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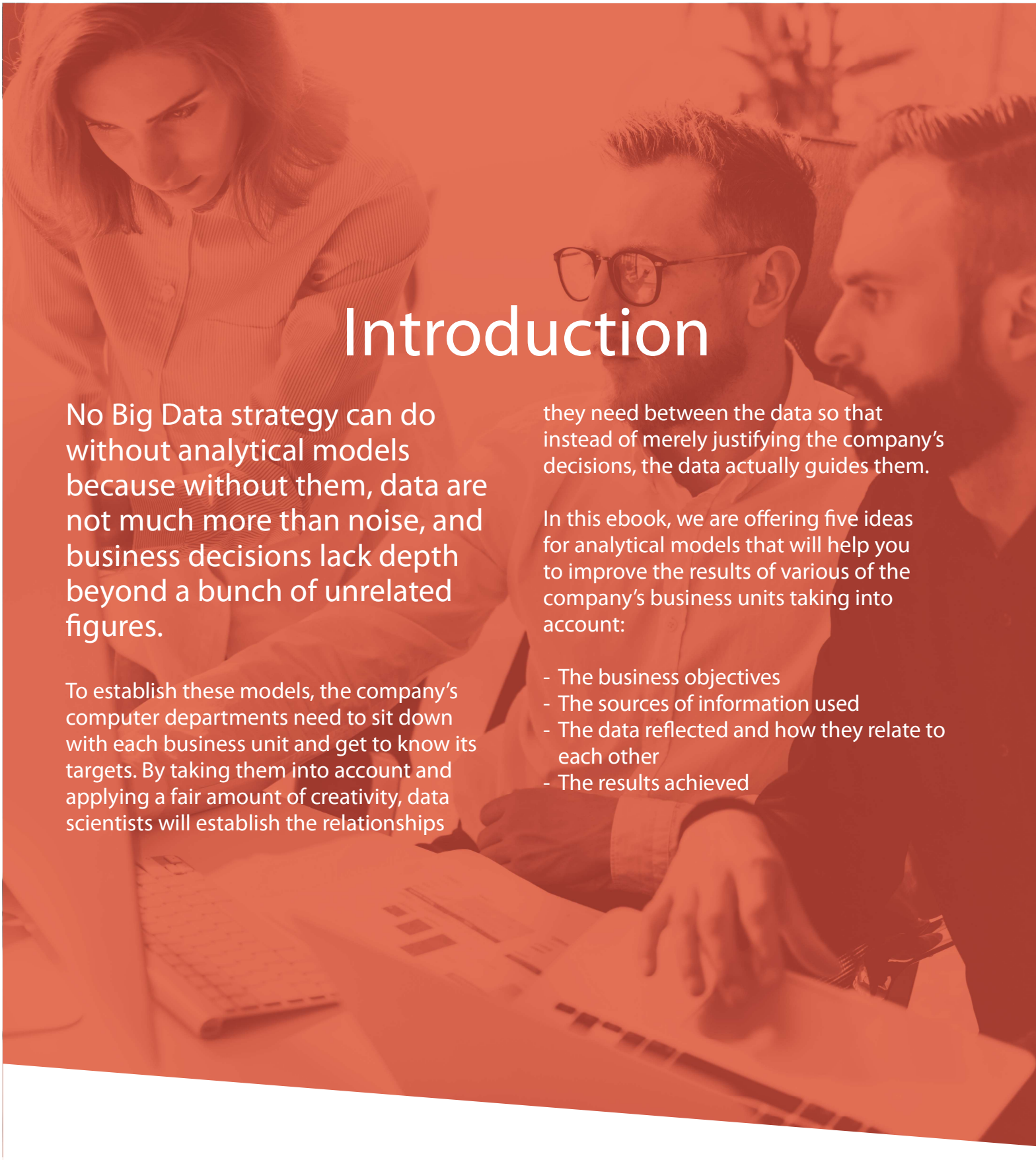
5 PRACTICAL BIG DATA APPLICATIONS TO ADD TO BUSINESS STRATEGY



Introduction

No Big Data strategy can do without analytical models because without them, data are not much more than noise, and business decisions lack depth beyond a bunch of unrelated figures.

To establish these models, the company's computer departments need to sit down with each business unit and get to know its targets. By taking them into account and applying a fair amount of creativity, data scientists will establish the relationships they need between the data so that instead of merely justifying the company's decisions, the data actually guides them.

In this ebook, we are offering five ideas for analytical models that will help you to improve the results of various of the company's business units taking into account:

- The business objectives
- The sources of information used
- The data reflected and how they relate to each other
- The results achieved

THANKS TO THESE ANALYTICAL MODELS, DATA SCIENTISTS CAN DRAW INSIGHT FROM BIG DATA'S TANGLE OF INFORMATION

1 MARKETING INTELIGENCE

Spotify's business model has two branches: monthly subscriptions and advertising in its freemium option.

While they do entail their own complications, subscriptions depend only indirectly on user engagement to generate revenue. However, in the freemium model, earnings generated by users do depend on how many hours per day each customer is active.

Business target: enhance user engagement

The starting point for this model was the question "How can we get our users to spend more time on Spotify if they logout after they hear their full playlist?" The answer: suggest content they don't know so that they'll want to listen to Spotify all the time. This is how "predictive contextual playlists" came into existence.

Each song that we listen to has a myriad of data including genre, period, tempo, singers that are linked to other users' playlists, and more.

Bearing this in mind, Spotify developed a Python-based program that, together with other data like

- The time of day each user used to listen to certain songs
- User geolocation when playing the song
- The weather in the area

allows them to recommend playlists and songs with potential of a high rate of liking to each user

The result was users with greater engagement, which enabled the leading music streaming platform to double its advertising turnover in 2016.

Data collected

- User logs
- Descriptive tables of the songs
- Geographical data
- Weather data

2 CUSTOMER SCORING

The key to success when defining a commercial strategy, product launch or offer resides in segmenting by purchasing power. Other than being interested in acquiring my product, can this segment afford it?

Segmenting becomes even more important when you can locate each of its users.

Business target: physically or digitally locate more profitable potential customers

One of the major steps forward provided by Big Data is the possibility to link tertiary sources of information (public records, legally accessed private databases, online activity...) to our databases.

By doing so, companies can find matches between their own data and external data and complete the profiles of each one of their leads with enough detail to group them together by purchasing power and purchasing potential clusters and send them a customized offer.

Data collected

- Leads with contact information/email
- National ID number
- Matches in the property registry and size of the building
- Level of indebtedness
- Estimated annual consumption amount (based on invoices)

Through an API connection to Data as a Service platforms such as ours, when a company has a individual's email address, that address can be checked and compared with public and private records. After completing the contact's "digital footprint" and based on each one of the previously mentioned variables, we can assign a score to determine each lead's sales potential.

3 NEURAL NETWORKS

In the case of sectors like telecommunications or energy, infrastructure plays a basic role in marketing campaigns for new products such as fibre optics or access to natural gas.

Therefore, business decisions in these sectors often hinge around the following questions:

- Can our services be accessed?"
- "If so, how much competition is there?"

Business objective: determine the physical sales outlets that have potential for service penetration and have the least competition.

Again, by linking our databases with external sources we can check and see the areas of the city that have the greatest sales potential and then check them against our company's sales outlets and their area of influence to avoid cannibalization.

Data collected

- Affluent areas
- Socioeconomic status of the residents there
- Access to infrastructure for each property register record
- Presence of the competition's sales outlets

Analyzing these variables gives us a heat map, one of the most useful tools in data visualization. And we can complete this by marking the competitions' sales outlets and their geographical reach. This representation of our analysis model will help us to present the managers in question with a map for the expansion of our optimal sales outlets and infrastructure.

4 CHURN RATE/ARPU4

One of the most profitable doors that the Internet has opened up for consumption is immediacy. It's a profitable door, but it's risky.

Companies are faced with a dichotomy when it comes to electronic transactions: "What should I attach priority to? To speed of accessing my products and services or protection against fraud and false identity?"

The decision should be made considering:

- If I include an extensive form to fill out and delay validation of user profiles of new customers, I can loose them because of poor customer experience management.
- If I let them access my platform without filtering them, I run the risk of letting any hacker into my system with a false identity and committing all sorts of fraud which will ruin my margins and my supplier relations.

Business objective: immediately validate identity and the risk of log-ins on my platform

To validate user entry information, a system is needed to gather key data on a form to allow for monitoring their identity through various databases by looking for coincidences.

Data collected

- First and Last Names
- National ID number
- Postal data
- Telephone number

After creating APIs that gather the forms and compare them with b2b & b2c databases and official newsletters, a scoring engine needs to be created which, based on matches, assigns a value to each record on our platform in order to determine the veracity and risk.

5 INTENSITY OF THE COMPETITION

For digital marketing departments, performance campaigns have marked the biggest step forward over the last few years. Being able to use an action to capture potential customer data and redirect that data to e mailshots and promotions within a brief period of time provides companies with one of the most powerful tools there is.

But year after year, email marketing results drop for many companies due to user impact saturation. This translates into low open rates and even lower click rates.

Business objective: improve my company's e campaign KPIs

Here, we need to create a much more organic model than the ones previously described. First, we have to generate lead segmentation with the leads we get and add all of the pertinent information to establish different audiences.

In B2C markets, which are the most common for massive emailshots, these will be personal data and postal data in addition to the different interests that we can complete by using APIs that gather their information from other social platforms. For B2B markets, the most pertinent information will be professional in nature, such as the position in the company, the size of the company and the industry.

In all cases, information on the action used to initially obtain the lead will be saved. This will enable us to establish campaigns based on interests and to segment audiences and vary the messages for each. The well known A/B test.

Data collected

- First and Last Names
- National ID Numbers
- Postal data
- Telephone numbers
- Email monitoring codes
- Number of opens per email

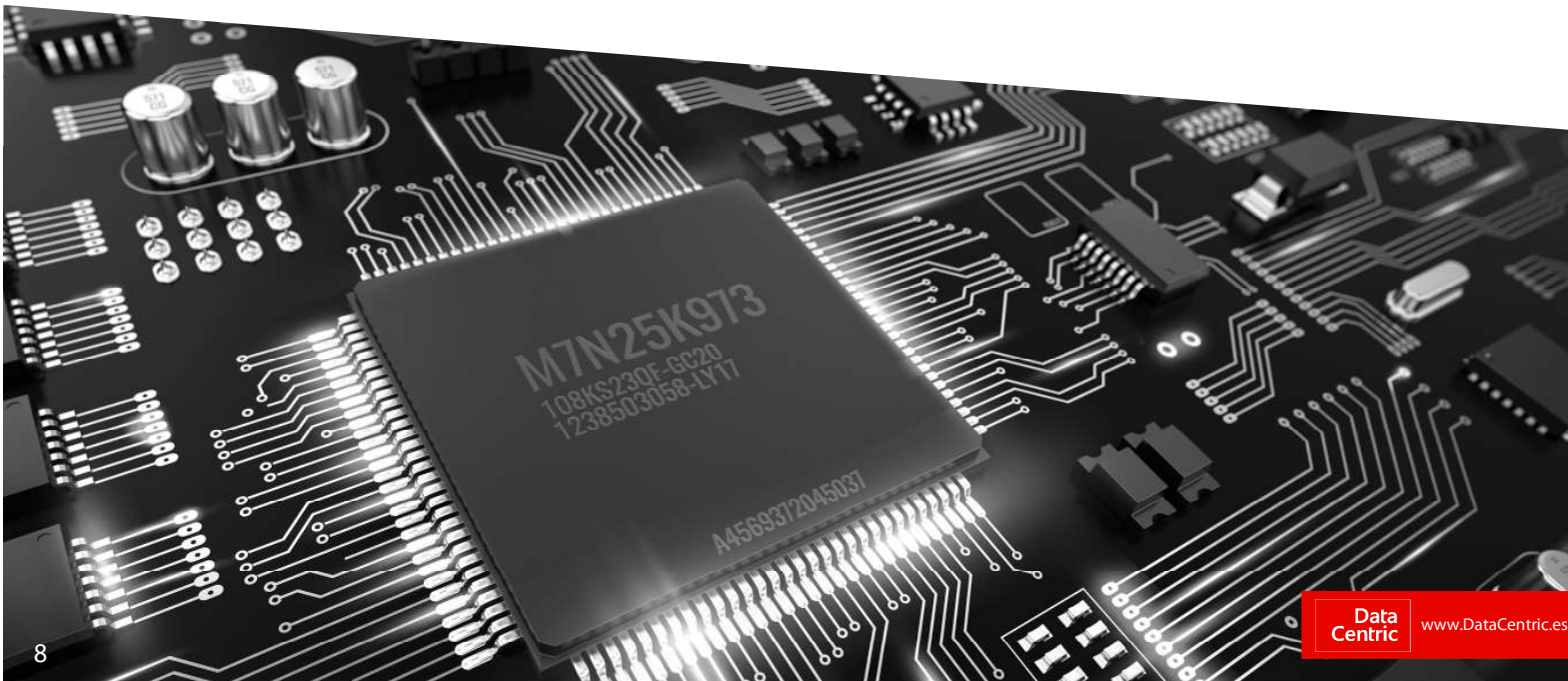
As the mailshots are done with an initial sample from our database and we get responses, our model will need to eliminate the message that gets the worst results from each segment. Having repeated the operation until we get the messages that obtain the best interaction, we will be ready to send out massive emailshots that will get better results.

Analytical models enable companies to improve all of their processes, from defining the most appropriate operative to identifying consumer clusters based on the variables that are pertinent to the business.

To build an appropriate model, the information first needs to be organized and standardized to be able to highlight what is most important. Set the objective you want to achieve and from there identify the data you will need and how you need to manipulate it to get responses.

Information is not static. Play with it as you like. Try new variables. Do they give you relevant information or new insight? Determine how you will obtain an algorithm and whether or not you are going to use tools and software that use artificial intelligence to create formula.
With this new information you collected, don't forget to determine how to display it to the rest of the decision-makers in your company to show them the way forward, the path to a Data Driven Business.

At DataCentric we can help you, just as we have helped our clients for more than 20 years to manage all of the Master Data Management and Data Governance. Contact us and be one more business to use decision-making backed by knowledge about your customers and the market.



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business
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What are you waiting for to give your business the best competitive advantage of all? Knowing your customers and the market.

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