fundraising efforts (Rod Linhares, Archdiocese of San Francisco, June 08, 2018)." In his discussion, Mr. Linhares touched briefly upon the fact that his organization does not currently collect donor capacity data.

6. How do you define the term Artificial Intelligence?

Mr. Linhares defined the term as "simulating human processes via computer systems (Rod Linhares, Archdiocese of San Francisco, June 08, 2018)."

Gregory Naleski, Associate Vice President For University Advancement, The Catholic University of America, Interview date: June 18, 2018

Greg Naleski has 18 years of experience in the fundraising/philanthropy area. He has worked for a variety of nonprofits/institutions of varying sizes and held roles such as Chief Development Officer at Washington Jesuit Academy and Senior Director of Strategic Initiatives at the Catholic University of America (CUA). In his current role as Associate Vice President For University Advancement at CUA, he has had the experience of working with a variety of different types of emerging fundraising software and tools such as social media, online giving, mobile donation systems, etc. The main objective of this interview was to see how these tools have helped nonprofits be more efficient and effective over time and the potential applications of AI and Machine Learning in nonprofit fundraising departments.

1. How have you seen social media impact the field of fundraising?

Mr. Naleski stated that social media has impacted the field as both a communications and crowdfunding tool. He discussed that "when nonprofits first began to explore the possible

applications of social media as a solicitation tool they found it most useful for

crowdfunding. Mr. Naleski further explained that:

" In the beginning fundraisers thought social media would help them raise more funds
and connect with more people online. However, Facebook and Twitter don't really "push
the needle" in terms of bringing in a significant amount of donations (Greg Naleski,
personal communication, June 18, 2018)."

Instead, Mr. Naleski suggests that social media should be used as it was intended for: to

get information to donors that drive them back to organizations. Mr. Naleski stated, "

Social Media is a great communications tool but it will never replace face to face visits

which is how fundraising professionals have for the longest time and will continue to

receive major gifts (Greg Naleski, personal communication, June 18, 2018)." Another

topic of discussion was the fact that, social media helps have a broader impact on donors

and prospects. Mr. Naleski mentioned that in some cases, Crowdsourcing has been

known to both increase participation and dollars raised. However, for the most part he

believes the impact is truly the amount of people that participate.

2. How have current CRM technologies impacted CUA's fundraising efforts?

Mr. Naleski stated that their current CRM system has actually hindered the efficiency of

his department. Fundraisers are required to input the notes they have from a meeting with

donor prospects and log this data into their CRM system. Mr. Naleski stated that this

process is remarkably inefficient and time consuming. He believed this is an area, AI

could provide support in the future.

3. **Do you have any thoughts on the potential of AI and machine learning being a
part of CRM systems in the future?**

 He believed these systems might have the capability in the future to search through

online social media postings to find individuals sharing information about special

projects. AI-enabled CRMs of the future should be able to mine this data to determine if

those individuals had the affluence, access and affinity to contribute major gifts to the organization. Another area Mr. Naleski felt AI could have a significant impact on is text to donate systems. As this technology becomes a more popular solicitation tool for nonprofits, Mr. Naleski stated, "AI-enabled CRMs could record information from individuals texting and notify fundraisers of those who have the potential to make major contributions in the future. "In the future, AI and Machine Learning enabled CRMs should be able to pull key words/phrases from call reports and send those reports to specific gift officers based on their job description or who they work with (Greg Naleski, CUA, June 18, 2018)." Mr. Naleski also discussed the importance of connecting gift officers with donor prospects based on their areas of interest. In his opinion this is definitely an area, AI/Machine Learning will have a significant impact. For example, if a donor gave a large gift to a particular school at a university, AI could notify one of the school's gift officers. In addition, AI/Machine Learning enabled CRMs of the future should have the ability to look at the key points of a donor and connect the right gift officer with the donor. For instance, if the donor's giving pattern shows they support Jesuit institutions, Businesses schools at these institutions, and social entrepreneurship, AI could relate this information to development professionals that meet these criteria. In addition, Mr. Naleski noted: " Because frontline fundraisers spend more time trying to get out in front of people and less time looking at data, there are prospects they don't uncover."

Annie Place-Winkler, Major Gifts Officer, Living Goods, SF, Interview Date: June 20, 2018

Annie Winkler, is a Major Gifts Officer at Living Goods. She has been in the philanthropy area for the past 7 years.

1. How has technology in general helped your organization increase the effectiveness and efficiency of its fundraising efforts?

Mrs. Winkler discussed the fact that tools like Wealth engine are "good not great. At the end of the day they help to paint a picture of any given prospect which can help us more quickly assess if we should continue to move them down the pipeline." Mrs. Winkler states that efficiency is the biggest takeaway for her from using the system. It saves her time and it gives her a quick snapshot, largely from a financial net worth standpoint of a donor's capacity. AI/Machine learning enabled technologies help nonprofits get the picture. Mrs. Winkler argued, "Since these types of systems pull from a variety of different sources, the exact accuracy is questionable." Because Mrs. Winkler is pulling from a smaller pool of prospects she finds the technology to be very useful.

As Mrs. Winkler, noted however, the bigger issue with the variety of technology/software available for nonprofits is that they are **"**Siloed. The software/services that exist are separate from each other. For smaller nonprofits it is hard to determine which software they can do without (Annie Winkler, personal communication, June 20, 2018)." In her opinion these systems should be integrated into one system.

2. How do you think CRMs of the future can be improved?

Mrs. Winkler discussed the importance of CRMs that are easy to access, and that have the tools that are now available but are siloed. She cited the main issue with the fact that these systems are siloed is that nonprofits of any size can't afford to purchase every

available software out there. In her opinion, a system that can analyze and track open rates of emails as well perform other donor management tasks would be helpful. Nonprofits with limited development support staff need CRM systems that can perform administrative and human processes.

3. How does your organization use social media?

Mrs. Winkler believes her organization doesn't use social media as effectively as it should. She cited her previous work experience at the nonprofit Room to Read, as an organization that uses social media efficiently and effectively. Mrs. Winkler stated they use it to target prospective donors for their annual fund, to endorse celebrity ambassadors as well as to promote different support campaigns such as International Day Of The Woman. Mrs. Winkler also reported that social media is most useful for communicating with her donors online. She stated that in the major gifts area, she personally connects with donors via handwritten notes or phone calls.

Jane Smith, VP Development & Alumni Engagement, Small Liberal arts college, Interview: June 21, 2018 - A Pseudonym

Jane Smith is philanthropy professional at a small liberal arts college in the Midwest. She recently stepped into the role 6 months ago. Her organization is one of a select number of nonprofits that has had the opportunity to implement AI/ Machine Learning into its fundraising efforts.

1. Has your organization had the chance to implement the AI-enabled fundraising software into your fundraising practices? How has it helped your efficiency/productivity?

Ms. Smith discussed in detail how the AI-enabled fundraising software, her college had implemented was not as efficient or effective as hypothesized. Ms. Smith stated that in her previous position at a large public Midwestern research university with 40,000+ students these systems would have helped significantly increase the efficiency and effectiveness of the organization's fundraising department. However, she stated that because many of her colleagues had been at the institution for a long time they had formed deep personal connections with their alumni. One of the unique aspects of the AI-enabled fundraising software, Ms. Smith's organization has implemented is that it has the ability to automatically draft emails to prospective donors. Ms. Smith has found this to not be useful for two reasons:

1) She finds it important to personalize emails to alumni donors.

2) She feels that for the price of the system, it should have more capabilities than just drafting emails. (Jane Smith, personal communication, June 21, 2018.)"

Ms. Smith also mentioned during her interview, "AI-enabled fundraising software should be implemented by organizations that have 10,000+ donors in their CRM system. With smaller organizations like hers who know their active alumni/donors on a personal level, these systems are relaying information to them they already know (Jane Smith, personal communication, June 21, 2018)."

2. Do you think Artificial Intelligence and Machine Learning could be helpful to additional facets of your organization's fundraising efforts?

Ms. Smith stated that because her institution has such a small donor pool and group of prospects, she doesn't feel AI technology could be helpful to additional facets of the organization. She pointed out the fact that the fundraising department up until a few years

ago was running on a system that is 30-40 years old designed to track where students lived on campus. Ms. Smith stated that because she isn't seeing results from the current AI-enabled fundraising software they have implemented they likely would not be implementing it in the future. Especially, if there is a cost to the system. The size of her fundraising department and small budget are also factors that support this decision.

Tim Connors, Founder, Pivot North Capitol, Interview: June 28,2018

Tim Connors is the Founder of Pivot North Capitol, a venture capital firm in the San Francisco Bay Area. Beyond Mr. Connors' venture capitalist experience he also interacts with a variety of Bay Area nonprofit organizations. The topics I discussed with Mr. Connors include, the impact of new technologies on fundraising efficiency at two catholic nonprofits, the evolvement of CRM fundraising systems in the future, and the potential impact of AI-enabled CRM systems in the future. Mr. Connors spoke mainly about software implementation, leveraging a team of donors, and how AI can be used as a tool to measure the likelihood of a donor making a large contribution to an organization.

1. How do you think nonprofit fundraising will be impacted by CRM systems of the future that may include Artificial Intelligence and/or Machine Learning?

Mr. Connors discussed the fact that AI-enabled fundraising software should be able to connect with volunteer management systems. Mr. Connors' argued that in their current state: " these systems aren't interconnected as they are set up now. In addition, most fundraisers specifically look at volunteer lists to determine if they can move these individuals up the donor pipeline. Many don't realize the opportunity to get these

individuals more involved by creating an experience like a volunteer advisory board (Tim Connors, Personal Communication, June, 28, 2018)."

As Mr. Connors argued, volunteer management is an area suitable for AI's ability to mine large datasets in a rather short amount of time. Data mining in this sense would allow fundraisers to gather more information about volunteers. Mr. Connors provided an example of using AI's data mining capability to:

"Gather information about teens volunteering at a nonprofit. Specifically he used an example of teens volunteering at a nonprofit of their choice that attended a prestigious private school in the Bay Area. These students chose a particular catholic nonprofit to volunteer at for their required community service hours. In some cases, these teens' parents were High Net Worth Individuals (HNWIs) who had the capacity to make large major gifts to the nonprofit (Tim Connors, personal communication, June 28, 2018)."

AI's data mining capability could help this nonprofit find those volunteers whose parents are HNWIs and invite them to become more engaged with the organization. As they became more involved they would likely speak to their parents who may contribute their time and treasure in the future. Mr. Connors believes this should be a future practice of nonprofit fundraisers. With the power of Artificial Intelligence, this is certainly possible.

2. Do Nonprofits use technology/software as effectively as you think they can?

Mr. Connors discussed that he thought nonprofits could use technology more effectively. He argued in his interview that technology has increased the effectiveness of some nonprofits but impacted others in a negative manner. Mr. Connors argued that:

"Nonprofits tend to underspend on fundraising and overspend on programs. This makes nonprofits terrible buyers of technology as they have little capital to invest. Even the large organizations that have budgets of $40 million don't have state of the art fundraising software (Tim Connors, Personal Communication, June 28, 2018). "

This is why the nonprofit sector is less innovative than the for-profit sector. Mr. Connors spoke to the need of educating the social sector about the importance of investing in software and technology. He agreed that organizations tend to look for a "magic system" that will return the highest amount of ROI in the shortest amount of time.

The University of Notre Dame utilizes a CRM system, which can track where alumni live and work. It helps Development staff determine which donors they should contact at what time. The benefits of utilizing AI-enabled technology are extensive. As these systems grow more powerful, the capabilities will extend further.

3. How rapidly do you see CRM systems evolving to the level discussed in the previous question?

Mr. Connors believes CRM systems will evolve "painfully slow." Mr. Connors argued that the nonprofit sector is notoriously horrible at purchasing software. He stated this is the case because they have very limited budgets and they don't understand how important it is to consistently invest money in new technology. Thus, it will take awhile for the CRM systems to evolve.

Elisa Kutza, Salesforce Administrator, Interview Date: July 9, 2018

The main topics discussed with Mrs. Kutza, included general software available for nonprofit fundraisers, her opinion about nonprofit efficiency in the context of technology, and Customer Relationship Management systems.

1. What are the typical third party types of software you see nonprofits working with? (Ex: wealth screening, constant contact)

Mrs. Kutza discussed working with wealth screening tools like Wealth Engine, email systems such as Constant Contact, Donor Perfect, and other fundraising software CRM systems.

2. With the vast amount of software available to nonprofits, which do you find have strong ROI for Nonprofits?

As an expert in the implementation of emerging technologies into nonprofit fundraising departments I wanted to get her view on systems she has seen that have produced a strong ROI. Interestingly, Mrs. Kutza couldn't give an example of any particular system she had worked with. However, she cited wealth-screening tools, like Wealth Engine, which harnesses the power of Artificial Intelligence/machine learning as having a significant positive impact in the philanthropy area. To many in the sector, Artificial Intelligence may seem like a futuristic concept however the technology is here and has already been developed.

3. In your opinion what aspect of technology keeps nonprofit fundraisers from being more efficient? (Ex: outdated technology, improper training)

Mrs. Kutza agreed that it is important to keep up with the times. Outdated technology can actually do more harm to an organization than budgeting for the implementation of new technologies. Mrs. Kutza argued that," The two reasons why nonprofits aren't more

efficient is because they possess outdated technology and improper training (Elisa Kutza, personal contact, July 9, 2018)."

4. Assuming you see Artificial Intelligence as being an asset to intelligent data mining, what additional benefits do you think AI can bring to fundraising?

As Mrs. Kutza noted in her interview, one future capability of AI is that it should be able to connect with CRM systems of the future to draw data from online giving, social media, and mobile donations. In addition, Mrs. Kutza believes future CRM systems should be connected to nonprofits' Google analytics systems so that they may spot trends fundraisers haven't picked up on before.

Expert Interviews: Results

The following table organizes the main subjects revealed through the expert interviews.

The four areas most commented on by the expert interviews were: Capabilities of AI,

interconnectedness, social media's impact, and capacity. Questions were asked

surrounding these topics because they were considered relevant areas of discussion based

on a review of the literature. Five out of the six interviewees discussed the potential for

AI's data mining capability. However, none reported their use of AI-enabled software

such as Wealth search engine tools when discussing their use of emerging technologies.

Table 1: Overview Of Common Interview Topics

In the area of	Discussion areas
Capabilities of Artificial Intelligence	- Data mining-Volunteer and donor - Proactive vs. Reactive - Keeping up with donor prospects
Interconnectedness	-Interconnectedness throughout org. - Software interconnectedness with CRMS
Social Media's Impact	- Best used as a communications tool -Helps with storytelling and connecting more donors to an org. -Great for 24-hr crowdfunding campaigns
Capacity	-Staff w/tech background -Staff in general -Financial capacity/budgets

Source: Author's creation. Elaborated from Interviews, 2018.

In addition, a SWOT analysis was conducted as a way to convey information about existing technologies such as social media, online giving, and mobile donations. Artificial Intelligence was also included in this analysis. The SWOT also outlines the possible threats of AI as well as the benefits.

Figure 2: SWOT Analysis of Existing Emerging Technologies

Strengths:	Weaknesses:
• Social media, Text to Donate, and Crowdfunding are all inexpensive to use. • And can be quickly deployed • Today's tools can be mapped to different target groups • ·And can be linked with each other	• Most fundraising software/tech is non intuitive • User training may be problematic • Cost can be prohibitive for many orgs. • Data entry can be burdensome • Many orgs. Lack necessary internal tech support
Opportunities:	Threats:
• Potential for AI to search social media postings and connect fundraisers with those posting • CRM's of the future will be more interconnected with social media • Data mining of 990s and other public records	• AI & Machine Learning could drive data privacy & financial confidentiality issues • Poorly designed AI products could fall prey to mistaken identity scenarios • Possible Gov't Regulation could be burdensome for user orgs.

Source: Author's creation. Elaborated from Literature Review, 2018.

Survey Results:

The survey suggested that fundraisers should expect that social media campaigns generate more in revenue than online giving or mobile donations. As noted in Table 1: the average age of donors on social media is between 25-45.

Table 2: General Survey Results:

Question	Answer	Percentage
Average age of donors giving to org. on Social Media?	24	7%
	25-30	21%
	35-40	29%
	40-45	36%
	50+	7%

Average Donation Raised Per Donor Through Social Media?	$5-$10	14.3%
	$11-$20	7%
	$25-$50	36%
	$51-$100	7%
	$100+	29%
Average Donation New Technologies like Venmo or PayPal have brought?	$5-$15	29%
	$10-$20	14.3%
	$25-$50	7%
	$51-$100	0%
	$100+	14.3%
	Don't Use	36%
Has org. implemented mobile donations?	Yes	53%
	No	47%
Avg. contribution amount of Text to Donate donors?	$5-$10	21%
	$15-$20	7%
	$25-$50	7%
	$51-$100	7%
	N/A	58%

Based on last crowd-funding campaign how much did your organization raise?	$2k-$15k	13%
	$90k-$135k	20%
	$309k	7%
	$600k-$900k	13%
	N/A	47%
Impact of Instagram and Snapchat	Yes	50%
	No	50%
Do these work best for Cultivation, Solicitation, or Stewardship?	Cultivation	43%
	Solicitation	29%
	Stewardship	21%
	N/A	7%
How much do you see these tools helping you raise in the next 12 months?	$5K-$10K	27%
	$15K-$20K	6%
	$25K-$50K	6%
	$50K+	13%
	None At All	47%

Among those responding, 86% of respondents reported they estimated the average age of a donor on social media to be between 25-45. Followed by 36% of respondents stated the average donation received via social media was between $25-$50. Followed by 29% of respondents who found the average donation to be between $100 or more and 14.3%

reporting donations in the $5-$10 range. 29% of respondents reported the average donation via new technologies such as VenMo or PayPal to be in the $5-$15 range. It is important to note that 36% of respondents stated they have not implemented these technologies into their fundraising plans. Figure 2: Average donation by platform depicts the donation amount range fundraisers should expect to raise across three platforms (social media, online giving, and mobile donations). The table was included in addition to the chart to clarify what the average donation nonprofit fundraising professionals saw being raised across these platforms.

Figure 3: Average Donation By Platform Graph
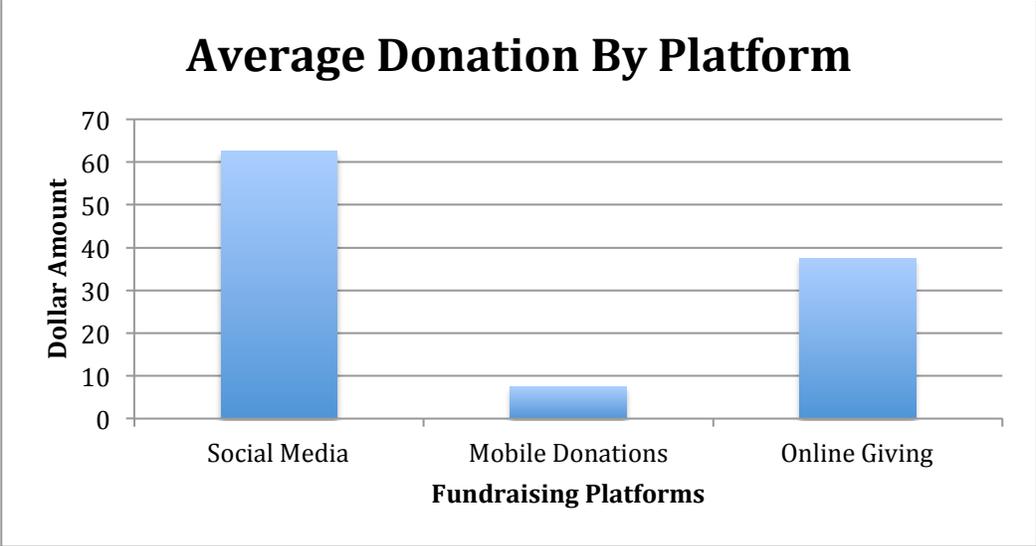
Source: Author's creation. Elaborated from Survey, 2018.

As depicted in Figure 3: Average Donation By Platform, the average amount raised by social media was slightly higher than $60. Followed by Online giving which raised an average of $35 and Mobile donations which raised an average between $5-$10. The bar graph helps fundraisers understand the range of donations they should expect to receive. It is important for professionals in the philanthropy area to understand how effective the three

most common technology platforms are. This information is extremely important for fundraisers who are trying to evaluate the effectiveness of a certain platform to determine if it is worth the investment of time and energy to continue using it.

The average amount raised via crowdfunding campaigns on social media was $147,500. Many of the respondents to this survey work for large higher education institutions with large budgets. Thus, why the average amount raised via crowdfunding was relatively large. 20% of respondents reported receiving donations between $90k-$135k. Followed by 13% who received between $600k-$900k. In addition, 13% of respondents reported receiving between $2K-$15K. Followed by 47% of respondents that reported "N/A" and did not answer the question. It was divided evenly 50/50- between fundraisers who had and had not implemented Instagram or Snapchat into their fundraising plans. Most fundraisers report social media being most useful as a Cultivation tool at 43%. Followed by 29% of individuals who found it more useful as a solicitation tool and 21% who used it as a stewardship tool. 7% of respondents reported not using social media as a fundraising tool.

The relationships between AI capabilities and their applications are shown above in Figure 1. The figure shows three capabilities of Artificial Intelligence (Bots, Machine learning and data mining) and how they can be applied to various emerging technologies. As depicted in the figure, AI's Data Mining capability can be used to identify prospective donors who give via social media. AI/Machine Learning can also be used to record donor information from online gifts and Bots can be used to speak with donors or visitors to a nonprofits' crowdfunding campaign. The recording information capability of AI will help

fundraisers gather contact information from donors who give online. This information can be used not only to solicit future donations but also to thank those donors. The first and Second levels of the diagram, depict "Artificial Intelligence" and its capabilities (Data Mining, Machine Learning, and Bots). The third row, shows that fundraisers can use AI's Data Mining capability to identify prospective donors, Machine Learning can be used to record donor contact information, and that Bots can be used to engage in Two-way communication with donors during crowdfunding campaigns. The fourth row shows the different technologies Artificial Intelligence can be used to engage with donors, record donor contact information etc. These areas include social media, online giving and crowdfunding.

Figure 4: How AI Can Increase Efficiency and Effectiveness
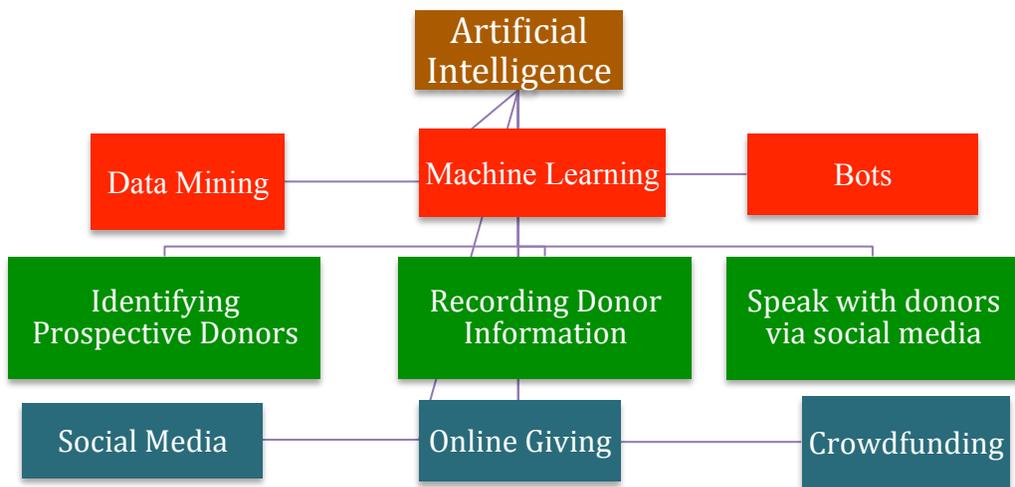
Source: Author's creation. Elaborated from Interviews, 2018.

Discussions

Throughout the expert interviews, the need to educate fundraising professionals about the benefits and drawbacks became apparent. As shown above, a SWOT analysis was conducted to demonstrate the strengths and weaknesses of these technologies.

Another major topic of discussion was the current status of emerging technologies. It became apparent through the expert interviews that the current systems tend to be more reactive rather than proactive. As discussed in the majority of interviews, AI-enabled technology is considered to be more proactive than reactive. The algorithms used to search data generate information about donor prospects quicker than the human brain. Thus, allowing fundraisers to spend less time analyzing data and more time conversing with prospective donors.

Other common themes that came up throughout my expert interviews include the cost associated with implementing new technologies, utility and capacity. Both Ms. Smith and Mrs. Winkler brought up the fact that these systems would likely be more helpful in organizations with donor databases in the 10,000+ records range. Not only do smaller organizations in some cases not have the staff capacity to operate these systems/technologies, they don't see them as a necessary tool. Larger organizations such as the Archdiocese or Catholic University would benefit from AI-enabled fundraising software. With smaller databases, often times the fundraising staff know their donors on a personal level. However, in larger organizations, with large databases it might take a fundraiser a great deal of time to look through all the records.

Three out of the four fundraising professionals I interviewed, agreed that major gifts was likely the area AI would be most beneficial. In addition, two of the four fundraising professionals I interviewed with brought up a few concerns about AI. Off the record, they mentioned privacy concerns as well as issues in regards to prospective donor data reliability. Both were also concerned with compromising their data. However, as is argued in the literature review, without data, AI can't work properly. The literature on the subject of AI drawbacks, explained how that automation could quickly turn into an issue. In their article, Kanter and Fine argue that automation could manipulate people into making larger contributions than they normally would. In most cases, this might not be such a bad thing as long as the donor has affinity, access, and affluence. However, it is an ethical concern that needs to be taken into account. Interestingly, none of the interviews talked much about this concern. They did however support the literatures' remarks that nonprofits need to seize the moment. Three out of the six nonprofits I spoke with had plans to implement AI technology into their fundraising practices over time.

Interestingly, a 2016 study by Georgetown University found that 55% of nonprofits were using it as a solicitation tool. However, throughout the course of the interviews I found that most fundraisers feel it is more useful as a communications tool rather than for fundraising. As more and more nonprofits begin to adopt social media as a fundraising tool in addition to using it as a communications they will see an increase in the efficiency and effectiveness of their fundraising departments.

Limitations

As Artificial Intelligence is a relatively newer subject, one of the limitations is the amount of literature present that discusses applications of it in the nonprofit sector. In addition, a review of the literature found there to be few sources discussing how technology has and has not increased efficiency or effectiveness in nonprofit fundraising. This information would have been useful when determining whether or not technology has had a positive impact on fundraising.

In the survey, a question that would have been valuable to incorporate in is, "How do you define Artificial Intelligence?" in order to gain an understanding of what respondents thought the term constituted. Another question that would have been valuable to incorporate is, "In what ways do you see AI being valuable to your organization in the next few years. This data could have been used to determine how knowledgeable nonprofit professionals in the philanthropy area are about the benefits of Artificial Intelligence.

In the production of the survey there was the issue of nonresponse in the beginning. In addition, there was the issue of respondents starting and not completing the survey as well as not answering questions because they did not feel they were applicable. In some cases, as high as 58% of respondents replied "N/A". This was due to the survey design and the level of detail requested from respondents. In some cases respondents had multiple answers to the same question. For example, when asked whether social media was best used as a Cultivation, Solicitation, or Stewardship some respondents gave two answers. The relatively small pool of 15 respondents was also a major limitation, which

makes it hard to make inferences from the collected data. It would have been ideal to have a much larger respondent pool, as it is hard to imply the results when the data pool is smaller.

Finally, it would have been valuable to have the opportunity to interview more fundraising professionals. However, the time constraint and limited access did not allow for this. This data would likely have further supported my thesis.

Section 5: Implications and Recommendations

1. **Lack of Familiarity**: A strong effort needs to be made to educate the nonprofit fundraising professionals community about the benefits and drawbacks of Artificial Intelligence/Machine learning. This can be done by using available literature and case studies to show the true value of Artificial Intelligence to leaders in the area of philanthropy. The Association of Fundraising Professionals, Chronicle of Philanthropy, and other associations/publications should support articles that demonstrate the strengths, weaknesses and benefits of using these technologies to the nonprofit community.

2. **Major Gifts:** Artificial Intelligence is and will continue to have a profound impact on the major gifts area of philanthropy. AI/Machine learning enabled software such as Wealth Engine has the ability to mine through large amounts of data aiding in the process of narrowing down donor suspect lists and identifying the best true prospects. Thus saving time and resources dedicated towards this process. I would recommend large nonprofits implement AI-enabled software into their fundraising practices. For smaller organizations, I would recommend they hold off on using the software until it is further

developed. As time goes by, Artificial Intelligence technology will become less costly to implement and more functional and stable.

2. **Increasing Efficiency and Effectiveness:** As implied throughout this report, some nonprofit fundraising departments lack in the area of efficiency due to small staffs or old technology/software. Artificial Intelligence can help these organizations increase the efficiency of their fundraising departments significantly via its abilities to mine data, collect data from various platforms, and communicate with donors.

3. **Proactive vs. Reactive:** Expert interviews conducted reveal that fundraisers need technology/software that helps them become proactive vs. reactive. The current technology/software in the market does just the opposite, which can hinder the efficiency of some nonprofit fundraising departments. In addition, fundraisers need software that can think for them and perform small administrative tasks if necessary.

4. **Social Media:** The literature and expert interviews differed on the role of social media. While they agree on its use for communication, only the expert interviews suggested that social media could be effective in the solicitation of donations especially during 24-hour crowdfunding campaigns.

5. **Donor Privacy and Data Reliability Concerns:** Both the literature and expert interviews revealed the issue of donor privacy and data reliability concerns of Artificial Intelligence. This issue needs to be addressed before more nonprofits adopt AI-enabled software. Concerns about donor privacy and data reliability might discourage the use of these techniques. As Artificial Intelligence becomes more widely used and more ingenious at harvesting critical data, developers of AI should create safeguards to prevent

potential breaches of privacy. The users should inquire as to what safeguards have been

put in place to protect donor privacy. In the future government regulation may be

necessary.

Section 6: Conclusions

The literature and expert interviews suggest that emerging technologies have the potential to increase the efficiency and effectiveness of nonprofit fundraising. The literature suggested that emerging technologies help fundraisers save time and resources. However data privacy and reliability concerns exist. Most experts feel the benefits of Artificial Intelligence certainly outweigh the concerns of critics. Which might dissuade some people from using the technology. Current AI-enabled software and those developed in the future can help fundraisers raise more contributions in a shorter amount of time. Emerging technologies such as online giving, mobile donations, and social media have helped and will continue to increase the efficiency and effectiveness of nonprofit fundraisers. Fundraisers need systems that can think for them and help them be one step ahead at all times. Current AI-enabled fundraising software has the ability to mine data at a rate far quicker than the human brain. While these systems have many benefits they also come with drawbacks. As these systems evolve there is a concern of them violating the privacy of donors. In addition, poorly designed systems may mistake identities. Some researchers argue that as these systems become more powerful the government may need to step in to regulate the use of AI-enabled software.

As an emerging technology, Artificial Intelligence is still a relatively new concept to the philanthropy community. Additional work on the impact of Artificial Intelligence in the nonprofit sector would strengthen the pace for using this technology. In the future, higher education in general but in particular business schools may think about teaching more courses on the subject. Artificial Intelligence has the potential to continue to impact the nonprofit community in a positive manner. As this report states there is a real need to educate the nonprofit philanthropy community about the benefits and drawbacks of Artificial Intelligence. These systems will transform the current reactive systems into proactive systems. This transformation will help fundraisers raise more contributions and nonprofits continue to benefit their communities and beyond.

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Rod Linhares, Personal Communication, (8, June, 2018)
Gregory Naleski, Personal Communication, (18, June, 2018)
Annie Place-Winkler, Personal Communication, (20, June, 2018)
Jane Smith, Personal Communication, (21, June, 2018)
Tim Connors, Personal Communication, (28, June, 2018)
Elisa Kutza, Personal Communication, (9,July, 2018)

Appendix A : Expert Interview Questions:

Expert Interview Questions: Rod Linhares

<u>What Other Technologies does your organization use?</u>

1. How has technology in general helped your organization increase the effectiveness and efficiency of its fundraising efforts?

2. Has Social Media had a positive or negative Impact on your fundraising efforts?

3. In which donor segment do you see AI technology being most useful? The annual fund, major gifts, or corporate giving?

<u>How Your Current Data system is Organized and Used.</u>

1. How is your CRM Data currently organized (donor segmentation)?

2. Has your organization changed fundraising Systems recently?

3. What current CRM System do you use?

4. How does your organization collect donor capacity data? (Data that includes giving amounts to other organizations)

5. How many times per month or year do you access your donor database?

<u>Artificial Intelligence and its Potential or Actual Uses</u>

1. How do you define the term Artificial Intelligence?

2. Do you deal with Big Data in a way that Artificial Intelligence could help you?

3. What would you want to see it do?

Expert Interview: Greg Naleski

1. How have you seen social media impact the field of fundraising?

2. How have current CRM technologies impacted CUA's fundraising efforts?

3. Do you have any thoughts on the potential of AI and machine learning being a part of CRM systems in the future?

Expert Interview: Dana Cummings

1. What CRM system do you currently use?

2. Have you implemented the AI-enabled fundraising software and integrated it with your current CRM system?

3. If you have, has it helped your efficiency/productivity? If so, how?

4. Do you think Artificial Intelligence and Machine Learning could be helpful to additional facets of your organization's fundraising efforts?

5. How does your institution currently use fundraising technologies like Social Media?

Expert Interview: Annie Place-Winkler

<u>What Other Technologies does your organization use?</u>

1. How has technology in general helped your organization increase the effectiveness and efficiency of its fundraising efforts?

2. Has Social Media had a positive or negative Impact on your fundraising efforts?

3. In which donor segment do you see AI technology being most useful? The annual fund, major gifts, or corporate giving?

How Your Current Data system is Organized and Used.

1. How is your CRM Data currently organized (donor segmentation)?

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4. How does your organization collect donor capacity data? (Data that includes giving amounts to other organizations)

Artificial Intelligence and its Potential or Actual Uses

1. How do you define the term Artificial Intelligence?

2. Do you deal with Big Data in a way that Artificial Intelligence could help you?

3. What would you want to see it do?

Expert Interview: Eliza Kutza Questions

General Fundraising Software Available:

1. What are the typical third party types of software you see nonprofits working with? (Ex: wealth screening, constant contact)

2. With the vast amount of software available to nonprofits, which do you find have strong ROI for Nonprofits?

3. In your research on different Third party wealth screening tools, have you found Wealth Engine to be an effective tool for Nonprofits?

An Expert's Opinion

1. In your opinion what aspect of technology keeps nonprofit fundraisers from being more efficient? (Ex: outdated technology, improper training)

CRM Systems:

1. What was it about DiRosa Center's previous CRM (Altru) that made the organization consider switching to Salesforce?

2. Have you worked with a "Social CRM" in the past? (Ex: Salesforce' Social CRM which connects to an organization's social media accounts)

3. Assuming you see Artificial Intelligence as being an asset to intelligent data mining, what additional benefits do you think AI can bring to fundraising?

Appendix B: Expert Interviewees

- Rod Linhares, Director of Development, Archdiocese of San Francisco, 8, June, 2018

- Gregory Naleski, Associate Vice President For University Advancement, The Catholic University of America, 18, June, 2018

- Annie Place-Winkler, Major Gifts Officer, Living Goods, 20, June, 2018
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- Jane Smith, VP Development & Alumni Engagement, Small Liberal arts college, 21, June, 2018 -Pseudonym

- Tim Connors, Founder, Pivot North Capitol, 28, June, 2018

- Elisa Kutza, Salesforce Administrator, 9, July, 2018

John Calandra is a young professional interested in pursuing a career in fundraising.

John's decision to pursue a career in nonprofit philanthropy developed during his high

school years at Junipero Serra High School in San Mateo. Though he didn't know it at the

time, John was writing direct mail letters and soliciting potential donors at the young age

of sixteen. In those four years, he raised nearly $20,000, the cost of tuition for one

underprivileged student. From 2012-2016, John attended The Catholic University Of

America (CUA), studying Sociology. During his senior year at CUA, John held a

leadership role on the Senior Class Gift committee raising a record-breaking total amount

of gifts from his fellow classmates. In 2016 after graduating from CUA, John began a

graduate business program in the Mendoza School of Business at the University of Notre

Dame and completed a semester and a half of the program. During the year he spent in

South Bend, Indiana, John had the opportunity to intern with Saint Joseph County Right

to Life, a small nonprofit dedicated to educating and preventing abortions. There, John

conducted research and wrote grants, helped with direct mail campaigns, and

coordinating both fundraising and educational events such as the annual March For Life

attended last year by nearly 500 people. In June of 2017, John returned to the Bay Area to

pursue his Masters in Nonprofit Administration at the renowned Jesuit institution, the

University of San Francisco. From June of 2017 until January of 2018, John served as

Development Intern at the Particular Council of the Society Of Saint Vincent De Paul of

San Francisco. There he helped the grants coordinator conduct research on potential

grants, conduct research on potential donors, built a dashboard for the organization to

track its planned giving donations, and helped plan and volunteered at the organization's

major fundraising event of the year.