The Future of CRM Systems: Five Up and Coming Features That Could Benefit Your Arts Organization

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INTRODUCTION

For most small arts organizations, the first CRM tool is the founder's brain, their knowledge about who their people are and why they are engaged and connected with the organization. The next step includes lists in excel spreadsheets information, but as the organization grows, and the points of engagement multiple, a database is needed. A relational database is created or bought off the shelf. Eventually that database might move to the cloud. The future organizational steps of CRM systems will be driven by artificial intelligence and machine learning. Their practical implications could reshape how nonprofit organizations provide customer service, leverage their data, and present content.

It requires a bit of imagination to examine the CRM features you are likely to see in three to five year. Specifically, can you imagine being able to...

- Provide some level of service from your box office because of an intelligent chat bot?
- Predict which of your new ticket buyers will react to your organization's annual appeal by using a statistical model generated in real-time as you create the mailing list?
- Run an analysis with one click that generates charts and a narrative explaining recent actions taken by your customers?

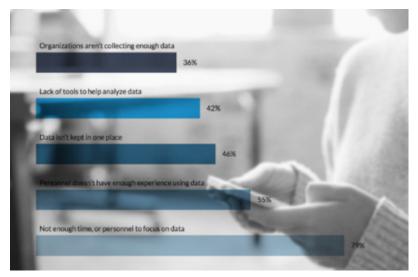


Figure 1. The Top 5 Factors Preventing Organizations from Utilizing Data. (Every Action 2016b)

- Segment your supporters into different audiences based on their online engagement with your content?
- Create a new webpage featuring amazing content, with a clear call to action, all without leaving your CRM?

These practical demonstrations of technology are currently available to a few, albeit large, organizations, and are being developed to reach further markets. The question is not if your organization will be able to take advantage of these technologies, but when. Specific frameworks and applications for bots, statistical modeling, AI, social integration, and CRM-website integration follow to provide effective future planning and implementation in forward-thinking arts organizations.

Bots

Robots are the physical representation of artificial intelligence that science fiction stories conjure in our mind, most often as clunky metal contraptions or as ominous disembodied voices. In reality, the robots we interact with these days are just often sophisticated computer programs that are built to help us accomplish tasks. Siri, Apple's personal assistant integrated with their phone and computers, is the most prominent example of these sorts of robots, or bots. Siri's "intelligence" comes from its

ability to fix its past mistakes based on feedback. When it fails to accomplish a task as directed, it creates a new rule to help guide its performance the next time you ask for the same thing or something similar.²

For arts organizations, these bots may have value in addressing online cart abandonment. A potential ticket buyer researches a show, selects a performance, adds tickets to his or her cart, but then stops. Currently, theater companies





Levy, "An Exclusive Look at How AI and Machine Learning Work at Apple," Backchannel, 2016.

² Shah, "How Do You Explain Machine Learning and Data Mining to Non Computer Science People?" Quora, 2012.

provide a chat window option, so the potential ticket buyer can ask questions to a staff member and complete their purchase. Some readers may have already experienced similar things when shopping for a commercial product.³ In the future, this person could be replaced by a chat bot, which can tap into the person's behavior as they were navigating the website or if logged in their CRM record.

Evidence of the investment and dissemination of bot technology is prevalent. Slack, a business communication tool, has allocated 80 million dollars of its capital to invest in bot based companies. Most of these companies are tightly integrated with their own chat features. The variety of uses reveal the flexibility and adoptability of bot technology. The bots are being used to simplify data entry, schedule follow ups with donors, organize your institutional knowledge, and even to help you build your own bot.⁴ Further evidence can be found in the Salesforce AppExchange through which bot technology can be integrated with the Patron Manager CRM, built on top of Saleforce's nonprofit edition (Salesforce 2016).⁵



A Warm Welcome To The New Wolsey Theatre

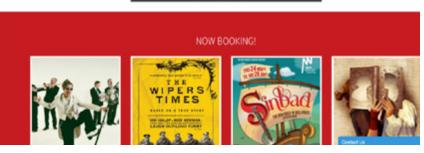


Figure 2. An example of a theater website using chat windows to engage potential ticket buyers. (The New Wolsey Theatre 2016)

- 3 Shepherd, "The 7 Principles of CRM for the Arts," Spektrix, 2015.
- 4 Cifuentes, "Slack Reveals the next 11 Bot Startups from Its \$80 Million Fund," Venture Beat, 2016.
- 5 Salesforce, "Search for Bot," Salesforce AppExchange, 2016.

Modeling

A statistical model begins by identifying a specific issue that you want to understand better. Support for a political issue, subscription sales, or major donations, are all examples of topics that nonprofit organizations try to understand better through statistical models. Data related to the amount of money donated to your organization is combined with other data points that you may think might be associated, such as property value, years of engagement with the organization, and email open rates. Statisticians using mathematical tools look at this data set and can see which other data points actually influence the amount of the gift. This understanding can then be applied to other individuals and help your organization understand which factors more likely result in driving your organization's economic engine.6

Statistical models are readily used outside of the corporate sector. Political campaigns frequently receive press for their use of statistical modeling to help identify supporters. For example, a politician would commission a poll, look at the data on the

individuals polled, and then apply those insights to all registered voters. Campaigns use these predications to guide their outreach and organizing efforts to focus solely on those individuals mostly likely to support their candidate.⁷

For arts and culture organizations, statistical modeling is already used frequently as an additional tool of donor researchers. Blackbaud's WealthEngine and Donor Search are just two examples of this technology. In addition, modeling also been applied to marketing. ⁸ Currently, Salsa allows users to create scores based upon a wide variety of data. Summing up

- 6 Addinsoft, "What Is Statistical Modeling?" Accessed October 30, 2016.
- 7 Detrow, "Ted Cruz Campaign Takes Voter Micro-Targeting To Next Level," NPR, 2016; Issenberg, "How Obama's Team Used Big Data to Rally Voters," MIT Technology Review, 2012.
- 8 Donor Search, "Prospect Research The Ultimate (And Actionable) Guide," accessed October 30, 2016; WealthEngine, "Analytics & Modeling," accessed October 30, 2016.







Figure 3. An example of a Wealth Engine profile, the capacity and influence ratings are the result of a statistical model. (WealthEngine 2016)

Artificial Intelligence and Machine Learning

Salesforce's investment in artificial intelligence and machine learning stems from a desire to make information within a CRM system more actionable. Salesforce's CEO Marc Benioff says the value of artificial intelligence is "helping people do the thing that people are good at." and says that it will accomplish this objective by better managing data and automating processes. This belief was elaborated on by Salesforce's Vice President of Product Strategy,

- 9 Salsa Labs, "Scoring Salsa Help Center," 2013.
- 10 Swift, "People Records Overview," Fractured Atlas, 2016a.
- Hardy, "ARtificial Inteligence Software Is Booming. But Why Now?" New York Times, 2016.

John Bell, when he stated "for the vast majority of companies, [AI] is too hard, they can't apply it to their business processes... This is democratizing AI so that every company can benefit." (Nichols 2016)¹²

Artificial intelligence and machine learning technology will make sure that customer chat bots knows context regarding each individual so the conversation is more useful for the potential ticket buyer. For example, a chat bot that knows that an individual has only bought group tickets is most

likely looking for the phone number of the group sales coordinator when they ask "Who do I call for tickets?" These technologies will also take those statistical methods used to create predictive models and place them within reach of mid-sized arts organizations.

Currently Saleforce's implementation of artificial intelligence and machine learning technology is limited. One feature that is ready for use includes the ability to help a salesman predict the likelihood of a sales conversion.¹³ Another tool is based upon the acquisition of BeyondCore, a company that promises to "instantly unlock hidden insights from your data."¹⁴ Beyond Core answers four questions:

- What happened?
- Why did it happen?
- What will happen?
- And how can I improve?

It answers these questions through statistical analysis, charts, and verbiage.¹⁵

The full integration with Salesforce is still pending. Despite a public launch at the October 2016 Dreamforce conference, it is best to think of it as a prototype¹⁶ that is still in development.

- 12 Nichols, "Salesforce Einstein: Enterprise AI Breakthrough, or CRM Clippy?" The Register, 2016.
- 13 Sinai, "Introducing Salesforce Einstein–AI for Everyone," Salesforce Blog, 2016.
- 14 BeyondCore, "Product," 2016.
- 15 Henschen, "Salesforce Einstein: Dream versus Reality," ZDNet, 2016.
- 16 Backaitis, "Salesforce Einstein: A Big Advance for AI or Dumb Tech?" CMSWire, 2016.





Tracking Online Engagement

An organization's ability to leverage artificial intelligence and machine learning tools in the future depends on its ability to keep and track data on its customers. For most arts and culture organizations, an increasingly overwhelming share of engagement is happening online. There is a surprising amount of rich data generated through an organization's website, the emails it sends, and the content it pushes out on social media channels. By collecting this data, it is possible for organizations with capacity to invest into the many pieces of technology and expertise required. This space is ripe for innovation to the "democratization" on which artificial intelligence and machine learning are on the cusp.

The underlying architecture of tracking online

engagement is wrapped up in deceptively simple words; pixel tags, cookies, and tag containers. Pixel tags, tiny images that provide a specific message when downloaded from a server.¹⁷ They are frequently used to count open rates in emails, but can be used for other purposes as well. Cookies are pieces of code, or tiny files of text, that help identify you and your preferences as you travel from one site to another. Tag containers are JavaScript code used by websites to manage pixel tags and cookies, as well as record additional pieces of information.¹⁸

Our own publication has delved Figure 4. And deeply into ways that arts managers can use tools like google analytics to mine insights about customer behavior. Google Analytics and other similar

tools, all depend on pixel tags, cookies, and tag containers to provide their insights. To do so, most organizations rely upon Google Tag Manager to help them accomplish mine these deeper insights. ²⁰

Connecting online engagement data to a CRM system is within the realm of possibility. Spektrix allows users to log into Facebook to purchase tickets, which could open up integration with Facebook itself or its Ad Exchange. Blackbaud's NetCommunity and Salesforce can also be integrated with either Google Analytics or Google Tag Manager. When combined with artificial intelligence, this tracking of online engagement could help identify entirely new audience segments to help your organization engage people that align with your mission.



Figure 4. An example of a chart and insight automatically generated by BeyondCore. (Rogers 2014)





¹⁷ Gross, "Cookies, Tags and Pixels: Tracking Customer Engagement," VisualIQ, 2012.

^{18 &}quot;Google Tag Manager Overview - Tag Manager Help," Google, 2014.

¹⁹ Sajewski, "Making Data-Driven Decisions For Marketing-Focused Outcomes," Arts Management and Technology Lab, 2013.

Cohain, "Google Analytics: Powerful or Useless? That Depends on You," Capacity Interactive, 2015; Gensler, "To Make Good Data-Driven Decisions You Need....Good Data," Capacity Interactive, 2014.

²¹ Shepherd, "The 7 Principles of CRM for the Arts," Spektrix, 2015.

^{22 &}quot;How Do I Add Google Tag Manager to NetCommunity," Blackbaud Knowledgebase, 2016; Wilkerson, "Integrating Google Analytics & Salesforce - A 30,000ft View," Luna-Metrics, 2016.

Website Integration

There is a need for better website integration to truly deliver on the promise that better tracking of website engagement will provide CRM solutions. For most nonprofits, a superior website that is fully integrated with the CRM is difficult to obtain, but will soon be necessary to leverage the value provided by artificial intelligence or machine learning (through chat bots or predicative models).

One solution is evidenced by Action Network and Artful.ly. Action Network, an online engagement platform that provides many features of a CRM, approaches any constituent's touch point as a piece of code called a "widget." This code can be embedded into a website, similar to YouTube video.²³ Artful.ly takes a similar approach, but only provides it for donations and events, while Action Network allows you to embed surveys, forms, and petitions.²⁴

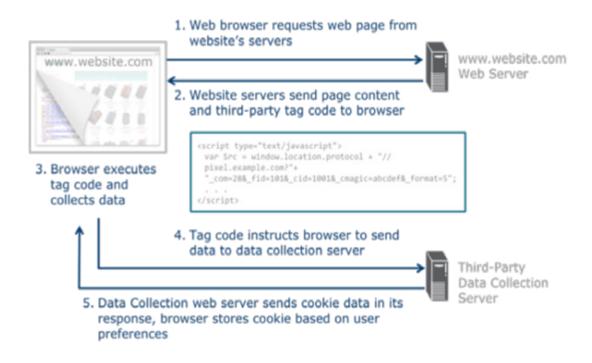


Figure 5. A visual representation of how pixel tags, cookies, and tag collections communicate with websites, users, and third parties. (Signal 2016)

For many arts organizations, website integration with CRM systems revolves around donors and tickets. Class, workshop and email signups might be equally as vital. Each are important touch points that have the power to connect your organization to your supporters. However, most of these processes are usually completed on a different website that is outside of the organization's control, limiting the organization's ability to collect data from the entire transaction.

Other approaches to helping organizations achieve a tight website integration do exist. EveryAction provides custom built websites based off the open source content management system Drupal. Although this feature is an additional charge for the user, it makes sense for many of the organizations using EveryAction since they are campaigns or





^{23 &}quot;Toolset - Action Network," The Action Network, 2016.

Swift, "What Is the Widget and How Does It Work?" Fractured Atlas, 2016b.

advocacy groups formed quickly for a specific purpose, presenting the need a for a functional website very quickly.²⁵

HubSpot is another example of a content management system married with CRM solution. Centered around the strategy of "content marketing", HubSpot helps organizations attract clients through compelling content, based upon the theory that potential supporters are drawn to compelling content, find value in it, and will return to the site. Over time, they build trust with the organization

Wither 98 TAKE ACTION MISSION PRESS REJECT SHELL'S ARCTIC DRILLING PERMITS GREENPEACE mther98 Be the President who leads us into It's not too late for the President to relect Shell's dangerous plans to drill in the the clean energy future, away from Arctic Ocean. Shell still needs approval for their Oil Spill Plan, and Wildlife Permits. the dirty fossil fuels of the past. Reject Shell's Arctic drilling permits The United States Department of Interior found a 75% chance of a large oil spill if Shell drills in the Arctic on a long-term basis. And what's worse: the technology to adequately clean up an oil spill in the Arctic Ocean doesn't even exist. 27,838 Signatures Collected A recent study in Nature concluded that Arctic Oil MUST be kept in the ground to prevent catastrophic climate change. In fact there is growing scientific consensus that we can't burn 25% of the oil, coal and gas we already have access to without unleashing the worst impacts of global warming. Obama can be the leader who finally breaks Big Oil's stranglehold on Sign This Petition America-OR, he can be the politician who sacrifices the Arctic and the Climate to Shell for more oil. The international Monetary Fund estimates that the world's fossil fuel companies will rack up an astounding \$5.3 trillion in effective subsidies in 2015, when public health costs and climate impacts are factored in. That's \$10 million a minute We can no longer afford our dependence on Big Oil. We need a President who will lead us into the clean energy future, away from the dirty fossil fuels of the past. Not be the USE http://priceofoll.org/2015/05/20/fossil-fuel-fatalism-untouchable-arctic/ http://slate.me/1.hyWMeP http://www.nature.com/nature/journal/v517/n7533/full/nature14065.htm Other 98% and Greenpeace may send you updates on this and other important campaigns by email.

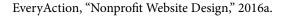
Figure 6. An example of an Action a widget embedded in an organization's website. (The Other 98% and Greenpeace 2016)

providing the content and eventually convert from unpaying supporters to paying customers.²⁶ HubSpot provides a blog platform, tracks the potential constituent's online engagement, and delivers automated marketing messages.²⁷

CONCLUSION

For these technologies to become within reach for the average arts organization, much development and innovation is still needed. CRM tools today

are incredibly complex and powerful tools. Chat bots, predictive models, artificial intelligence, machine learning, online engagement tracking, and website integration alone will not fundamentally solve this dilemma. Users must know why they are using their CRM system and set a clear strategy within it to derive the most value from it and reach defined organizational goals.





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²⁶ HubSpot, "What Is HubSpot?" 2016b.

²⁷ HubSpot, "HubSpot Website Platform - Host Your Website with HubSpot," 2016a.

BIBLIOGRAPHY

- Addinsoft. 2016. "What Is Statistical Modeling?" Accessed October 30.
 - https://help.xlstat.com/customer/en/portal/articles/2062460-what-is-statistical-modeling-?b_id=9283.
- Backaitis, Virginia. 2016. "Salesforce Einstein: A Big Advance for AI or Dumb Tech?" CMSWire.
 - http://www.cmswire.com/digital-experience/salesforce-einstein-a-big-advance-for-ai-or-dumb-tech/.
- BeyondCore. 2016. "Product."
 - https://beyondcore.com/product/.
- Cifuentes, Jon. 2016. "Slack Reveals the next 11 Bot Startups from Its \$80 Million Fund." Venture Beat. http://venturebeat.com/2016/07/19/slack-reveals-the-first-11-bot-startups-from-its-80-million-fund/.
- Cohain, Yosaif. 2015. "Google Analytics: Powerful or Useless? That Depends on You." Capacity Interactive. http://ideas.capacityinteractive.com/google-analytics-powerful.
- Detrow, Scott. 2016. "Ted Cruz Campaign Takes Voter Micro-Targeting To Next Level." NPR. Accessed October 30. http://www.npr.org/2016/02/19/467395218/ted-cruz-campaign-takes-voter-micro-targeting-to-next-level.
- Donor Search. 2016. "Prospect Research The Ultimate (And Actionable) Guide." Accessed October 30. http://www.donorsearch.net/prospect-research-ultimate-guide/.
- EveryAction. 2016a. "Nonprofit Website Design." Accessed October 31. https://www.everyaction.com/feature/website.
- EveryAction, NonProfit Hub. 2016b. "The State of Data in The Nonprofit Sector." Accessed October 31. http://cdn2.hubspot.net/hubfs/433841/The State of Data in The Nonprofit Sector.pdf.
- Gensler, Erik. 2014. "To Make Good Data-Driven Decisions You Need....Good Data." Capacity Interactive. http://ideas.capacityinteractive.com/data-driven-decisions.
- "Google Tag Manager Overview Tag Manager Help." 2014. Google. https://support.google.com/tagmanager/answer/6102821?hl=en.
- Gross, Phil. 2012. "Cookies, Tags and Pixels: Tracking Customer Engagement." VisualIQ. http://www.visualiq.com/resources/marketing-attribution-newsletter-articles/cookies-tags-and-pixels-tracking-customer-engagement.
- Hardy, Quentin. 2016. "ARtificial Inteligence Software Is Booming. But Why Now?" New York Times, September 18. http://www.nytimes.com/2016/09/19/technology/artificial-intelligence-software-is-booming-but-why-now.html.
- Henschen, Doug. 2016. "Salesforce Einstein: Dream versus Reality." ZDNet. http://www.zdnet.com/article/salesforce-einstein-dream-versus-reality/.
- "How Do I Add Google Tag Manager to NetCommunity." 2016. Blackbaud Knowledgebase. Accessed October 31. https://kb.blackbaud.com/articles/Article/95469.
- HubSpot. 2016a. "HubSpot Website Platform Host Your Website with HubSpot." Accessed October 31. http://www.hubspot.com/products/website.
- ——. 2016b. "What Is HubSpot?" Accessed October 31. http://www.hubspot.com/what-is-hubspot.
- Issenberg, Sasha. 2012. "How Obama's Team Used Big Data to Rally Voters." MIT Technology Review. https://www.technologyreview.com/s/509026/how-obamas-team-used-big-data-to-rally-voters/.
- Levy, Steven. 2016. "An Exclusive Look at How AI and Machine Learning Work at Apple." Backchannel.





https://backchannel.com/an-exclusive-look-at-how-ai-and-machine-learning-work-at-apple-8db_fb131932b#.xjagkvshx.

Nichols, Shaun. 2016. "Salesforce Einstein: Enterprise AI Breakthrough, or CRM Clippy?" The Register. http://www.theregister.co.uk/2016/09/18/salesforce_einstein_unveiled/.

Rogers, Stewart. 2014. "BeyondCore Analytics Asks All the Questions -- so You Don't Have to." VentureBeat. http://venturebeat.com/2014/11/13/beyondcore-analytics-asks-all-the-questions-so-you-dont-have-to/.

Sajewski, Christine. 2013. "Making Data-Driven Decisions For Marketing-Focused Outcomes." Arts Manage ment and Technology Lab.

Salesforce. 2016. "Search for Bot." Salesforce AppExchange.

https://appexchange.salesforce.com/results?keywords=bot.

Salsa Labs. 2013. "Scoring - Salsa Help Center."

https://help.salsalabs.com/hc/en-us/articles/223341927.

Shah, Pararth. 2012. "How Do You Explain Machine Learning and Data Mining to Non Computer Science People?" Quora. https://www.quora.com/How-do-you-explain-Machine-Learning-and-Data-Mining-to-non-Computer-Science-people.

Add Google Tag Manager

https://www.spektrix.com/us/blog/the-7-principles-of-crm-for-the-arts-us.

Signal. 2016. "Tag Management 101." Accessed October 31.

http://www.signal.co/resources/tag-management-101/.

Sinai, Jim. 2016. "Introducing Salesforce Einstein–AI for Everyone." Salesforce Blog. https://www.salesforce.com/blog/2016/09/introducing-salesforce-einstein.html.

"Spektrix - Features." 2016. Accessed September 24.

https://www.spektrix.com/us/features/.

Swift, Marcus. 2016a. "People Records Overview." Fractured Atlas.

 $\underline{https://www.fracturedatlas.org/site/knowledgebase/people-records-overview}.$

——. 2016b. "What Is the Widget and How Does It Work?" Fractured Atlas. https://www.fracturedatlas.org/site/knowledgebase/what-is-the-widget-and-how-does-it-work.

The New Wolsey Theatre. 2016. "Homepage." https://www.wolseytheatre.co.uk/.

The Other 98%, and Greenpeace. 2016. "President Obama: Reject Shell's Arctic Drilling Permits - Ensure Your Climate Legacy." Accessed October 31. http://other98.com/president-obama-reject-shells-arctic-drilling-permits-ensure-climate-legacy/.

"Toolset - Action Network." 2016. The Action Network. Accessed September 24.

https://actionnetwork.org/toolset.

WealthEngine. 2016. "Analytics & Modeling." Accessed October 30.

https://www.wealthengine.com/products-services/services/analytics-modeling.

Wilkerson, Dan. 2016. "Integrating Google Analytics & Salesforce - A 30,000ft View." LunaMetrics. http://www.lunametrics.com/blog/2016/02/01/integrating-google-analytics-and-salesforce/.



