

# Big Data and Predictive Analytics Are Now Easily Accessible to All Marketers

**P**redictive marketing is the evolution of relationship marketing defined and practiced by many direct marketers in the last few decades. Predictive marketing is not a technology, but an approach or a philosophy. Predictive marketing uses predictive analytics as a way to deliver more relevant and meaningful customer experiences, at all customer touch points, throughout the customer life cycle, boosting customer loyalty and revenues.

The rise of predictive marketing is fueled by three factors: (1) customers are demanding a more personal, integrated approach as they interact with marketing and sales through many channels, (2) early adopters show that predictive marketing delivers enormous value, and (3) new technologies are available to capture new and existing sources of customer data, to recognize patterns, and to make it easier than ever to use customer data at the intersection of the physical and digital worlds.

Predictive analytics is a set of tools and algorithms used to make predictive marketing possible. It is an umbrella term that covers a variety of mathematical and statistical techniques to recognize patterns in

data or make predictions about the future. When applied to marketing, predictive analytics can predict future customer behavior, classify customers into clusters among other use cases. Other terms you might hear in the media to describe this process include *machine learning*, *pattern recognition*, *artificial intelligence*, and *data mining*. Predictive analytics and machine learning are used interchangeably in this book.

Predictive marketing is fundamentally changing both business and consumer marketing across the customer life cycle. It is transforming the focus from products and channels to a focus on the customer. Predictive analytics is used to improve strategies to acquire new customers, to grow customer lifetime value, and to retain more customers over time.

Innovative, technology driven companies like Netflix and Amazon have been using predictive analytics for years, and so have others like many in the telecommunications, financial services, and gaming industries, such as Harrah's Entertainment. The row of movies and TV shows "you might like" that appear when you curl up on the couch and turn on Netflix is a driving force of the company's success. It's all made possible by the translation of customer data with smart analytics. In fact, "75% of what people watch [on Netflix] is from some sort of recommendation," Netflix's Research Director Xavier Amatriain wrote on the company's tech blog in 2012.

Amazon has been using predictive analytics to drive success since the very beginning of the company. Recommendations that appear under a product you are thinking of adding into your cart is part of what makes Amazon such an e-commerce powerhouse today. The company has stated publicly that 35 percent of its sales comes from recommendations made by their predictive engines. That would equate to \$26 billion of revenue in 2013. The company is using predictive analytics in many other ways too, such as predicting which email newsletter to send you, or to nudge you at the right times to reorder an item.

In the gaming industry predictive models can set budgets and calendars for the casino's gamblers, calculating their predicted lifetime value in the process. If a gambler wagers less than usual because they may have skipped a monthly visit, the casino can intervene with a letter or phone call offering a free meal, a show ticket, or gaming comps. Without this type of customer analytics, casino operators might not notice what could be a slight, almost imperceptible change in customer behavior that might portend future problems with that patron. For example,

if a long-time customer decides to cash in all their player card points, perhaps it's because they are dissatisfied with their last experience at the casino property. Predictive analytics can quickly spot these trends and alert casino management to the issue so that they can approach the individual to find out if there is a problem. This kind of personalization can go a long way in appeasing a disgruntled customer, which might be the difference between retaining or losing them as a customer.

Harrah's Entertainment's Total Rewards, which was rolled out as Total Gold in 1997 and renamed Total Rewards a year later, is heralded by many as the gold standard of customer-relationship programs and is powered heavily by predictive analytics algorithms. The company's belief in its loyalty program grew so strong that it cut its traditional ad spending from 2008 and 2009 more than 50%. The company spent \$106 million on measured media in 2008; for the first half of last year it spent \$52 million and in this year's first half \$20 million. (Source: <http://adage.com/article/news/harrah-s-loyalty-program-industry-s-gold-standard/139424/>.)

Although some large brands have been using predictive analytics for many years now, it is not too late for other brands, large and small. In fact, predictive marketing is only now finding widespread adoption in medium and small organizations. A good example of a company that has achieved significant success with predictive marketing is Mavi, a high-fashion clothing manufacturer and retailer based in Istanbul, Turkey. Mavi is known for its organic denim favored by celebrities and supermodels. Mavi operates over 350 multinational stores and sales channels in the United States, Canada, Australia, Turkey, and 10 European countries.

Mavi started with a single predictive marketing campaign six years ago. When Mavi first got started, each department, including marketing and IT, used its own set of marketing reports and customer data, including key performance indicators. This led to cumbersome cross-referencing and impeded important decision making. Like many companies, the Mavi marketing team initially did not have access to customer data without relying on IT resources. This was the first problem that the team tackled. Mavi deployed a modern, cloud-based predictive marketing solution in 2009. This allowed the company to consolidate, cleanse, and de-dupe their customer data on a daily basis. They were then ready to start using data in hyperpersonalized campaigns.

One of the first predictive marketing programs that Mavi tested was a program around specific buying personas. Mavi used predictive analytics to find groups of people with distinct product preferences. In predictive lingo these are called *product-based clusters*. Mavi found at least three very different groups of shoppers: customers who favored mostly woven shirts, others who favored beachwear, whereas a third persona mostly shopped for new season high fashion and accessories. Mavi started to use these personas to implement more targeted marketing campaigns via email and short message service (SMS). Specifically, it implemented a reengagement campaign for lapsed customers that featured the right types of products with the right customers. Using these clusters, Mavi was able to reactivate 20 percent of lapsed customers. This was a big breakthrough because every customer saved or reactivated reduces Mavi's need to acquire new customers.

Mavi today is running more than 80 different predictive marketing programs in a year. Collectively, these campaigns helped add 7 percentage points to Mavi's overall revenues in the first few years, which is a huge sum on a dollars and cents basis. Wikipedia reports that Mavi revenues in 2014 were \$747 million, so that would be an incremental \$52 million. Mavi is still finding new ways to increase customer lifetime value, and with every campaign launched this number is pushed up higher.

Elif Oner, Mavi's head of customer relationship management, recommends all marketers get started with predictive marketing. She says: "Start small and pick just one program and build on that success." Elif is also the CFO's favorite marketer. Every dollar she spends in marketing, every discount she gives, is accounted for, tested, and optimized. The CIO Bulent Dursun also played an important role in realizing the potential of analytics and was a key supporter, which made the approach successful.

## **The Predictive Marketing Revolution**

Anticipating customer needs is not a new concept. What is new is the ability to anticipate and respond to customer needs automatically, near real time and at large scale, for hundreds, thousands, or even millions of customers at a time.

Not too long ago, you could walk into a corner store and the salesperson would know your name, know what kind of things you bought, how

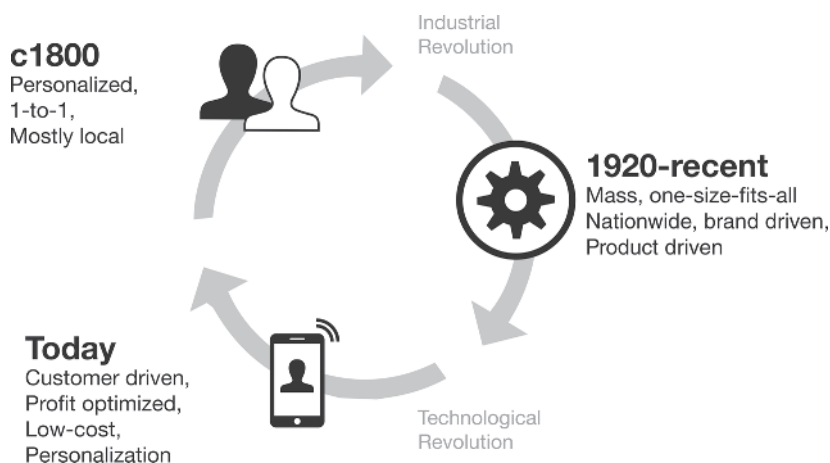
long you've been a customer, and other important information about your personality and behavior. This relationship not only makes the buying process pleasant, it also increases the likelihood of the customer to return, spend more, and develop a sense of brand loyalty and trust.

These days we shop in supermarkets where nobody knows our name. The promise of predictive marketing is to bring the personal relationships of the corner store to the modern world of online and offline marketing. Using predictive analytics, it is possible to move from an era of mass marketing centered on the products you sell and the promotions you send to an era of highly personalized marketing centered on the customer you serve.

Today, even small- and midsize businesses interact with customers on an enormous scale through a wide variety of channels, including websites, social media, mobile apps, and store visits. Because of the substantial increase in speed, number, and type of customer interactions, companies have a greater opportunity to maintain the kind of personal relationships that used to be an important aspect of doing business. Of course this is not easy, and many companies fail due to lack of technical, organizational capabilities and strategic focus.

Customer interactions and the digitization of so much of our daily activities have allowed businesses to gather an extraordinary amount of data about their customers that can be put to use to better service customers. For example, when you buy a pair of shoes at Zappos, the company knows many things about you: what type of shoes you like, your name, gender, where you live, whether your zip code is mainly made up of apartment buildings or single-family homes, whether you typically buy items at full price or at a discount, whether you bought just one product or multiple products, how often you clicked on a Zappos email or visited its website before placing that first order and what you looked at, how often you called the call center, whether you are a first-time or repeat customer, whether you are a VIP customer or an unprofitable customer who returns more products than she keeps, and much more.

Most companies still find it very difficult to put any of this information to good use. The sheer size and breadth of the records make them incomprehensible for anyone without the training and experience to mine insights from large datasets. This is where predictive analytics and machine learning come in. Machines are very good at mining insights



**Figure 1.1 The Predictive Marketing Revolution**

from large datasets automatically. Machines can remember the names of millions of customers with no effort and greet them accordingly, just as the shopkeeper from yesteryear would have done. In other words, using machines, humans can now bring back the personalized marketing interactions from yesteryear, even if their company has millions of customers. Figure 1.1 illustrates how the marketing revolution has come full circle. In the 1800s, shopkeepers had personal relationships with each and every customer. In the 1900s, during the industrial revolution, these personal relationships fell victim to mass marketing and a desire to scale businesses. Now, thanks to the technological revolution, marketers can bring back the personal relationships from yesteryear, while still operating companies at a large scale.

Predictive marketing is the perfect marriage between machine learning and human intelligence. The point of predictive marketing is not to replace marketers with machines but rather to empower and augment human intelligence with machine learning.

## The Power of Customer Equity

Predictive marketing gives rise to a new, data-driven way to approach marketing, with the customer at its center. The ability to collect and analyze data on every single customer, as well as his or her interactions



**Figure 1.2 From a Product to a Customer Orientation**

with your brand, allows you to serve your customers better and generate more sales. At its core, as Figure 1.2 illustrates, predictive marketing is helping companies to evolve from a product- or channel-centric orientation to a customer-centric orientation. Companies using predictive marketing focus on developing and managing customer relationships rather than just developing and selling products or channels:

- Instead of finding customers who will want your products, it is now possible to discover which products your customers will want in the future.
- Instead of maximizing sales, companies in the customer era focus on optimizing customer lifetime value and share of wallet to drive profitability of the enterprise.

- Instead of organizing around channels and product lines, companies which practice predictive marketing organize around the customer.
- With the customer at the center, companies are using big data and predictive analytics to configure processes and organizations to find ways to customize interactions.
- Communications become much more targeted and the key metric is relevance, not reach.

Predictive marketing allows you to identify and realize the long-term value of customer relations to keep your best customers coming back and buying more. Figure 1.3 illustrates the core principle: if your company acquires more profitable customers, grows the value of each and every customer systematically, and retains these customer relationships for a long time, the firm will grow, too.

Companies should think about managing customer equity in much the same way they manage their stock portfolios: just like stocks, some customers are more valuable than others and their value will rise and fall throughout time. Predictive marketing gives companies an easy and automated way to manage individual customer lifetime value and customer equity.

The key to unlocking this value lies in the information you are able to collect about your customers. The more you can personalize the experiences you offer, the more likely the customer remains loyal to your brand. Think about your hairdresser. She has a lot of information about you. She knows how you like your hair cut and probably knows a lot about your family, friends, and job. This information makes the interaction with your hairdresser very seamless. You sit down, she gets to work, and you have a pleasant conversation. She may call you when it's time for your next appointment and suggest a new hairstyle from time to time. It would take you a long time to start over with a new hairdresser. Your hairdresser has very few clients. Most marketers serve millions of customers. It is not possible for a brand to collect and process the data of millions of customers without computers and software.

Predictive marketing puts customer data and insights directly in the hands of marketers, customer-facing personnel, and applications that deliver personalized experiences to individual customers.



Figure 1.3 Customers Are Key to Market Value

## Predictive Marketing Use Cases

Predictive marketing is much more than just providing recommendations. The most commonly use cases of predictive marketing are the following:

- **Improve precision of targeting and acquisition efforts.** With predictive marketing it is possible to know which channels produce the most profitable customers and optimize marketing spending based

on this knowledge. Armed with better information about behavioral buying personas, marketers can also design more effective acquisition campaigns that hypertarget a specific microsegment and increase conversions by four times or more.

- **Use personalized experiences to increase lifetime value.** Predictive marketing can predict future customer preferences and interactions (such as a customer's likelihood to buy). Armed with this information, marketers can improve personalization, relevancy, and timing of customer interactions. It is these experiences that will keep customers coming back and maximize customer lifetime value. If you can maximize the lifetime value of each of your customers, you will automatically maximize the value of your entire customer portfolio and thereby the value of your company as a whole.
- **Understand customer retention and loyalty.** Predicting when, why, and which customers will return or leave is a big challenge for many organizations. Predictive marketing can help flag customers who are at risk of leaving so that marketers can take proactive steps to retain these customers. Predictive analytics can also generate insights about loyalty-inducing behaviors that maximize customer lifetime value.
- **Optimize customer engagement.** Predicting who will respond to an email promotion, what would it take to convert a browser into a buyer, what discount is needed to incent the customer to complete the transaction are all methods of increasing customer engagement in real time or near real time that maximizes marketing effectiveness.

Figure 1.4 gives examples of questions that predictive analytics can answer for marketers. These examples, as well as other used cases, are discussed in greater detail throughout the book. The list below is not an all-inclusive list, as the marketing questions that can be answered with predictive analytics are really endless.

Armed with information ranging from likelihood to buy, predicted lifetime value, and future product preferences, brands can better serve their prospects and their customers by delivering personalized experiences.

10 Questions to Answer	How Predictive Can Help
1. Who my best customers will be	Predict which prospects or customers have the highest lifetime value, taking into account revenues, but also the cost to acquire and service these accounts. Use this information to spend time and money on high-potential customers early on.
2. Find more new customers like your existing best customers	Predict which prospects are most like your existing high-value customers using look-alike targeting (B2C) or specialized lead generation vendors (B2B).
3. Find personas in your data to use to acquire more customers like this	Predict the customer clusters that most distinguish buying personas with respect to brands, products, content and behaviors in your customer base. Then develop creative, content, products, and services to attract more buyers like this.
4. Which marketing channels are most profitable	Predict which channels attract the customers with the highest lifetime value, including all future purchases. Use this information to influence keyword bidding strategies and channel investments.
5. Which prospects (nonbuyers) are most likely to buy	Determine who is most likely to buy so you can give the right incentive (in B2C) or prioritize your sales personnel's time with the right prospects (in B2B).
6. Which existing (or past) customers are most likely to buy	Product incentive (or discount) is needed to convince a one-time buyer to become a repeat customer. Prioritize the time of account managers to focus on likely upsell candidates.
7. Which existing customers are least likely to buy	Predict which customers are likely to leave and target them proactively with a "please come back" incentive, a personalized recommendation or by having the customer success manager make a call.
8. What customers might be interested in a specific new product	Predict which customers might be interested in overstock items or a new product release so you can focus your sales and marketing efforts on these businesses or consumers.
9. What other products or content might this customer be interested in	Predict what product or content recommendations to make to a particular customer in order to win, upsell, or reengage this customer.
10. What is my share of wallet with a specific customer	Predict in what markets or customer groups you have high value potential to focus future customer acquisition strategies.

**Figure 1.4** Ten Examples of Predictive Marketing

## **Predictive Marketing Adoption Is Accelerating**

A recent survey of 132 marketing executives by our company AgilOne found that 76 percent of marketers used some form of predictive analytics in their marketing in 2015, which is up from 69 percent in 2014. The acceleration is fueled by three factors: (1) customers are demanding the benefits of predictive marketing—mainly highly relevant and timely marketing, (2) early adopters show that predictive marketing delivers enormous value, and (3) new technologies are available to make predictive marketing easy.

### ***Customers Are Demanding More Meaningful Relationships with Brands***

Consumers are bombarded with marketing and frankly are fed up. Retail research agency Conlumino conducted a consumer survey in late 2014 that showed many consumers have come to expect some form of personalization—in part because the larger and more established brands have been serving up personalized experiences for some years now. By asking more than 3,000 adult online shoppers about what information they expected companies to know about them and what personalized experiences they appreciate, the survey uncovered that more than 70 percent of shoppers want brands to deliver some type of personalized experience, whether it is sending an alert about a new product that matches their interests, a refill reminder, or VIP customer recognition. Certain types of customized experiences, such as loyalty rewards and personalized discounts, were popular across the board, whereas appreciation levels for other areas of personalization differed greatly depending on age, location, gender, and a number of other factors. The findings suggest that it is crucial to have a deep understanding of your customers, and using hypertargeting is crucial to building brand loyalty:

- More than 79 percent of U.S. consumers and 70 percent of U.K. consumers expect some sort of personalization from brands.
- More than half of consumers in the United States and United Kingdom expect e-commerce sites to remember their past purchases.
- Among U.S. shoppers, the most popular personalized experiences were emails offering discounts on products they previously viewed

- (66 percent), alerts when products they like are on sale (57 percent), and VIP customer appreciation rewards (51 percent).
- Consumers in the United States were much more likely to expect online retailers to personalize experiences than those in the United Kingdom: about half of Americans want to receive a new customer welcome greeting, versus only 34 percent in the United Kingdom.
  - Shoppers age 18 to 34, part of the “millennial” generation, were more likely to appreciate almost all forms personalization: 52 percent of millennials expect brands to remember their birthday as compared to 21 percent of those aged 65-plus.
  - Personalization of email is much more popular than personalization of display advertising, with 66 percent of U.S. consumers and 57 percent of U.K. consumers welcoming email-retargeting, but only 24 percent (U.S.) and 17 percent (U.K.) welcoming web-based retargeting.

In one case, the customers of a high-fashion brand from New York actually wrote to tell the company they felt they were not receiving the personalized experience they deserved. Specifically, this company was conducting postpurchase surveys after each shipment. Some customers wrote that they were frequent shoppers of the brand, yet felt they did not receive any special treatment. It is rare for customers to express their dissatisfaction with one-size-fits-all marketing so directly. It is more likely that customers are letting you know through their actions. Are you experiencing an unusually large number of customer complaints, do you have a small number of repeat buyers, or are you seeing a large number of opt outs from your email campaigns? All of these could be signs that customers are not getting the personal attention they expect.

Another example comes from a small kitchenware company. For years, its products were offered in limited quantities and geographic areas. Word spread about the unique products, and to meet customer demand, the products are now offered through its website directly to consumers and in large retail outlets such as Costco. The passionate customer base was demanding more relevant communications. Customers did not write or call to tell the company about this, but rather it started to experience a rising number of opt outs when sending email. Clearly customers were saying that the one-size-fits-all email campaigns were not suiting their needs. Today customers receive much more relevant and timely email,

such as replenishment reminders to reorder barbecue pellets for grilling just around the time they were running out of their last order. Predictive marketing has increased the purchase rate from their marketing emails from 1 percent to 4 percent, while reducing the unsubscribe rate by 40 percent within just six weeks.

Many marketers may think they are delivering relevant experiences, but consumer perception is often very different. A 2013 AgilOne survey of 2,000 marketers and consumers, found that 75 percent of marketers believe that they are sending as many as 15 relevant marketing campaigns to consumers each year. However, 34 percent of consumers say they cannot remember a single relevant campaign from the past year. Clearly there is a disconnect between marketers and consumers. The same survey found that 52 percent of marketers send the exact same email to all of their customers and 65 percent send the exact same number of emails to each of their customers regardless of their preferences.

Marketers need to change their thinking dramatically. Today, marketers may cheer when one of their email campaigns receives a 4 percent click-through rate. In reality that means that 96 percent of customers deemed this email irrelevant. That is a terrible result. We believe all customers deserve to be served relevant and respectful communications. Instead of sending 100 messages with a relevancy of 1 percent, marketers should start sending a single message with a relevancy of 100 percent.

### ***Early Adopters Show That Predictive Marketing Delivers Enormous Value***

Marketers better pay attention to predictive analytics. Applying predictive analytics is the biggest game-changing opportunity since the Internet went mainstream almost 20 years ago, because of the unprecedented array of insights into customer needs and behaviors it makes possible. When Bill Gates was asked during a 2013 Sequoia Capital event what company he would start if he were starting out today, he answered with two words: machine learning.

In his book, *Data Driven Marketing*, Kellogg School of Management faculty Mark Jeffrey proves that high-performing companies spend significantly more on data infrastructure than lower performers (16 percent versus 10 percent). High performers were defined as the top 25 percent of the dataset, measured by their excellence at marketing a basket of

financial metrics, which validated the high performers indeed get better financial performance. High performers also spend more on customer equity or retention marketing (14 percent versus 11 percent) and less on demand generation (48 percent versus 58 percent). He also describes the success of early adopters of predictive analytics in this book. For example, Earthlink used predictive analytics to identify dissatisfied customers about to churn. Taking proactive steps to contact and retain these customers helped Earthlink reduce churn by 30 percent. Similarly, the supermarket chain Sainsbury Stores used predictive analytics to cluster its customer base in relevant segments. The company then used these segments to remodel its stores and customize the product assortment in each store based on these data. As a result, revenues increased by 12 percent.

There is no limit in the number of campaigns that a company can develop. Mavi, the mid-market retailer we discussed earlier, has developed over sixty individual campaigns, using predictive analytics, gradually increasing revenues and profitability.

### ***New Technologies Are Available to Make Predictive Marketing Easy***

So why are all marketers' not using predictive marketing techniques already? Until recently the technology needed to collect, analyze, and act on large amounts of customer data for hundreds, thousands, or millions of customers was inaccessible to most marketers. It was too expensive, time-consuming, and cumbersome to invest in the technology and manpower required to collect and analyze customer data and to deliver customer experiences across channels based on these insights. However, recently predictive analytics has matured to the point that out of the box, standard algorithms and technologies are available, which marketers can access without the help of data scientists or software engineers. In Chapter 15 we discuss in detail the different off-the-shelf tools available to marketers today, which make it significantly cheaper, faster, and easier to use predictive marketing.

**Predictive Marketing Is Becoming More Affordable** The costs involved with predictive marketing can include the money spent on hardware and software technology, as well as the people time spent on

data collection, integration, predictive analytics model development and deployment, and the people time needed—from marketers or data scientists—for the ongoing maintenance of these models and the use of these models in daily marketing campaigns.

Until recently, the data-warehousing infrastructure alone to collect and store customer data could cost you hundreds of thousands or even millions of dollars. In his book about data-driven marketing, Mark Jeffrey documents that a small regional retailer with 10 stores, 100,000 customers, and 1 terabyte of customer data may need to spend \$50,000 to \$250,000 to build in-house data warehousing infrastructure. That number rises to \$2.5 million for a medium-size retail chain with 400 stores and to \$250 million for a large, national retailer with 5,000 stores. Nowadays, cloud-based predictive marketing solutions are available for as little as several thousand dollars a month.

**Predictive Marketing Is Becoming Easier to Deploy** Whichever solution you use—an off-the-shelf package or an in-house solution—you will need to collect and integrate customer data into a customer profile for each customer. In a late 2014 survey of 132 marketing executives, AgilOne found that 68 percent of marketers do not have a single view of each customer. You probably have a lot of information about your customers already, but this data may reside in many different silos. Most companies have separate databases for online transactions, store transactions, and phone transactions. Web behavior has its own silo as does email behavior, social behavior, and service center interactions. Until recently, it could take months or years to accomplish the data integration needed to build a single customer profile and to link and deduplicate all customer data. Recently, more automated solutions have emerged that make data integration and data cleansing much easier. These solutions often use standard data models that make it easier and faster to standardize customer data across channels.

Historically you did not just need in-house infrastructure; you also needed in-house or outsourced data integration specialists and data scientists. Data scientists were needed to build custom models to analyze customer data—probably using a predictive analytics workbench tool. These models also needed to be tweaked and tuned periodically to continue to deliver accurate results. Data scientists are in short supply, and more than 50 new graduate programs have sprung up across

the United States alone to fill the gap. Fortunately, nowadays many marketing solutions come with out-of-the-box, built-in models that are proven and tested by other companies in your industry. Some of these models even have self-learning capabilities, which means that they adjust to your evolving customer data automatically over time without requiring ongoing maintenance from a data scientist.

### **Predictive Marketing Is Becoming More Accessible to Marketers**

Even if customer data is available within the organization, it may not be available to you, the marketer. This happened to Omer Artun, when he joined Best Buy as the head of marketing for a new division called “Best Buy for Business” in December 2003:

I joined Best Buy from Micro Warehouse where I had already built a near real-time customer analytics system to track and analyze orders on a daily basis. I was hired to do the same for Best Buy’s new B2B group, which sold products such as routers, printers and computers to small businesses. Best Buy, like many companies, was outsourcing its IT to a third party at the time. If you wanted to talk customer data with this group, it was \$10,000 dollars just to meet. I went to the IT guys and asked for a raw data dump, nothing else, but got nothing. After a couple of months, I still wasn’t able to obtain a list of customers who had purchased from us in the past. The data was available somewhere, but not accessible to me. I fought the battle for another nine months before I finally gave up. I started a company, AgilOne, to make predictive analytics and customer data accessible to marketers shortly thereafter.

Even having access to data will not drive revenue unless data can be used to deliver more relevant experiences to customers. It can be difficult to integrate and share customer information directly with customer-facing personnel or applications that send out or trigger these types of customer communications. It is not unusual for a company to have a lot of customer data, but for marketers to be unable to use this information to segment customers within their email marketing software, for example, without complicated, time-consuming, and costly data integration. A new generation of marketing software is becoming available, where predictive insights are accessible as drag-and-drop filters to help

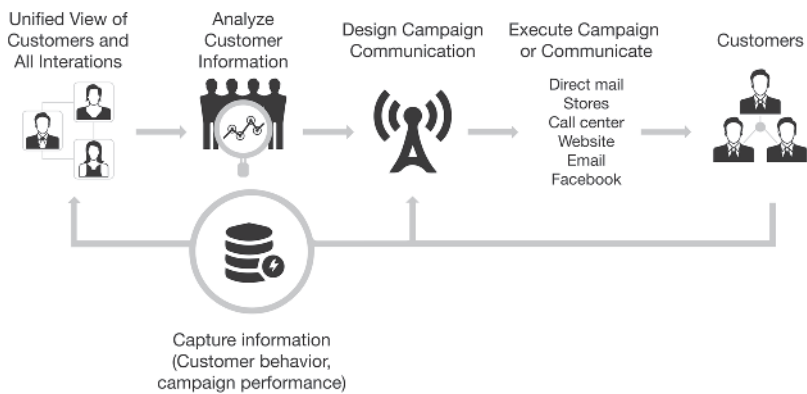
segment and target customers and to include personalized content or recommendations as dynamic content in emails or advertisements.

## What Do You Need for Predictive Marketing?

The fundamental building blocks of a successful predictive marketing initiative, as summarized in Figure 1.5, are:

1. Continuously learn more and more about your customers: capture data, build profiles and unify the information on a daily basis. We discuss how to do this in great detail in Chapter 3.
2. Analyze customer information and assess customer preferences and profitability at a micro (individual/segment) and macro level—both past and future. Chapter 2 gives you an overview of the different predictive algorithms you can use as a marketer.
3. Leverage customer information to profitably personalize experiences across all customer touch points, and to optimize the return on investment of your marketing and sales time and money. Part II of this book is entirely devoted to these practical applications.

In order to do predictive marketing, you need to develop these three capabilities of collecting and integrating customer data, analyzing customer data, and delivering relevant customer experiences across channels. You can acquire these capabilities in one of three ways: (1) build predictive models yourself using a predictive analytics workbench,



**Figure 1.5** The Predictive Marketing Process

(2) outsource customer analytics and predictive marketing campaigns to a marketing service provider, or (3) evaluate and buy a predictive marketing solution, such as a predictive marketing cloud or a multichannel campaign management tool. The first option will cost you millions of dollars and require you to hire an in-house team. Marketing service providers are typically servicing the Fortune 500, and annual contracts for full customer data integration, analysis, and personalized campaign probably start at a quarter million dollars a year. Predictive marketing cloud solutions available at the time that we are writing this book start at about \$50,000 a year. Chapter 15 provides more details about each of these options as well as some criteria to decide which route is best for you.

Whatever you do after reading this book, we recommend that you get started with predictive marketing in some way or another. Early adopters of predictive marketing will have significant competitive advantages, including more loyal and valuable customers. Companies that fail to adopt predictive marketing are at risk of falling behind. The key is to start small and grow your efforts over time. Find a quick win that can deliver immediate ROI.

