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Analytics

Machine Learning Can Help B2B Firms Learn More About Their Customers

by Stephan Kudyba and Thomas H. Davenport

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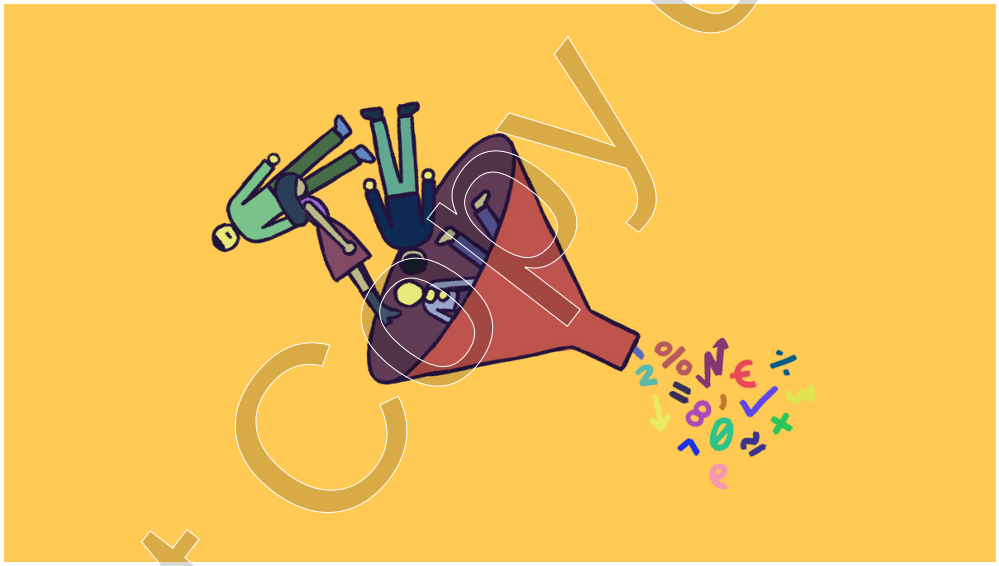

vincent tsui for hbr

Much of the strategic focus in the digital economy thus far has revolved around getting better insights into consumers. B2C firms have been the leaders in customer analytics initiatives. E-commerce, mobile commerce, and social media platforms have enabled businesses to better sculpt marketing and customer support initiatives and customer services. Extensive data and advanced analytics for B2C have enabled strategists to better understand consumer behavior and corresponding propensities as visitors and purchasers conduct daily activities through online systems.

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But there is also an emerging capability to gain insights on business customers. B2B, or the process of marketing and selling product and service offerings to business customers, is experiencing an intensified focus with the increased availability of new digital data that describes businesses. Traditional B2B insight activities have involved such limited data as size of companies as measured by revenue, capitalization or employees, and industry type as formally classified by SIC codes.

The internet offers a much more detailed level of data, going well beyond standard industry categorization. Web content that provides robust, detailed descriptions of companies provides valuable descriptive information. However, these digital resources yield little value unless individual customers are identified and their detailed backgrounds and interests are analyzed to provide strategic insights for suppliers. And that's where AI techniques provide can help.

Neural networks and "deep learning" algorithms, along with other machine learning methods, enable data scientists to mine the gold in digital formats. These AI-based methods involve advanced search techniques that identify, categorize, and gather user-defined data elements corresponding to search criteria. For example, considerable business description information exists on LinkedIn. But how can organizations analyze each profile on the network? Well-designed AI-based algorithms are the key to extracting information from LinkedIn. These more structured data resources then provide the means for yet another application of AI-based algorithms, where the focus is on identifying patterns in data that ultimately provide the basis for predictive sales and marketing models. These can be used for scoring, forecasting, and classification capabilities. By helping B2B companies gather better data on their customers, AI will help them catch up with their B2C peers.

One company focusing on AI-based analytics for B2B applications has adopted a unique way of leveraging the extensive digital footprints that provide descriptive attributes of all types of firms. Its approach to

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leveraging data assets combines the art and science of producing analytic solutions. EverString Technology considers the diverse sectors of the web that contain descriptive information of businesses (for example, site domains and employee digital footprints) and incorporates input from expert practitioners in the B2B space to help further describe individual businesses. EverString deploys machine learning to identify, extract, and model a categorization scheme of companies so that users in the B2B space can more accurately identify opportunities.

B2B companies need to know, for example, how many companies exist in a given market space. How can they identify and access all those firms that fall into the market pertaining to their product or service? And which specific buyers should they target in those firms? By creating a micro-categorization scheme and applying guided AI to various sectors of the web, EverString can produce thousands of customer insights in a short period for its B2B customers. The company has created an intelligent system to augment customer data in the B2B space.

One B2B company that utilizes EverString's platform is Autodesk, a multinational software company that provides software for the architectural, engineering, construction, manufacturing, media, and entertainment industries. A major focus in Autodesk's approaches to B2B sales over the past several years has been on using more data for account selection and understanding. But in large design-oriented companies, it is often difficult to understand which individuals might have an interest in computer-aided design software.

Prior to working with EverString, Autodesk relied on field experience and customer buying histories. Now it relies increasingly on predictive analytics from EverString to identify likely customers. One key tool is the Enterprise Business Agreement Propensity Model, which suggests which executives in a large customer organization are most likely to engage in an enterprise-level agreement with Autodesk. The company also maintains an

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overall account potential model that makes use of EverString data and predictions.

The primary users of the data and models are, of course, the Autodesk sales force. They are given ranked recommendations and the raw scores created by the EverString models. The Global Sales Strategy organization within Autodesk manages the process and tries to ensure that the data and models check out.

It is early days for the use of these capabilities at Autodesk, but thus far both the sales teams and the Global Sales Strategy group feel that the EverString offerings are very helpful to the sales process. As Matthew Stevens, Autodesk's sales insights manager within Global Sales Strategy, told us:

> *EverString provides key inputs on analytics, which we convert into potential sales opportunities. It's early to judge the exact payoff, but it's difficult to imagine making a recommendation without these insights. We are challenged to respond to all the questions about accounts and scores, but at least we have data to support our recommendations now.*

Stevens also noted that there are many more activities to pursue in the future with this data-driven approach to sales:

> *Finding data on European and Asian companies is challenging due to privacy regulations and language differences. We're working with EverString to understand these opportunities better. Currently our EverString analytics and data are not connected with Salesforce, our CRM system. But we are at the first stage of a multistage journey to understand analytics and insights in sales. We are definitely moving in the right direction.*

New tools from organizations like EverString are enabling B2B-oriented firms like Autodesk to develop much-more-data-driven approaches to sales and marketing. The amount and quality of data on businesses may

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not yet approach that for consumers, but there is considerable progress being made in achieving parity.

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