

Introduction

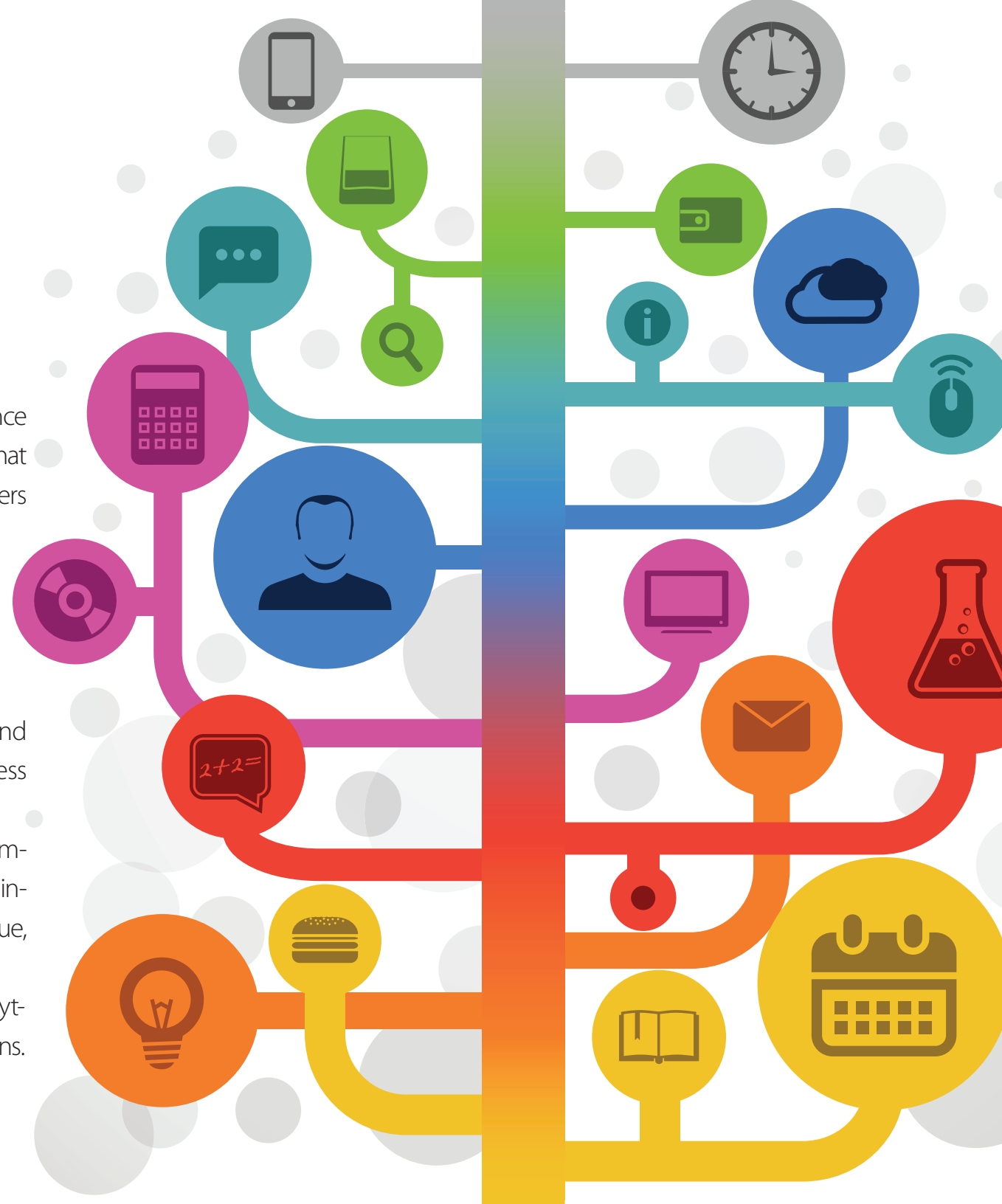
Throughout history, business leaders used previous positive performance to make decisions. They did what worked before and stopped doing what didn't work. Analytics, where it existed, was rudimentary. Business leaders relied on intuition driven by experience.

While this worked well much of the time, it also resulted in spectacular failures, as well as frequent disconnects between the business and the customer.

Now, all that is changing. We're entering an era when the business decision-making process and results are being transformed, driven by big data and analytics. Sure, intuition and experience are important – but in the end, business decisions are becoming objective.

This revolution is particularly powerful in customer relationships – the most important business relationships. Big data and analytics change how businesses interact with customers by helping them build long-term relationships, realize value, and incorporate all sources of data.

A holistic view of the customer is made possible with a robust big data and analytics platform and can ensure unique experiences and personalized communications.





The Four Benefits

Effective use of big data and analytics with regard to customer relationships requires a systematic approach. Businesses must build on the four basic structural components.

Big data and analytics provide support for identifying and preempting customer defections.

Acquire Customers

Big data and analytics help identify potential customers and bring them into the fold.

Personalize Interactions

Personalization is crucial to acquiring, growing, and retaining customers by converting insights into relevance to deliver targeted messages that fit customers' individual needs.

Increase Profitability

Big data and analytics improve the ability to grow lifetime value of ideal customers.

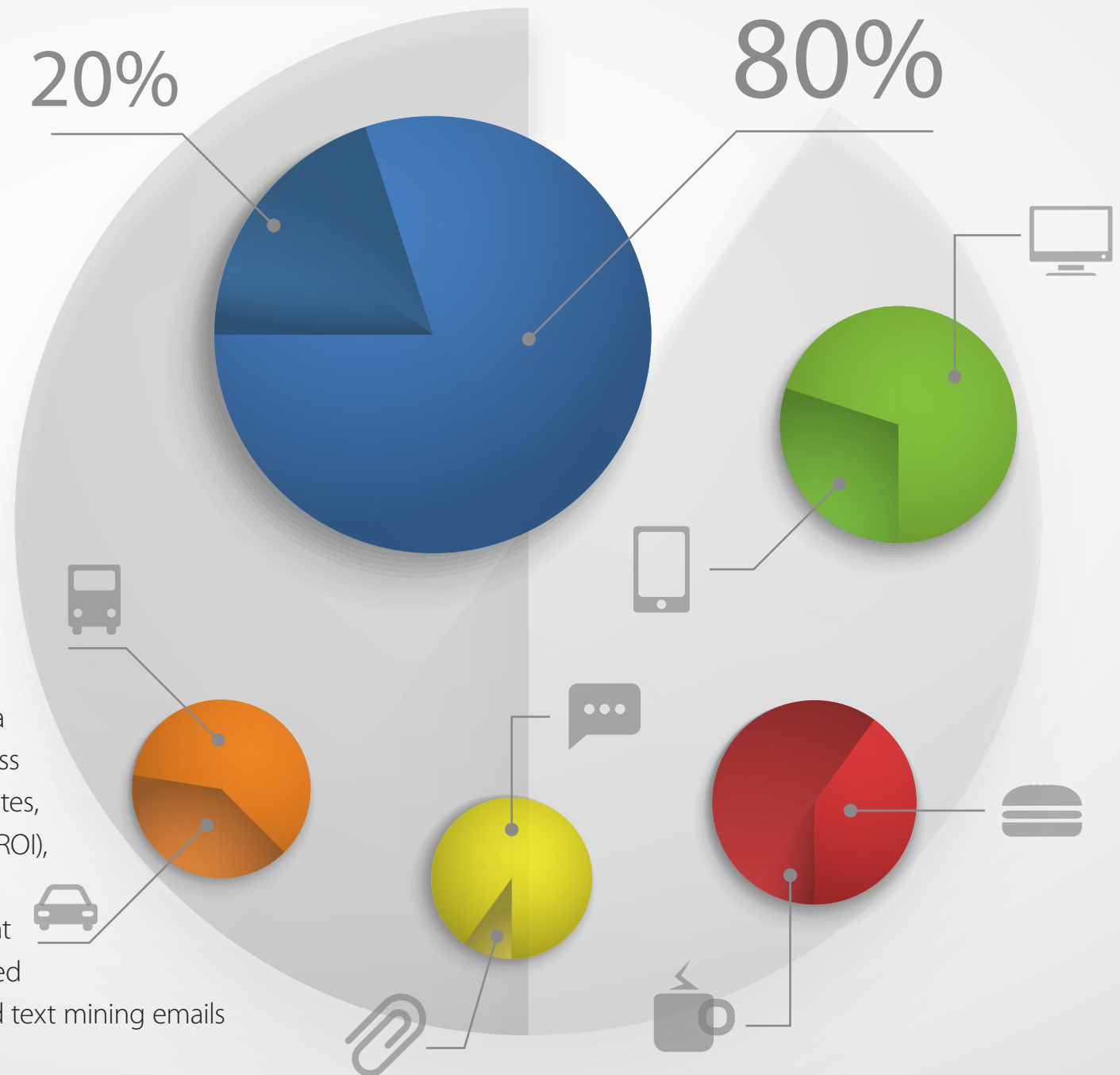
Retain Customer Loyalty

Make Your Business **BIG DATA** & Analytics-Driven

Big data and analytics don't just improve profitability and reduce costs (although those goals will be achieved). They can be truly transformational.

Analytics enhance the entire customer lifecycle. Big data and analytics provide metrics to gauge the effectiveness of customer programs. These metrics include revenue, conversion rates, satisfaction key performance indicators (KPIs), return on investment (ROI), and progress through the purchasing pipeline.

Organizations should look to what they already know about current customers to ensure the ideal, most profitable prospects are targeted for acquisition. Businesses should use research tools such as data and text mining emails and social analytics to acquire customers.

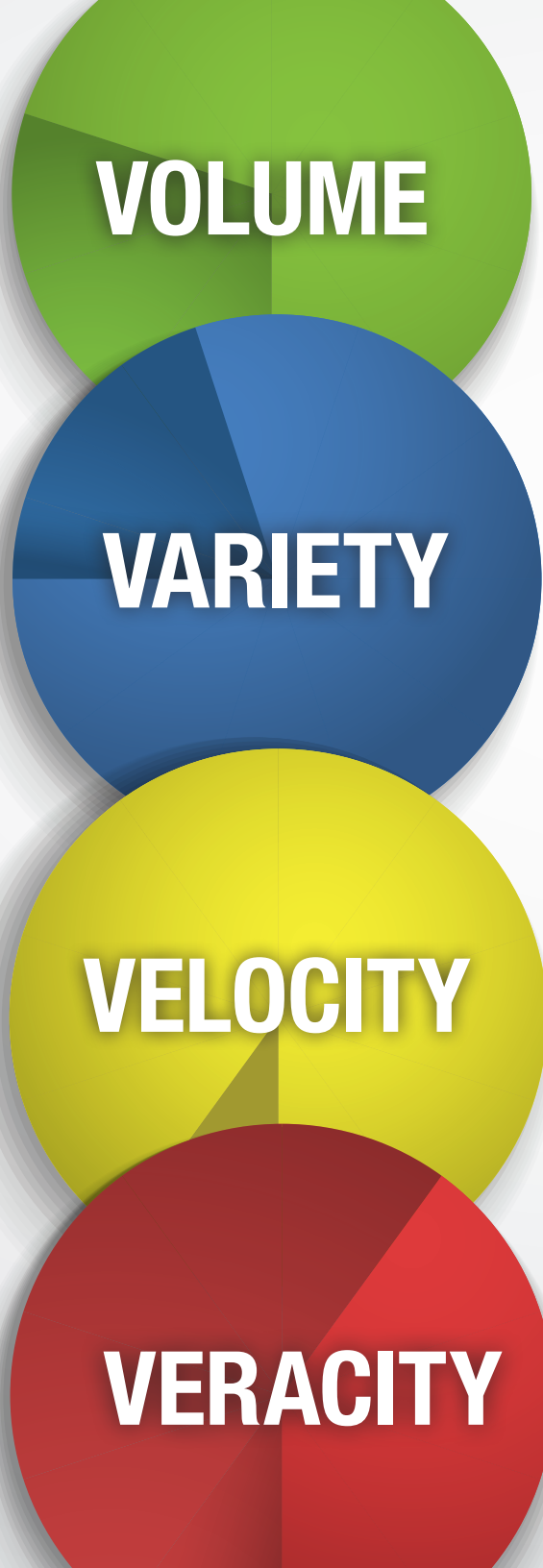


The Four Vs

The next step is increasing revenue per customer using tools such as loyalty programs, upselling, and cross-selling, and price optimization.

Companies also need to retain customers by using big data and analytics to identify those likely to defect and entice them to stay.

But to achieve these ends, companies need to understand the basics of big data and analytics itself **(See Four Vs Graphic on right)**.



← **Increased instrumentation and customer conversations** generates staggering amounts of data. Ninety percent of the data in the world today was created in the last two years. That'll likely increase 50-fold in the next decade.

← **Data is available in multiple formats.** The two most important categories for this discussion:

- **Structured data** can be classified and put into rows and columns in a database. Customer transactions are an example of structured data.
- **Unstructured data** includes video, voice, and free-form text like that which can be found in enterprise content management (ECM) systems. Unstructured data also includes social media content such as tweets and Facebook updates. Unstructured data requires complex analysis to make sense of it and make it useful. About 80 percent of data now available is unstructured.

← **The data just keeps** coming faster and faster: transactions, social media updates, emails, phone calls, notes from sales calls, and on and on. Businesses need to keep on top of all of it. They need to analyze data in real-time (or as close to real-time as possible) to extract its value. For example, timing is crucial to deliver the optimal, targeted retention offer to keep valued customers from defecting to a competitor.

← **Businesses need to eliminate** uncertainty about data. There may be multiple customer IDs in the system for an individual customer, each perhaps with a slightly differently spelled name or nickname. Businesses need to resolve those discrepancies to increase the efficiency of marketing campaigns and not bother customers with the same message multiple times.

Businesses need to use the following types of data and content to get a 360 view of the customer:

- Descriptive data includes self-declared information and demographics.
- Behavioral data includes orders, transactions, and other customer activity as recorded by the business.
- Interaction data includes email, chat transcripts, records of calls between the business and customers, and web click streams.
- Attitudinal data includes opinions, preferences, needs, and desires. These are often discovered through survey responses or social media data.

Businesses need to use data mining, data management, and data integration and governance to ensure all data is included and organized appropriately in order to get insights.

Being data and analytics driven also requires having the right IT infrastructure in place, specifically an optimized infrastructure to deliver insights at the point of impact to empower all employees. Effective use of big data and analytics requires that companies operate in real-time or the right time – across multiple customer

touch points and in the face of competitive threats. Companies need to make sure analytics can access data and provide insights quickly and efficiently. Data needs to be accessed as needed, no matter what its format or where it may reside.

Visualization is needed to communicate insights throughout the organization. Human beings are wired to think visually. Dashboards help decision makers understand complex data quickly, providing the big picture while data exploration enables them to quickly dig into the details in a visual fashion. Custom reporting using color coding, mapping, and other visual formats helps decision makers process information. And simulations display what-if scenarios to help make decisions quicker and with better results.

Customer interactions need to be repeatable and consistent. Companies need to embed and automate intelligent decisions into operational processes.

• **Predict lifetime value of a customer.** Big data and analytics help companies predict how much a lead is likely to spend as a customer by comparing that prospect with the characteristics of current customers. This analysis enables businesses to acquire customers selectively. Businesses can focus on acquiring high-value customers and exclude low-value customers who drain resources and produce reduced or even negative profitability.

And there are other benefits to big data and analytics. The capabilities that comprise a comprehensive big data and analytics solution provide insight into competitor activity. In particular, social media analytics can help businesses compare how often they're being discussed in a positive and negative light compared with competitors. Businesses can measure customer mindshare as well as sentiment in comparison with their competition. But that's just the beginning. Big data and analytics can allow businesses to interpret

the signs of a competitor making a significant change, such as a new pricing strategy, product launch, or strategic direction, achieving a big customer win or losing a customer.

Having this background means that, with big data and analytics, companies can accurately feed customers with customized offers throughout the customer's relationship with the business, beginning with acquisition and continuing with growth and retention.

This helps cut marketing costs by improving targeting efficiency and reducing spray-and-pray marketing. A business not using big data and analytics and relying on spray-and-pray sends every offer to every potential customer in its marketing database, hoping a few offers – or enough – will prove fruitful. Spray-and-pray marketing has always been an expensive, wasteful proposition. And it's getting worse.

Only a few years ago, marketing was limited to a few primary channels, mainly direct mail, phone, broadcast advertising, and print. Now,

the channels are exploding: all of the old channels plus email, social media, online advertising, mobile, and more.

The value of big data and analytics is displayed not only by helping marketing maintain consistency across all those channels and use all of them effectively, but also, and even more importantly, by using all information created by these additional channels to make decisions more intelligently.

Acquiring high-value customers is a multi-step process, and big data and analytics can guide you every step of the way:

Facilitate progression through the marketing pipeline. Before they become customers, consumers and business buyers start by identifying their needs and researching possible solutions. They then move on to research specific products and services. Later, they contact companies to begin the sales process. Big data and analytics help businesses guide potential customers every step of the way.



Develop personas based on characteristics of customer micro-segments.

Some customers are more concerned about pricing, others about quality, others about service, and more. Many will be receptive to emotional messages evoking family, beauty, health, and so on. (That’s particularly true for consumer products and services.) Big data and analytics identify the common, finely grained characteristics of potential customers and group like characteristics with like customers.

Execute individualized marketing strategies. Once you’ve used big data and analytics to identify high-value sales leads and their needs, now comes the time to deliver the messages most likely to work with each potential customer.

Compare performance of marketing campaigns. How did you do? Which campaigns worked best? Which campaigns worked least well? Which campaigns can be more effective when tuned for better performance? Big data and analytics is the guiding star to help constantly adjust direction to reach the goal of improved business performance.

Know the attributes of your current high-value customers. A great way to find new high-value customers is to cultivate relationships with individuals and businesses that resemble your current best customers. Big data and analytics can help build profiles of the most profitable current customers. What are their characteristics? What are their qualities and special needs? Do they require a great deal of customer service? Are they strongly influenced by social media?

Understanding current customers helps with the acquisition of new ones. Discovering the attributes of high-value customers helps focus efforts on leads with similar characteristics.



As an example of how big data and analytics can help, consider **RFM** analysis. This is a relatively simple tool that grades customers on **three** criteria:



REGENCY

When was the last time the customer purchased something?



FREQUENCY

How often do they visit?



MONETARY VALUE

What’s the average spend?

Customers with **high** RFM scores are the **best customers**, and the leads that most closely resemble those customers are the ones to target.

Grow

Acquiring customers is necessary but expensive. Another vital way to increase revenue and profit is to make your current customers more valuable. Big data and analytics help achieve this goal by using advanced association methods that deliver targeted upselling and cross-selling offers in real-time and optimizing use of marketing resources.

Cross-selling suggests products that are often bought together. Upselling adds additional features to a product or service. You're familiar with both cross-selling and upselling if you've ever visited a fast-food restaurant. "Would you like fries with that?" is an example of cross-selling. "Would you like to super-size your order?" is upselling. Big data and analytics tools can help aggregate information to make intelligent upselling and cross-selling offers across a broad portfolio of products.

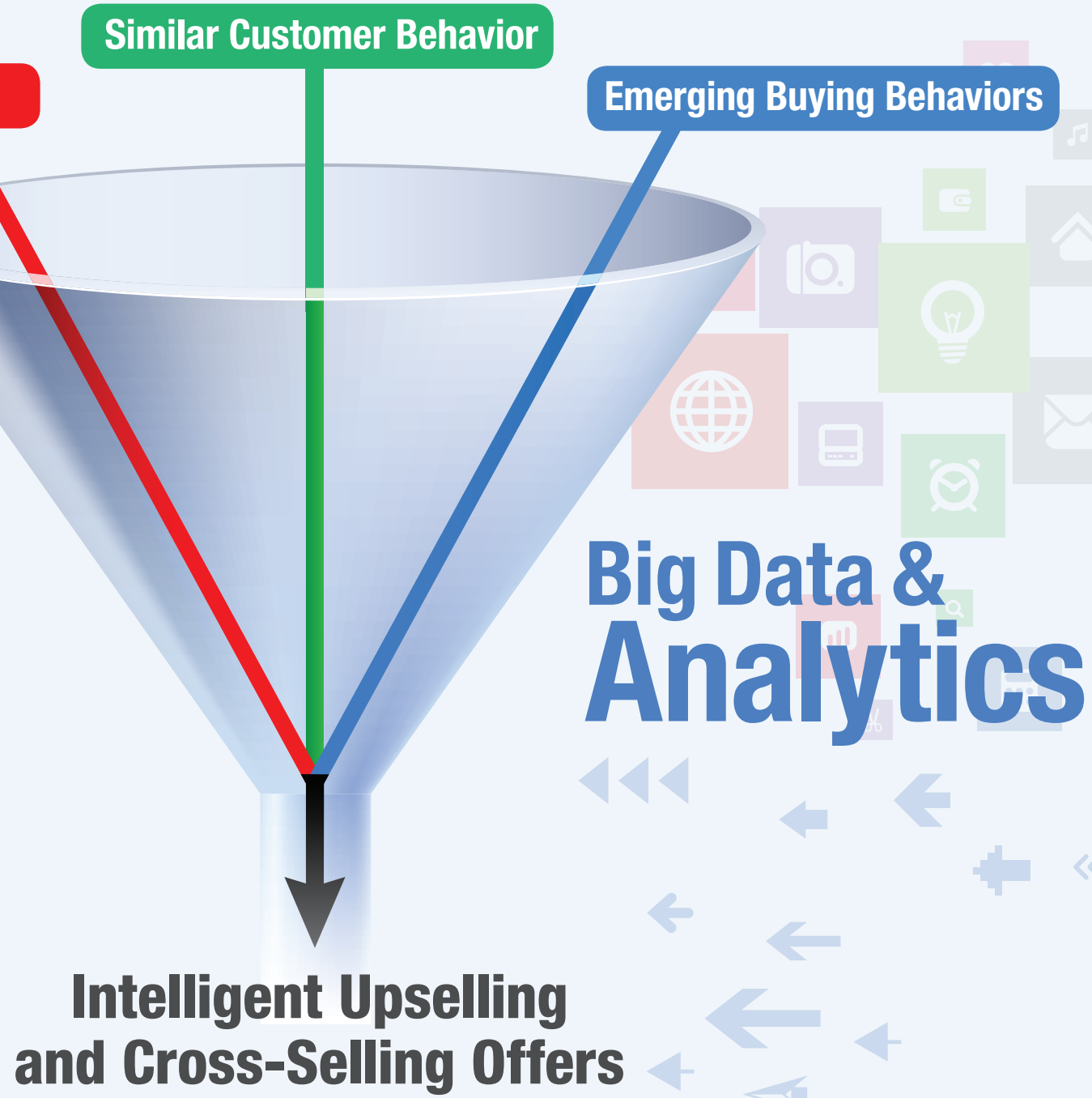


Simple upselling and cross-selling begins with, "If customer buys Product A, then offer Product B." But big data and analytics enables much more sophisticated opportunities. It looks at the world of information available to business, looking deeper at customer attributes and outside circumstances surrounding the purchase – weather, day of the week, time of year, social conversations, and more.

Improving customer value adds to profitability and loyalty. The process starts with comparing customers' purchase behavior against similar customers. Also, look outside the company. Understand emerging customer buying behaviors.

Consistency is key to increasing customer value. The most effective use of big data and analytics requires consistency and collaboration across the enterprise. Enterprises need to provide a consistent experience to the customers, no matter what channel is being used for communication: email, in person, online, mobile, apps, or voice telephony.

Defining the customer lifetime value (CLV) is also important. A business can't grow what it can't measure.



The components of CLV are:

- Acquisition costs
- Margin generated by the customer
- Retention rate
- Social influence – the value the customer provides through social interactions

CLV helps target campaigns to achieve several beneficial goals: increasing profitability, driving customer acquisition, identifying customers who may defect or who are a drain on internal resources, and qualifying inbound sales leads.

CLV improves marketing by defining how much you actually spend to acquire a customer or to keep that customer from defecting.

Big data and analytics can provide several benefits to drive marketing to current customers. It sends the right message to the right customer through the right channel at the right time. And it maps customer behavior to the buying cycle, thereby enabling the business to serve an offer or content that matches the customer's buying stage

and helps progress that customer to a purchase.

Businesses need to measure to ensure their marketing efforts toward current customers are paying off. Businesses also need to test offers to optimize ROI.

Businesses should use predictive modeling to anticipate the future behaviors of individual customers. Predictive modeling takes two forms:

- Predictive modeling can identify a set of clusters describing how cases in a dataset are related, identifying which items are purchased together (often called a market basket analysis or affinity modeling).
- It can also take the form of a decision tree, which predicts an outcome and describes how different criteria affect that outcome, identifying indicators affecting a propensity to respond, purchase, or defect.

To create the predictive model, the algorithm first analyzes data looking for specific patterns or trends. Then, the algorithm applies the model across the entire dataset to extract useful patterns and detailed statistics.



Retain

osing customers is a big problem for any business. Customers may become dissatisfied or angry, and they may take their business elsewhere.

Losing one customer is bad enough, but a single dissatisfied customer has new channels to spread the word and bring other customers with them. Customers can, and do, vent their dissatisfaction through social channels such as Twitter and Facebook. A single pebble can cause an avalanche.

Businesses need to identify at-risk customers and head off defections of valuable customers. Big data and analytics can help by improving retention and customer satisfaction through sentiment analysis and scoring to make tailored offers proactively.



Gaining a 360° view of the customer can provide organizations with valuable information about how to serve customers better and foster brand loyalty.



Retention looks for behavioral anomalies, or behavior contrary to acceptable practices, which could result in a defection decision. After identifying those patterns, businesses can take action to make sure customers are retained. (But only retain the most profitable customers. Let competitors have customers who require a large investment of resources but generate minimal profits.)

Big data and analytics help spot behavioral anomalies that indicate a customer is at risk of being lost. For example, until recently, the first sign a telephone company received that a customer was at risk of defecting was when that customer called to cancel service. At that point, the company would try to talk the customer out of the decision, but by then, it was usually too late to win the customer back.

Big data and analytics does better by helping spot early warning signs – for example, flagging customers who make an increased number of service calls, complain about dropped calls, and then visit the FAQ on the company website to

find out how to terminate a contract early. Big data and analytics tools spot anomalies, mine call log text, and identify at-risk customers before they are ever lost.

Gaining a 360° view of the customer can provide organizations with valuable information about how to serve customers better and foster brand loyalty. Companies can build information about customers using sentiment information from surveys, interactions, and social media to gain insight. Using that data, companies should tailor offers, track relationships, and identify where customers reside within the purchase funnel.

The best businesses have been getting 360° views of their customers for a long time. It's a scientific means to an old business principle: Get to know your customers better. You already know how your customers have behaved in the past and how they are behaving now. But you really want to know what's in their heart, their experience, and their deepest desires in the areas where you can serve them.

Big data and analytics can give you that.



Personalize

Personalization is the fuel driving the engines of acquisition, growth, and retention. Personalization ensures that each customer interaction is unique and moves the customer along the buying journey. By using big data and analytics, businesses can predict the best communication method, channel, message, and time of delivery to reach each individual customer.

Businesses need to achieve a deep understanding of customers, including all types of information about them. By using that information, businesses can acquire, grow, and retain customers.

The alternative to personalization is mass marketing – spray-and-pray, which has been covered previously and is not viable. It's expensive and inefficient. Too many messages go out to customers who just don't care. Perhaps worse, they reduce the size of the marketing database as customers and leads opt out of receiving messages.





Personalization goes far beyond sending messages. It extends to all parts of the company: the website, interactions over the phone, face-to-face communications, email, social media – all channels.

In every communication, customers require personalized messaging tailored to their desires, needs, and individual characteristics. Personalization incorporates all customer data, structured and unstructured, inside the firewall and external, to provide a custom message to every customer and lead. Moreover, messages and interactions must be unique and granular, beginning with the initial contact and following up with contacts after the initial purchase, to increase profitability and loyalty.

Personalization goes beyond segmenting groups to segmenting individuals. This kind of micro-segmentation identifies each individual customer's preferences, needs, and behaviors. Personalizing offers at that level maximizes marketing campaign dollars and enhances the


customer relationship.

For example, neural networks and decision trees can be effectively applied to micro-segmentation. Neural networks uncover complex patterns in types of customers and rank each by scoring their likelihood to respond to a specific offer. Decision trees use branching graphs to portray decisions and their likely outcomes.

Conclusion

Big data and analytics can help businesses deliver on customer needs, acquire customers, increase current customers' profitability, and retain the most valuable customers by keeping them from churning. To achieve those goals, businesses need to deliver personalized, relevant messages driven by the insights derived from big data and analytics.

But that's just the beginning of what big data and analytics can do for your organization. It can help you streamline operations, find new sources of revenue, manage risk, and prevent



fraud and counterfeiting. Organizations today analyze less than 1 percent of the vast supply of incoming data. Using big data and analytics, smarter enterprises can change how they work, serve more customers, and enhance the products and services they offer.

Get started today.

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