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What Ways Can We Use Big Data to Offer More Personalized and Tailored HR Services to our Employees?

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Abstract

Big data analytics—analytic techniques operating on big data—is continuing to disrupt the way decision-making is occurring. Instead of relying on intuition, decisions are made based on statistical analysis, emerging technologies and massive amounts of current and historical data. Predictive analytics, which will be featured in much of the research below, is a type of big data analytics that predicts an outcome by correlating the relationships of various factors. These predictions can be made utilizing a variety of organized structured data and disorganized unstructured data (i.e. social media posts, surveys, etc.)

Keywords

human resources, big data, HR analytics, analytics, tailored employee services, personalized employee services

Comments

Required Publisher Statement

EXECUTIVE SUMMARY

RESEARCH QUESTION

What ways can we use big data to offer more personalized and tailored HR services to our employees?

DESIRED RESEARCH

A company wants to learn how other firms are using big data to provide better and customized HR services to their employees. Specific case studies and general research on the capabilities of big data relating to personalization are desired.

INTRODUCTION TO BIG DATA

Big data analytics—analytic techniques operating on big data—is continuing to disrupt the way decision-making is occurring. Instead of relying on intuition, decisions are made based on statistical analysis, emerging technologies and massive amounts of current and historical data. Predictive analytics, which will be featured in much of the research below, is a type of big data analytics that predicts an outcome by correlating the relationships of various factors. These predictions can be made utilizing a variety of organized structured data and disorganized unstructured data (i.e. social media posts, surveys, etc.)[1]

CASES: REAL-WORLD EXAMPLES

Health Services

Collecting big data on employees' well being can help employers develop customized health services. *Dell* launched a company program called *"Well at Dell"* to encourage healthy lifestyles by harnessing employees' medical data. Based on medical data and health risk assessments, employees receive alerts and information customized to their health issues, incorporating their latest test results and treatments, allowing them to make more informed decisions. A newly diagnosed diabetic, for example, might get information about how to monitor blood sugar and watch out for the circulatory problems that often accompany the disease. A health strategy comprising of carefully selected benefits that target the entire workforce and catered to specific employees' wellbeing issues can be hugely beneficial to staff, while providing a return on investment for employers.[2]

Facilitating Collaboration and Simplifying Workflow Processes

Using HR big data to simplify workflow processes and clarify points of contact is one method of personalizing HR services. *McKinsey Quarterly* demonstrates how an organization can foster collaboration through big data. After identifying a company's functions or activities where connectivity seems most relevant, it can then map relationships within those priority areas. Options for obtaining the necessary information included tracking e-mail, social network tools, observing employees, using existing data (such as time cards and project charge codes), and administering short (5- to 20-minute) questionnaires. With the information in hand, a company can create network maps illustrating relationships and clarified contact points within the organization on each subject matter. This analysis driven by big data will help the company by eliminating collaborative inefficiencies and be beneficial to each employee by simplifying process workflow processes.[3]

Policy Alteration
After noticing women were departing at a higher-than-average rate, Google analyzed its HR big data. It discovered that new mothers were at the root of the issue. As a result, Google altered its maternity leave policy and reduced the attrition rate for new mothers by 50%.[4]

Training Programs
Additionally, other data showed that women were promoted at a lower rate than men because women were less likely to nominate themselves for a promotion. Consequently, Google began providing workshops to encourage women to nominate themselves for promotional opportunities. Google also used structured and unstructured data (i.e. interviews, evaluations, etc.) to find the traits of good managers. With this type of information, firms could create customized training programs for employees to develop the traits employees may lack.[5,6]

BIG DATA PERSONALIZATION CAPABILITIES
Because of the scarcity of information on big data for the personalization of HR services, this section will seek to illustrate the capabilities of big data that can be tapped into and applied to the personalization of HR services:

(1) Utilizing various data points, Target was able to create a model that predicted when a customer was pregnant, allowing Target to send coupons tailored to pregnant women (See Appendix 2). Leveraging logged data from HR, this firm can identify past behaviors, use this knowledge to predict future needs of services, and tailor/provide these services accordingly.[7]
(2) One personal-line insurer uses comprehensive customer profiles, with data points that are constantly updated, to tailor insurance policies accordingly for each customer. If this firm encourages its employees to update their employee profiles as they relate to HR services (i.e. education schedule→tuition reimbursement and flexible work arrangements; illnesses→FMLA and reasonable accommodation), it can personalize its services quickly and notify the relevant employees.[8]
(3) Big data allows firms to build scripts that proactively identify and mitigate issues causing dissatisfaction; they are also used to deliver campaign messages. These tactics can be used to follow up on employees' requests and populate personalized information in correspondence.[9]

LEVERAGING BIG DATA GOING FORWARD
The talk about Big Data is getting louder by the minute. In order for firms to provide the best, tailored services possible, they must harness the power of big data analytics. Structured data is important but unstructured data is crucial for personalization, as it demonstrates the sentiments of employees. The cloud is making access to, and management of, such data easier. In summary, to best leverage big data analytics for personalization, consider the three V's (See Appendix 3), utilize emerging technologies, and be creative.

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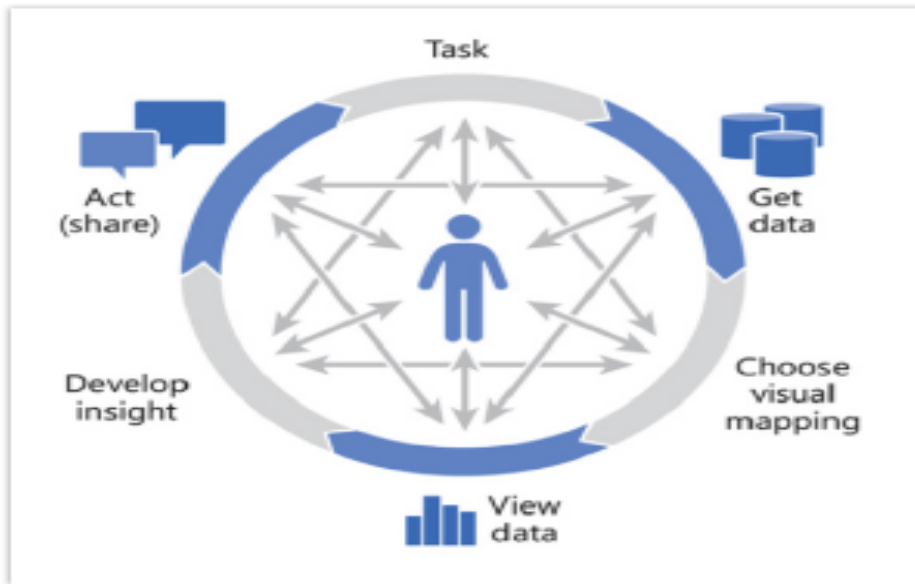
Source: Jock D. Mackinlay, PhD, "How to See and Understand big data," 2007

(2) Excerpt:

"If companies can identify pregnant shoppers, they can earn millions.

The only problem is that identifying pregnant customers is harder than it sounds. Target has a baby-shower registry, and Pole started there, observing how shopping habits changed as a woman approached her due date, which women on the registry had willingly disclosed. He ran test after test, analyzing the data, and before long some useful patterns emerged. Lotions, for example. Lots of people buy lotion, but one of Pole's colleagues noticed that women on the baby registry were buying larger quantities of unscented lotion around the beginning of their second trimester. Another analyst noted that sometime in the first 20 weeks, pregnant women loaded up on supplements like calcium, magnesium and zinc. Many shoppers purchase soap and cotton balls, but when someone suddenly starts buying lots of scent-free soap and extra-big bags of cotton balls, in addition to hand sanitizers and washcloths, it signals they could be getting close to their delivery date.

As Pole's computers crawled through the data, he was able to identify about 25 products that, when analyzed together, allowed him to assign each shopper a "pregnancy prediction" score. More important, he could also estimate her due date to within a small window, so Target could send coupons timed to very specific stages of her pregnancy. "

(3) "3Vs (volume, variety and velocity)." What is ?. N.p., n.d. Web. 7 Mar. 2014. <http://whatis.techtarget.com/definition/3Vs>.