Integrating Social Media Data into CRM Systems: Using your CRM to Its Full Potential

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Customer Relationship Management (CRM) system play a crucial role in marketing for all kinds of organizations, especially the nonprofits. CRMs help the organizations identify, acquire, retain, and nurture profitable or recurring customers with an entirely customer-centered mechanism. Yet a CRM system alone cannot meet all the needs of constituent relationships, so organizations may wish to implement other tools to complement their CRM system in accordance with their needs, and to use the data in the CRM to its full potential. As a result, organizations benefit from CRM integration, which is the process of using various technologies to "connect" multiple systems so they can pass data back and forth. When other systems integrate with the CRM system it opens up the channels from which nonprofits can gather data on their constituents. CRM integration will make it much easier to find the information of current constituents, will gather more data than traditional CRM systems, and will likely lead to a shift in the business process of the organization. Among all the potential systems to be integrated, social media could be one of the most informative ones.

How Social Media Data Improves Customer Knowledge Management (CKM) of an Organization

In the age of social media, there is a significant amount of public data available which is not in the nonprofits' CRM systems, therefore social media platforms play a crucial role in the new model of CRM system. They could be used to gather data of constituents and to serve as a platform

¹ M.S. Zanjani, R. Rouzbehani, H. Dabbagh, Proposing a Conceptual Model of Customer Knowledge Management: A Study of CKM Tools in to engage the audience. Social media is currently widely used by nonprofits for the retention of current audience, but few have incorporated the social media data of their constituents into their CRM system to gather information of their audience. Beyond a trend, using social media data and to track the constituents' online activities is crucial for the organization to gain a more comprehensive and established Customer Knowledge Management (CKM).

Customer knowledge is "a kind of knowledge in the area of customer relationship, which has direct or indirect effect on our organizational performance." This includes three kinds of knowledge:

- Knowledge about customers: this is what will typically first come to our mind when talking about customer knowledge, and it is about the customers' expectations, motivations, and behaviors.
- Knowledge from customers: the knowledge organizations receive from the customers. For instance, through reviews, feedbacks, and surveys, arts organizations will have the knowledge on the constituents' ideas and thoughts on a certain program, their experience of certain event, and/ or their recommendations on how the programs might be improved.
- Knowledge for customers: this is about predicting and therefore satisfying the knowledge needs of customers. Knowledge for the customers is the process of knowing what the constituents want to learn

British Dotcoms, [in:] World Academy of Science, Engineering and Technology No. 38, 2008.





about and therefore providing them the sufficient information on it.

Customer Knowledge Management (**CKM**) is defined as the ongoing process of generating, disseminating and using customer knowledge within an organization, and between an organization and its customers, using all the three types of customer knowledge mentioned above². The following table (Table 1) shows the degree of each social channel's support to three types of customer knowledge in the process of CKM.

Table 1. Social media used in the process of CKM

Social channel	Type of cus- tomer knowledge	Processes of CKM			
		identification & acquisition	storage	development	sharing
Blogs	for customer	+	+	+	++
	from customer	++	+	+	+
	about customer	+		+	+
Micro-blogging services (e.g., Twit- ter)	for customer	+	+	+	++
	from customer	++		+	++
	about customer	++		+	+
Social networking services (e.g, Face- book)	for customer	+	+	+	++
	from customer	++		+	++
	about customer	++		+	+
Location-aware mobile services	for customer	+	+	+	++
	from customer	++	+	+	++
(e.g., Foursquare)	about customer	++	+	++	+

^{+ -} support , ++ - strong support

Source: Buchnowska, Dorota. "Social CRM for Customer Knowledge Management." Contemporary Economy 5. December 1, 2014.

As we can see from the table, most social media channels can provide strong support and sufficient information both "about customer" and "from customer", which would allow the nonprofit organizations to gain more detailed information on their constituents other than their phone number, email address, and street address. For instance, say Volunteer Management

² Buchnowska, Dorota. "Social CRM for Customer Arts Management & Technology Laboratory

wanted to find out if there are people in the CRM with a financial background in order to recruit them to volunteer or serve on the board. In this case, we could integrate the data from LinkedIn accounts to see constituent's academic and working background, information which would not be found in the traditional CRM system. Further, with the integration of the CKM model into the CRM system of nonprofits, organizations could create a holistic understanding of their constituents and patrons, and therefore can segment the audience into more specific groups, which ultimately could lead to a more targeted marketing strategy for each of the audience group, and social media provides the data source for a comprehensive CKM system.

Potential Data Privacy Issues with CRM Integration

When talking about data integration from other sources, like social media, the data privacy and security of the constituents raises the most concerns. Data privacy concerns raise both ethical and legal issues. Organizations may wish to seek legal counsel as domestic and international privacy laws will likely have an impact on your data collection scope and methodology.

Broadly speaking, it is important to make data collection parameters explicit to constituents. Organizations need clear disclosures about what they do and do not collect in the privacy policies on their website, and to make sure to include social media aspects if they are to integrate



Knowledge Management." Contemporary Economy 5. December 1, 2014.

constituent data from such platforms. For instance, in the section of "Site usage information" in the privacy policy of the Museum of Modern Art, there are specific information provided regards their data collection from social media: "A Facebook pixel is code on the MoMA website that helps us to track conversions from Facebook ads, to optimize ads based on data collected, to build targeted audiences for future ads, and to market to people who have already engaged with the MoMA website...MoMA also works with third-party analytics and marketing entities that use technologies such as cookies and pixel tags on our behalf. These tracking technologies may be deployed by us and/ or by our service providers – such as Google Ad Manager, Facebook, Instagram, and Xaxis on our behalf to collect or receive information from our website and elsewhere on the Internet, and to use that data to provide measurement service and target ads. These technologies enable us to assign a unique number or identifier to you, and relate your website usage information to our data about you, including your personal information...You can opt out of the collection and use of this information for ad targeting at aboutads.info."3

Dallas Museum of Art, which was eliminated in December 31, 20174. The Friend Program aimed to reinforce the engagement of the audience during their experience on-site in the museum and online by asking the participants of the program voluntarily sharing their personal data and their activity pattern with the museum database. However, they failed to mention in their privacy policy that they are also using the data they collected from the program in exchange for corporate philanthropy when they realized more revenue could be brought through the corporates than their regular admission. 5 A failure to informing constituents of the usage of their data and being transparent on privacy policies can result in legal and ethical issues. This is particularly true when institutions try to integrate the constituents' data on their social media platforms given social media's highly personal nature. Therefore institutions need to make sure to check with the legal professionals for the latest requirements and specific state compliance issues in order to update the privacy policy accordingly.

A problematic example of incorporating constituent data is the DMA Friend Membership Program, initiated by the

⁵ Green, Tyler. "Why more art museums will be free—and soon." *Blouin Artinfo*. January 8, 2014. Accessed May 1, 2019.





³ "Privacy Policy and Terms of Use | MoMA." The Museum of Modern Art. Accessed May 01, 2019. https://www.moma.org/about/about-this-site/#privacy-policy.

⁴ "DMA Friends." Dallas Museum of Art. Accessed May 01, 2019. https://www.dma.org/visit/dma-friends.



Figure 1. A sample of the DMA Friend application interface that shows which kinds of personal data and the on-site experience and preference information the museum has collected through the program. Source: https://mw2014.museumsandtheweb.com/bow/dma-friends/

Data Integration Steps

To integrate data into a CRM there are several steps to be taken.⁶ Each step may be adjusted slightly in accordance with an organization's individual goals.

1. *Preparation*: First, create flowcharts to show how you want the data to

⁶ The 4-step model of data integration is based on Bernard's report on "CRM Integration for Nonprofit." *Idealware*.

transmit between each system, and determine which technological tools can be used to make the transmissions possible.

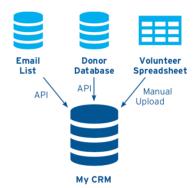


Figure 2: It shows the flowchart that demonstrate the sources of data to be email list, donor database, and volunteer spreadsheet; the direction of data transmission is from all these external sources to the local CRM; and the technological basis for the transmissions are API and manual upload. Source: Bernard, Chris. "CRM Integration for Nonprofits." Idealware. June, 2018.

2. Data Dictionary: After determining which platforms to draw data from, and what tools to use, formalize the contents, format, structure, and relationships of each entity and field in the database. There are six main elements which need to be explained in the data dictionary: Field Name, Data Type, Data Format, Field Size, Example, and Validation. All these together creates an elaborated instruction and basis for the data fields we need.





- 3. Field Mapping: There are circumstances when data from external platforms does not perfectly correspond with the data entities in a CRM systems, therefore it may be necessary to establish rules and coding to pair them up. For instance, sometimes on certain social media platforms, people register their names as one single data field, but in CRM system it is registered separately as first name and last name. in this case, it is important to determine that all characters before the first space in the Name field from the external source pairs with the first name in CRM system.
- 4. Record Merging: ultimately, one needs to to find the "primary key/ keys" that connects CRM with external social media source. Find a data entity or a set of entities from both CRM and social media platform that corresponds each other and is unique for each individual constituent. When merging records pair up constituent information from our CRM with that on social media platforms, and eventually use the tools to integrate the data together.

Bringing It All Together

There are several tools that can make the integration of social media data possible. Three major ones are Google Tag Manager, Application Programming Interface (API), and Automation Tools.

Google Tag Manager

Google Tag Manager is a tag management system which allows organizations to

quickly update tracking codes and related code fragments collectively knowns as tags on the websites or mobile apps. 7 When Tag Manager is installed, marketers in nonprofits can set tags and keywords to be triggers to fire tags when certain events happen. The combination of tags, triggers, variables, and related configurations installed on a certain website or mobile app is a tag container which can Nonprofit organizations can certainly make use of this tool for marketing purpose that it provides the tool to trigger the website to record an impression of a certain ID of its viewer. It will change the current model of social media being only the tool for retaining audience because the tag containers will filter out the viewers whose online activities have triggered the tags set by the organization to be the potential audience.

Application Programming Interface (API)

API is another tool that service as a bridge between your CRM system and external platforms. It is so ubiquitous on websites and social media nowadays that we might not even notice. APIs serve as the technological basis for all the other integrating platforms to work. For example, you may have experienced of buy a movie ticket online, and in the email confirmation, there is button for you to add this event to your calendar. In an arts organization context imagine connecting the ticketing system of the theater to the calendar platform. It works the same when integrating social media data into the CRM system of your organization. Make sure to get the API credentials you need, such as

https://support.google.com/tagmanager/answer/61028 21?hl=en





⁷ "Tag Manager overview." *Google Tag Manager*. Accessed February 25, 2019.

login information or an API key, before implementing it in your system.

Automation Tools

These are third-party tools that can be used for simple CRM integrations on the basis of API. One of the most popular tools is IFTTT⁸. IFTTT is a free platform that will connect different apps and devices. For instance, it has an Applet, a program that links your apps and devises that are connected to IFTTT, that allows users to receive an email when making a call, which could be helpful for CRM system. Users can also build their own Applets on the Platform to link two platforms for their own purposes. IFTTT could be especially useful for small nonprofits with limited budget for some simple CRM integration.

Case Study of RBC Capital Market: A Success Story of CRM Integration in the Financial Service Industry

During the Dreamforce 2018 conference in San Francisco, Kim Prado, the Global Head of Client of the Banking and Digital Channels Technology Department of RBC Capital Markets⁹, demonstrated the CRM integration and supporting models that RBC has successfully implemented.¹⁰ The goal of the integration was to reduce the

associated account plan number per client to only 1 and also to have the lines of businesses of the company connected and be able to connect with one another. The solution for the problems is the "3 Pillars of Success" model: create a client-centric instead of product-centric strategy, ensure both the quantity and the quality of the integrated data, make the system easy for the end-users to implement.

1. Create a Client-Centric Strategy

Prado makes the point that the concept of "client" could be divided into internal and external clients, while the internal clients would be the marketing and sales of the company. When interviewing stakeholders they all claimed that CRM was definitely the priority that the company needed to work on and improve. Concerns raised included "I don't know who visited my client last week," "my client seems to know more about what they did with me than I do," and "I am not armed with the data I need to go to see my clients."11 After their partnership with Tier1 CRM and Salesforce, and equipping the company with a more advance and organized CRM system, they have systematically connected all 9 lines of business in the company, turned off 6 legacy CRMs, and hundreds of spreadsheets

https://success.salesforce.com/sessions?eventId=a1Q 3A00001XoCSUUA3#/session/a2q3A000001WZc6 QAG

¹¹ Above are the quotes from sales and marketing across the globe that Prado has interviewed. From their claims, it is clear that without a well-designed and informative CRM system, it would be hard for the sales to establish a stable and trusting relationship with the clients. Same issues could also be raised for arts organizations that without a comprehensive understanding of the constituents, organizations will take a more passive position when managing the relationship with the audience because we don't have the data to back up our understanding to them.





⁸ Home. *IFTTT*. Accessed April 1, 2019. https://ifttt.com/discover

⁹ RBC Capital Markets. <u>https://www.rbccm.com/en/</u>

¹⁰ All the information in this section of the paper will be based on source: Prado, Kim. "Global Markets: The Future of Institutional Client Engagement." *DreamForce 2018* Session Recording. 40:00. September 25, 2018.

recording client interactions. It is clear that with a holistic and unified CRM system structure, it is much more beneficial to their CKM and sales, which ultimately makes the company able to operate more effectively.

2. Integrate & Scale

For a large-scale company like RBC with 9 lines of businesses, it is crucial to unify all their branches together. As Prado states in the video, their biggest win from this CRM adoption was the unification of the client definition from the 9 lines using integration of several of the systems together to the CRM. 12 With the notion of this, they created the RBC App Store, which allows the endusers to design their own workspace, launch any piece of any application they care about on the springboard. This application enabled the company to push out consistency to all lines of businesses. The interface of the application is unified for all branches of the company, which allowed the multiple systems of each individual line of business to come together in a holistic way.

3. Efficiency & Productivity

APIs play a crucial part in making it easier for the end-users to implement systems. Prado introduced the mechanism to the RBC App Store and it benefited to the salespeople who operated the system. With Salesforce's app exchanging component in the RBC App Store that hooks into IPC, the

Association Connecting Electronics Industries, 13 they were able to tie in a bidirectional connectivity component into Salesforce directly. She gives the example of one office of RBC in Canada which manages to serve 5000 clients with only 9 salespeople. When a client calls with a problem, the system will automatically pop open all of the client's information, including their touch points, trades, their line of credit, and which ecommerce platform the client is on. In this way of harnessing the platform, the salespeople can cover more clients with more efficiency based on the information and data they have on hand, which makes the harnessing and leveraging the data more important.

The successful case of RBC demonstrates the crucial role CRM systems plays in a large-scale company to improve their CKM and create a unified system structure throughout the 9 lines of business of the company. The integration of different systems all together to a unified, yet customized, interface allows a compilation of all the data from different lines to come together, while end-users could pull out any information they want on their dashboards. Ultimately, the API that connects their own system and IPC enables the integration of a large amount of their clients' data from external sources to their own CRM system, which directly increases the efficiency of their salesforce.

CONCLUSION

so that the integration with social media will scale up the size of the data and the knowledge on the constituents.

¹³ "Association Connecting Electronics Industries." IPC. Accessed May 08, 2019. http://www.ipc.org/.

¹² Though most of the arts organization would not have a scale like this and are unlikely to have as many as 9 branches, the application of this model to arts organizations would be the integration of social media data into local CRMs. Arts organizations could see social media platforms as other "business lines",





Arts organizations, especially nonprofits, usually have a limited budget for operational expenses. This can result in delays of useful CRM systems integrations and updates. Social media's online dominance means that there is a significant amount of data available on constituents which in previous builds an organization may not have grasped and integrated into a CRM. The future of marketing for all kinds of business, including the art industry, will be highly rely on the comprehensive knowledge on the customers and the data collected in the CRM systems, and social media may be one of the largest data sources out there. Arts organizations need to first establish a clear CRM strategy to advance the customer knowledge management (CKM), keep transparent privacy policy regarding data collecting, and eventually follow the steps and use the tools to integrate external data into local CRM systems.



Bibliography

"6 Guiding Principles to Maximize CRM Adoption (1)." *Salesforce.com*. Accessed May 03, 2019. https://success.salesforce.com/sessions?eventId=a1Q3A00001XoCSUUA3#/session/a2q3A0000001WZ9zQAG.

"10 Things to Consider in a CRM." *Idealware*. May, 2012. Accessed February 17, 2019. https://www.idealware.org/10-things-consider-crm/

Ahani, Ali, Nor Zairah Ab. Rahim, Mehrbakhsh Nilashi. "Forecasting Social CRM Adoption in SMEs: A Combined SEM-neural Network Method." *Computers in Human behavior* 75. October 2017.

Ang, Lawrence. "Is SCRM Really a Good Social Media Strategy?" Journal of Database Marketing & Customer

Strategy Management 18, no. 3 (September 1, 2011): 149–153. http://search.proquest.com/docview/903606762/.

"Association Connecting Electronics Industries." *IPC*. Accessed May 02, 2019. http://www.ipc.org/.

Bernard, Chris. "CRM Integration for Nonprofits." *Idealware*. June, 2018. Accessed February 16, 2019. https://www.idealware.org/reports/crm-integration-for-nonprofits/

Buchnowska, Dorota. "Social CRM for Customer Knowledge Management." *Contemporary Economy* 5. December 1, 2014.

"CRM, ERP, and MDM: An Enterprise Integration Strategy." *Salesforce.com*. Accessed May 08, 2019.

https://success.salesforce.com/sessions?eventId=a1Q3A00001XoCSUUA3#/session/a2q3A000001WUXdQAO.

"Dallas Museum of Art to Offer Free Membership And a Return to Free General Admission Starting January

2013." *Dallas Museum of Art*. Accessed May 08, 2019. https://dma.org/press-release/dallas-museum-art-offer-free-membership-and-return-free-general-admission-starting.

"DMA Friends." *Dallas Museum of Art*. Accessed May 01, 2019. https://www.dma.org/visit/dma-friends.

"DMA Friends." *MW2014: Museums and the Web 2014*. Accessed May 02, 2019. https://mw2014.museumsandtheweb.com/bow/dma-friends/.





Gilmore, Justin. "The Future of CRM Systems: Five Up and Coming Features That Could Benefit Your Arts Organization," Arts Management & Technology Laboratory. March, 2017.

Green, Tyler. "Why more art museums will be free—and soon." *Blouin Artinfo*. January 8, 2014. Accessed May

1, 2019.

Gross, Phil. "Cookies, Tags and Pixels: Tracking Customer Engagement." *Visual IQ*. February 06, 2017. Accessed February 25, 2019.

https://www.visualiq.com/resources/marketing-attribution-newsletter-articles/cookiestags-and-pixels- tracking-customer-engagement

Harrigan, Paul, Soutar, Geoff, Choudhury, Musfiq Mannan, and Lowe, Michelle. "Modelling CRM in a Social

Media Age." Australasian Marketing Journal (AMJ) 23, no. 1 (February 2015): 27–37.

Home. IFTTT. Accessed April 1, 2019. https://ifttt.com/discover.

Peltier, James W., Zahay, Debra, and Lehmann, Donald R. "Organizational Learning and CRM Success: A

Model for Linking Organizational Practices, Customer Data Quality, and Performance." *Journal of*

Interactive Marketing27, no. 1 (February 2013): 1–13.

Prado, Kim. "Global Markets: The Future of Institutional Client Engagement." *DreamForce 2018* Session

Recording. 40:00. September 25, 2018.

https://success.salesforce.com/sessions?eventId=a1Q3A00001XoCSUUA3#/session/a2q3A000001WZc6QAG

"Privacy Policy." Dallas Museum of Art. Accessed May 01, 2019. https://dma.org/privacy.

"Privacy Policy and Terms of Use | MoMA." *The Museum of Modern Art*. Accessed May 02, 2019.

https://www.moma.org/about/about-this-site/#privacy-policy.

RBC Capital Markets. https://www.rbccm.com/en/

Roos, Dave. "How to Leverage an API for Conferencing." *Howstuffworks*. Accessed April 1, 2019. https://money.howstuffworks.com/business-communications/how-to-leverage-an-api-for-conferencing.htm.

"Tag Manager overview." *Google Tag Manager*. Accessed February 25, 2019. https://support.google.com/tagmanager/answer/6102821?hl=en





- "Tell Tale Signs You Need a CRM Upgrade." *Tech Impact*. September 19, 2017. Accessed February 18, 2019. https://blog.techimpact.org/tell-tale-signs-you-need-a-crm-upgrade
- Wilkerson, Taylor. "The Data Divide: Small NPOs Have Different Needs." Arts Management & Technology Laboratory. November 6, 2017. Accessed Februrary 17, 2019. https://amt-lab.org/blog/2017/11/small-nonprofit-data-needs?rq=CRM
- Xie, Zining. "Leveraging CRM Data for Audience Segmentation." Arts Management & Technology Laboratory. July 18, 2017. Accessed February 17, 2019. https://amt-lab.org/blog/2017/7/leveraging-crm-data-for-audience-segmentation?rq=CRM
- Xie, Zining. "Pairing Data to Achieve the Most Audience Segment Success." Arts Management & Technology Laboratory. August 4, 2017. Accessed February 17, 2019. https://amt-lab.org/blog/2017/8/pairing-data-to-achieve-the-most-audience-segmentation-success?rq=crm

Valentin, Nitu Claudiu, Oana, Nitu, Adriana, Grigorescu, and Elena, Codrea. "Exploratory Study of the

Companies' Economic Performance Using a Social Customer Relationship Management." *Procedia*

Economics and Finance 39 (2016): 800–806.



