

Case Study



DREXEL LEBOW BUSINESS ANALYTICS

Clarivate Analytics: Designing a Sales Dashboard

Sarah Malik and Murugan Anandarajan, PhD

This case study was written solely to provide material for discussion. The authors do not intend to illustrate effective or ineffective handling of a managerial situation. The authors have disguised certain names and other identifying information to protect confidentiality.

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INTRODUCTION

Christine McKay, a marketing analytics professional at Clarivate Analytics, was walking back to her desk after the annual marketing kickoff meeting with one goal in mind. All teams in the marketing department—Channel Marketing, Segment Marketing, Communications, and Business Analytics—were tasked with a new marketing objective for the quarter: contribute 23% of the organization's sales pipeline.

After logging onto her computer, Christine was greeted with 35 unread emails, each one detailing another urgent request from a sales representative. Resuming the routine she'd had for the past three months, Christine canceled her meetings to deal with the massive email requests. The meetings were vital to her team, but if she didn't answer these emails promptly, they would double tomorrow and create a chain of backlogged requests. With a sigh, Christine muttered to herself, "There must be a better solution."

BACKGROUND

Formerly the Intellectual Property and Science business of Thomson Reuters, Clarivate Analytics owns and operates a collection of leading subscription-based services focused on scientific and academic research,

patent analytics and regulatory standards, pharmaceutical and biotech intelligence, trademark protection, domain brand protection and intellectual property management.

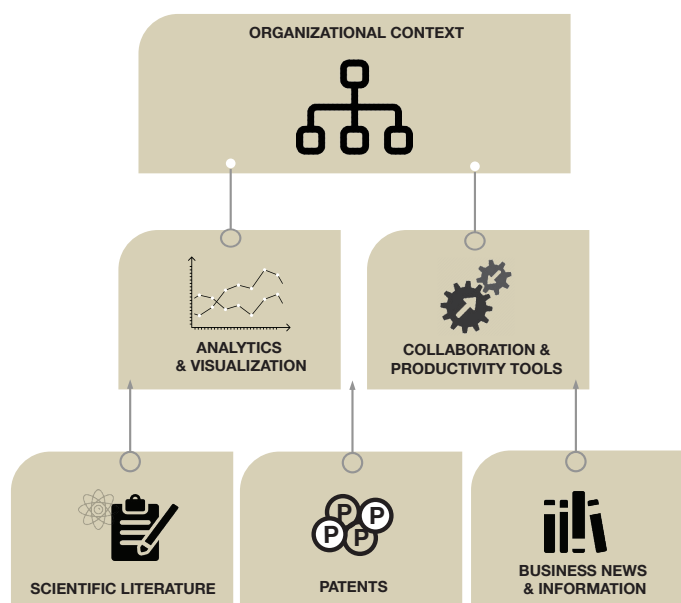
Clarivate Analytics is an independent company with 4,000+ employees, operating in more than 100 countries and owning recognized brands such as Web of Science, Cortellis, Thomson Innovation, Derwent World Patents, CompuMark, MarkMonitor and Techstreet, among others. On October 3, 2016, Baring Private Equity Asia and Onex Corporation completed the acquisition of the Intellectual Property & Science business from Thomson Reuters for \$3.55 billion. After the purchase, Clarivate Analytics was split into three divisions: intellectual property services, life sciences, and government/academia. As shown in Figure 1, Clarivate Analytics serves to provide trusted insights around the world by helping companies to discover, protect, and commercialize their ideas faster, staying true to their name which is derived from the words “clarity” and “innovate.”

One of the flagship products of the intellectual property services division is Thomson Innovation. Thomson Innovation provides “trusted global patent data, scientific literature, and business information with powerful analytics and easy-to-use workflow tools” to support intellectual property decisions. Through Thomson Innovation, companies save time, avoid risk and create commercial gain using comprehensive, relevant, and reliable information. Researchers do not need to worry about problems such as checking multiple sources, coping with foreign languages, or dealing with incomplete records. It provides the most trusted global patent data and scientific literature with the powerful capability of performing in-depth analysis and collaborating efficiently. Figure 2 illustrates how Thomson Innovation turns large volumes of data into actionable intelligence with interactive analysis and visualization tools. Thomson Innovation powers relevant intellectual property decisions by incorporating company data with the the latest global patent information.

Fig. 1



Fig. 2



SITUATION

The marketing group was tasked to contribute 23% of the sales pipeline - a drastic change since the current marketing contribution was approximately 11%. For every \$100,000 of the sales pipeline, at least \$23,000 had to represent marketing-influenced opportunities. For Christine and her team, the goal seemed impossible.

Within marketing, Christine worked on the business analytics team to identify actionable insights using data analysis. While different teams in the organization may have a deep focus on a specific type of data, the business analytics team had access to a broad set of data and supported all initiatives by Clarivate Analytics. As a result, Christine and her team were the key points of contact for all sales representatives, who would often call upon the team to provide data from Thomson Innovation.

Roughly 90% of Clarivate's revenue is generated from subscriptions, with many entering into multiyear or annual renewal contracts. Every year, sales representatives make any updates through Salesforce.com, a customer relationship management tool that is used to organize the companies' interaction with customers. Once the renewal is confirmed, the finance department sends an invoice to the customer and the customer pays the renewal amount for ongoing access.

Christine is vital during the renewal stage because of her access to different types of big-picture data. Sales representatives submitted all requests to her email instead of a ticketing system.

Table 1 outlines the types of information sales representatives would request and how long it took Christine to gather the information. For example, if a sales representative requested information for entitlements and revenue for Drexel University, it could take anywhere from three days to one week to gather the information. The information was housed in different databases, largely affecting the turnaround times. After the data was compiled, Christine would calculate the necessary functions and create a uniform format, using a Microsoft Excel document, and send the file via email to the sales representative.

Sales representatives would often send emails to Christine in the afternoon and expect the data by the end of the day {see Figure 3}. Since many turnaround times for data exceeded 24 hours, Christine spent time explaining to sales representatives why it was not feasible to return the data under such short notice. Often, databases would crash or time-out, preventing Christine from completing the data retrieval. She would need to wait hours to complete a single file extraction. Along with physical obstacles within the systems, there was also tension increasing between Christine's personal contacts around the office. For example, to gather information from the product team, Christine had to contact her colleague and request a favor. Eventually, favors would add up and work requests would hurt her relationship with those colleagues. Other contacts may stop responding due to irritation with Christine's one-off requests, even though her intent was to gather information for sales representatives. Christine would create a calendar reminder for each request, but depending on the number of metrics requested by the sales representative, the turnaround time may vary and the calendar notifications would increase.

GATHERING THE INFORMATION REQUIREMENTS

With experience as a business analyst for Thomson Innovation, Christine realized the number of requests could not be changed, but she knew there must be a way to understand how sales representatives were using the information she sent and how the increasing requests could become more manageable.

Christine wanted to approach the investigation through informal means; if she told the leadership team her goals, they would expect a solution by the end of the quarter. In Christine's mind, there may not be a

clear solution within that timeframe, and she didn't want the expectation of commitment to backfire on her later. Using her network, Christine approached various sales representatives in hallways, break rooms, and near coffee machines to understand their perspective on the situation. For example, here is a conversation in the break room with Sarah Malik, Christine's friend who was a sales representative:

Christine: "Hi Sarah, how's your day going?"

Sarah: "It's going well. How about you?"

Christine: "I've been thinking about the volume of Thomson Innovation sales requests and I know that you requested information about the Drexel University account yesterday. What kind of information is the most valuable to you? Why is it the most important?"

Sarah: "I'm glad you brought that up. I was just going to ask you whether I can get the information by the end of the day. In terms of what information is most valuable, I would say that the current and upcoming renewal status is most important. It allows me to track when I should contact the client and helps me gauge how much revenue is expected each quarter."

Christine: "Thanks! You're the third sales representative to mention current and upcoming renewal status; it looks like that is a vital piece of information. I'm going to head back to my desk and get the information to you by the end of the day. Talk to you later!"

Sarah: "Thanks, Christine. I can always count on you."

Christine not only began speaking to sales representatives but also to other marketing teams. She asked questions such as, "how is customer information captured?" and "how frequently is the information updated?" After speaking with various sales representatives and marketing groups, she noticed latent patterns. As the frequency of requests for certain types of information increased, the importance of the information grew. For example, after Sarah's conversation, Christine realized that three sales representatives before her had also mentioned the importance of current and upcoming renewals. Christine added tallies next to the data type as the frequency increased.

She continued to converse with different data owners and a pattern began to emerge: a series of values were either favorable, unfavorable, or indifferent for Clarivate Analytics. The following data points were the top eight of the total metrics.

1. Current and upcoming renewals: Quantity and renewal status (likelihood to close) of outstanding renewals
2. Thomson Innovation revenue and spend: Trends in revenue amount of the Thomson Innovation product
3. Other Business Units: Trends in revenue amount of other Clarivate Analytics products the customer owns
4. Entitlements information: Number of registered users compared to total number of users in their Thomson Innovation subscription.

5. Usage metrics: Percent difference in page views: last month compared to 12-month average
6. Training metrics: Number of trainings attended within the previous year
7. Cases metrics: Number of tech support cases within the previous year
8. Intellectual Property Services Opportunity metrics: all current and previous year's opportunities and their probability status

Excited that she had finally found the eight most commonly requested metrics from sales, Christine met with Sara to share her findings.

Christine: "Hey Sarah! Here are the nine data points that were requested most often by sales representatives. Let me walk you through them and explain."

Sarah: "Wow, this is a great way to summarize what sales representatives want to understand about their customers. This answers 90% of my questions and gives me enough to understand the customer's activity and enable me to better communicate with them. But I would need to be walked through the data again and again."

Christine: "Well it's great that this helps you, but not helpful that you'd need me to explain each time. That means everyone would need help each time. I'll try to create a user-friendly visualization tool that would allow anyone to understand the status of the account."

Sarah: "Yes, that would be really helpful to my role."

Christine: "I wonder how we can fix this problem."

Sources:

Acquisition info: <http://www.bpeasia.com/news/161003-thomson-reuters/>

Thomson Innovation: <https://thehub.thomsonreuters.com/docs/DOC-1550699>

APPENDIX

Table 1 Data Requested From Sales

Marketing Department	Finance Department	Product Department	Sales Department	Customer Support
Role: To create and execute campaigns to target new prospects as well as existing customers to increase depth and breadth of product adaption and revenue generation Data requested: Customer response to campaigns Turn-around time: 2-3 hours Information warehouse: Salesforce.com	Role: To track all revenue and spending habits Data requested: Customer revenue trends Turn-around time: 3-5 days Information warehouse: 15 different billing systems	Role: To track what portion of the product the customer is entitled to and how often they are using the product Data requested: Usage trends, entitlements, and upgrade information Turn-around time: 1 week Information warehouse: Favor-based to colleague in product team who had access to databases	Role: To work 1:1 with prospects and customers to close new sales, create renewals, or create opportunities for product upgrades Data requested: Renewals and new opportunity information Turn-around time: 2-3 hours Information warehouse: Salesforce.com	Role: To provide technical support to customers on product usages and general service questions Data requested: Type and number of support cases per account Turn-around time: 3-5 days Information warehouse: Salesforce.com however if sales representatives wanted deeper information, Christine needed to engage with the customer support team

Fig. 3

From: Sabrina
To: Christine
Date: 5/9/2016 at 2:44pm
Subject: Urgent - data for Drexel Univ

Hey,

Me again with the same request :)
I need the following info for Drexel:

Spend by month for last two years

Products purchased in last two years

Entitled seats for each product

And usage for each

Cust Support cases and what they were for (is there a case subject or type or something similar?)

Who submits those cases – contact details

Time to resolved case

Open/closed/lost opps

Open/closed/lost renewals

And sorry for the rush but I need this ASAP since I have a meeting with them tomorrow at 8:30am.

Thanks!

