

Generating business-to-business leads: How to reach the people behind the logo

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Abstract For a long time, business-to-consumer companies looking for new customers have included social media in lead generation. There, they identify individual needs, lifestyle, values and topics that are important for future customers. In business-to-business (B2B) marketing, both web and social media are used to support and maintain existing customers. To attract new customers, however, many companies are still using addresses collected through traditional methods, such as cold calling and assembling different address lists and publications. At the same time, digital channels offer a huge potential for new B2B customers to be identified and contacted. This paper shows how text and web mining can be used to track the digital footprints of existing and potential customers in the B2B market, how to create intelligent profiles of companies and organisations (including profiles of relevant contact persons), and how to reach them at the right time with the right content.

KEYWORDS: B2B, intelligent profiles of companies and organisations, analytics-based B2B lead generation, automated predictive models, predictive modelling, text mining, web mining

INTRODUCTION

As the processes of marketing are increasingly digitised, both customers and markets get smarter and more dynamic. At the same time, all stakeholders — including companies and organisations — are leaving a growing

volume of digital data traces, meaning that the available data volumes are increasing exponentially.

In the analogue world, a number of qualified industry directories collect data from different sources and present this

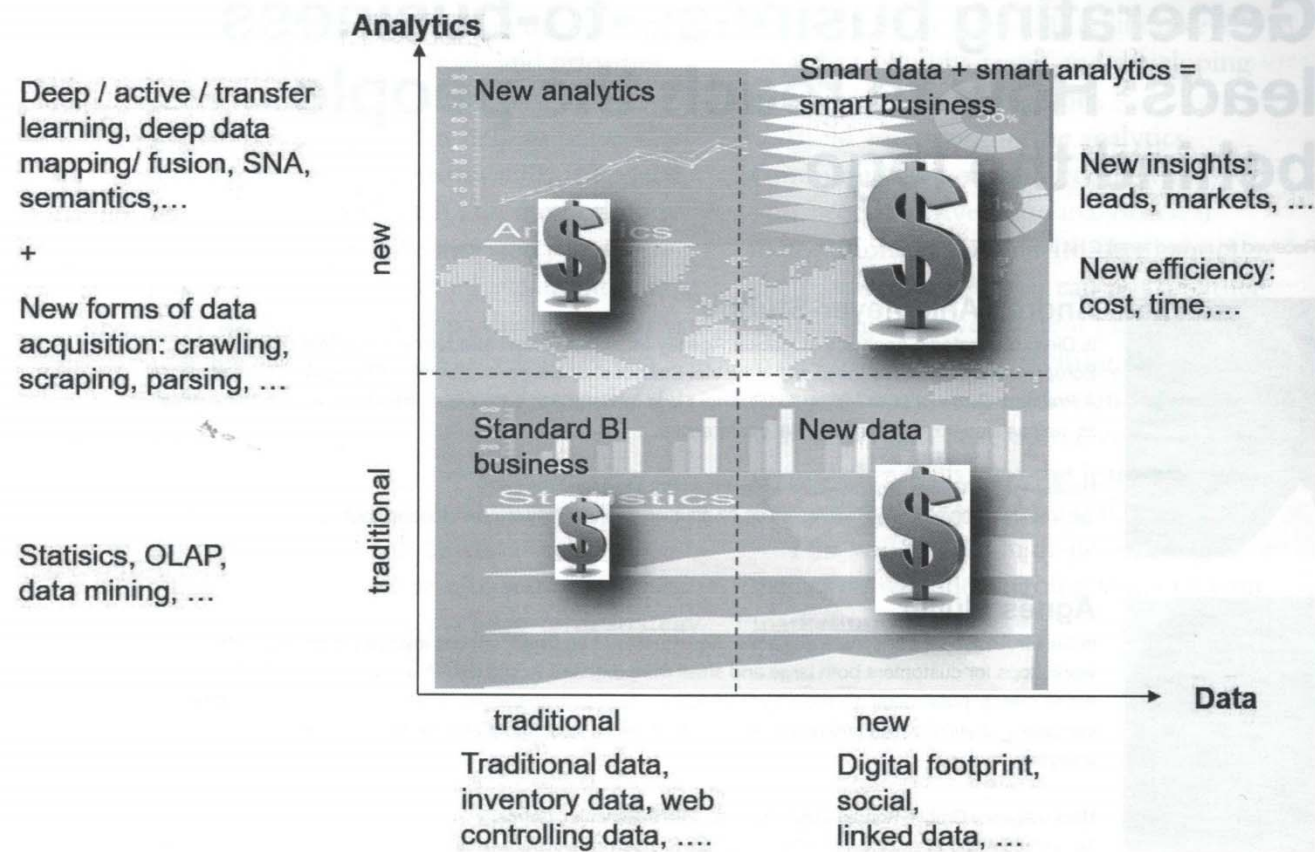


Figure 1: New methods — new insights — smart business

Source: Based on Gentsch, P., Kulpa, A. paper 'Insight Sales', presented 10.04.2017 on the spring inhouse conference at Datalovers, Mainz, Germany.

information in a usable format. Such data are updated only at large intervals, however, and not only fail to represent current interests, topics and developments, but also the rapid changes in the business-to-business (B2B) market.

By contrast, the digital world offers a new universe of possibilities. To leverage these possibilities, marketers need new forms of data collection, new analytical methods, and agile communication tools united in a largely automated system.

To generate precious B2B leads, an innovative approach uses a best practice of B2C lead generation: the search for look-alikes. While only the level of the individual person is important in B2C lead generation, the B2B look-alike model considers two levels: company and contact person(s).

In other words, analyse the characteristics of existing B2B customers and contact persons,

identify other companies with similar qualities, and detect how to address them in their preferred manner (time, channel, style etc).

DECRYPT THE DNA OF THE BEST EXISTING CUSTOMERS

As a first step, look closely at your best existing customers. Characterisation by industry, number of employees, sales, location, and other classic company master data is no longer sufficient. In real life, people do not form relationships purely on the basis of profession, gender, age, family status, income and place of residence. Personal skills, values, interests, circumstances, and peculiarities are also (or even more) important. With B2B relationships it is the same.

Therefore, a truly complete picture of the best existing B2B customers is

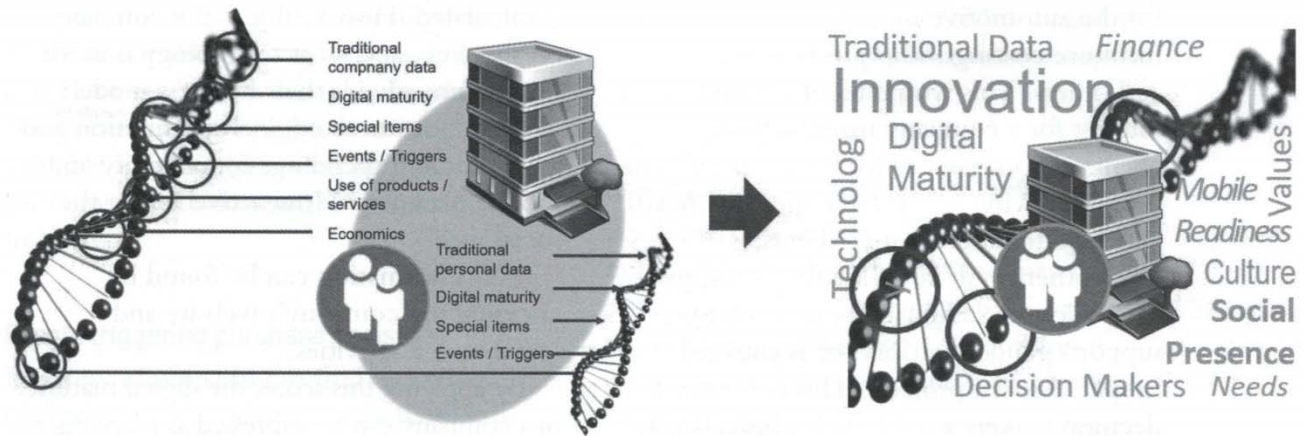


Figure 2: Decrypt the DNA of the best existing customers

required — embracing many different aspects of companies and the relevant contact person(s).

This picture should include:

- traditional data;
- specific interests and topics currently moving companies;
- digital maturity of companies;
- events triggering purchase decisions;
- information about contact person(s);
- use of the purchased products and services;
- economics.

What does their website say about them?
What do they post on social networks?
How visible and active are they on the web?
Which employees in which function are the relevant contact persons? Which channels do they prefer? For what purpose and how does the company use our products or services?

In addition to the current state, this picture should also comprise an assessment of the company's potential future developments and the industry to which it belongs.

Traditional company data

Company name, organisation form, branch, location — this information can be found in official directories, from list brokers, or directly from company websites, along with further information such as turnover, number of employees, etc.

To classify the company's business correctly, use the publicly available codes for the region in question (in Germany, for example, this list is provided by the Federal Statistical Office).

Customer relationship management (CRM) systems also contain traditional data about existing customers, such as prior responses to sales and marketing activities, order frequency, last advertising contact, payment behaviour and so on.¹

Specific interests and topics of current interest

This is where advanced analytics come in. Companies often use their web pages to describe their mission as well as their product or service. Valuable insights can be gained using text-mining methods, such as neural networks, that learn distributed representations of words (vectors) during training, and abstract the semantic meaning.

Words with similar meanings appear in clusters, which are designed to reproduce certain word relationships (such as analogies), using vector maths, a famous example being 'king – man + woman = queen'.²

As a result, insights are generated that make it possible to determine the fields of activity with greater granularity. For example, in addition to the meta term 'coatings manufacturers', a distinction can be made between manufacturers of paints

for the automotive industry, exterior paints, furniture coatings, ship paints, wall paints, and others. This would be of significant interest for a company manufacturing chemical components for paints as different product environments have specified needs and require different ingredients.

Another result could be that a company cares a lot for sustainability and ecology, supports gender equality, or is engaged in special social projects. This company's decision makers would likely appreciate a B2B partner that shared the same values.

By updating these insights on an ongoing basis, new developments and trends in general and in specific industries as well as in individual companies can be identified from an early stage.

Digital maturity of companies

To assess the extent to which a company/organisation has advanced in digital transformation, a score for digital maturity

is calculated. How visible is the company on the web, and what technology is used? How innovative is their business model? What about search engine optimisation and advertisement spending, connectivity and mobile readiness? How active is it in the social web?

This information can be found by crawling the company's website and social media activities.

By applying this score, the digital maturity of a company can be expressed as a key figure. This is used to segment companies according to the degree of their digital maturity.

Digital maturity varies depending on the industry to which the company belongs. The more the industry needs to be found on the web (by customers, as a brand, for recruiting employees etc), the stronger is their digital maturity. In short, an online shop usually has a higher digital maturity than a local craft shop or a supplier of specific items as part of a supply chain.

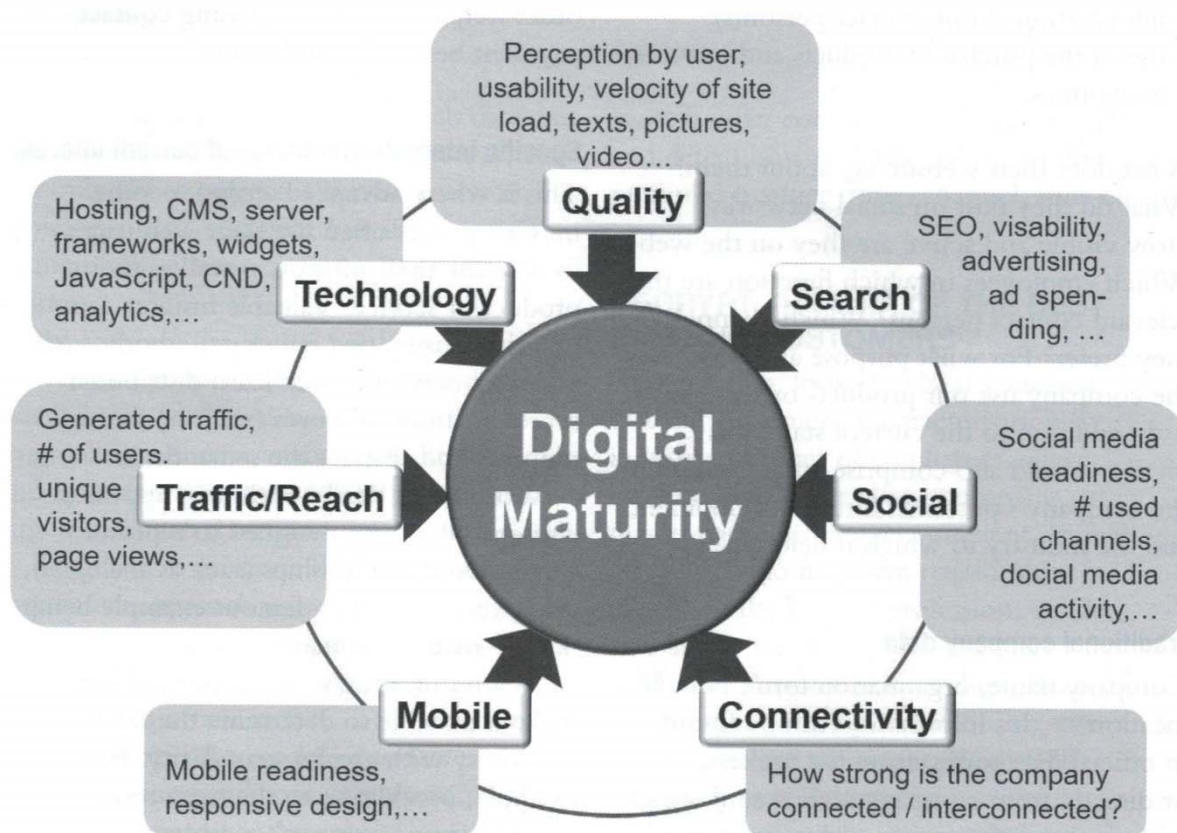


Figure 3: Aspects of digital maturity

Digital maturity also allows conclusions to be drawn about a company's overall degree of innovation compared with its competitors. This key figure creates another valuable insight and is a strong differentiator for companies belonging to the same industry.

Events triggering purchase decisions

It is very illuminating to find out which events in the life of a company have had a positive impact on business. Were there higher sales in the past around a company anniversary, a change in management, or after a company won a prize or award? What impact did global or local events have, legal amendments, or the two hot weeks in summer last year?

To identify such (industry-dependent) events and triggers and to transfer them into data, usable for model building, domain knowledge and the experience of the sales team are indispensable.

Information about contact person(s)

What applies at the company level also applies at the level of the people belonging to the company's buying centre. These are the contacts who need to be targeted with campaigns and offers.

This is why a comprehensive, dynamic picture must be created for them too, including traditional data, such as name, gender, age, position in the company, academic titles, etc. This individual profile is enriched by specific interests and topics (statements, posts on business-related social networks, publications etc) and individual digital maturity. If known, reactions to general and private events can be included as well.

In addition, this information provides very valuable insights for existing customer care. Which head of the purchasing department is not happy about receiving a special offer following the new interesting

article he published in a specialist magazine, or about being congratulated on a company or employment anniversary?

Use of the purchased products/services

Customers use our products and services — but *how* do they use them? One may need a special varnish for everyday furniture, the other for sealing the wooden fittings of prestige vehicles. Was the software we programmed implemented in a CRM system or to control newsletter campaigns? What feedback/suggestions for improvement have existing customers provided? The answers to this last question may open up new possibilities for application and thus new groups to target with offers.

Economics

The economic success of companies is readily available in a timely manner (traditional data, annual reports, press articles etc).

Further indications of a company's prosperity include, for example, its stability, whether it is recruiting additional employees, the current state of the technology it uses, the positive state of the respective industry, and its assessment of its future development.

Continuous learning

All the data collected and analysed so far are dynamic; for this reason, the data must be constantly updated and re-analysed in order to keep the company profiles and contact lists up to date.

In addition, to benefit optimally from the available data, the domain knowledge and experience of a good sales team should be updated and taken into account regularly.

These multidimensional features can only be mastered via Big Data analytics — especially by web mining, text mining and deep/machine-learning algorithms.

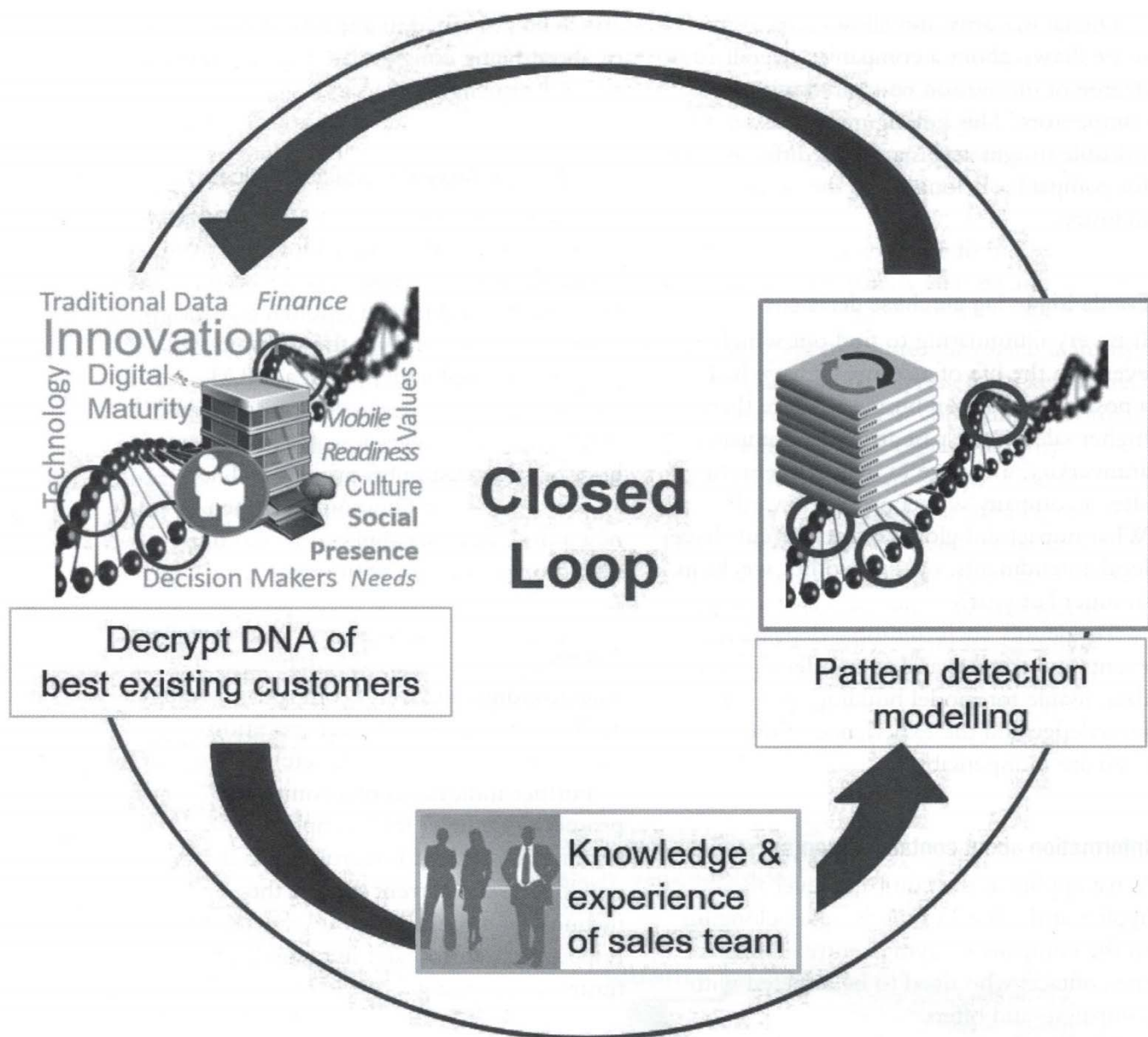


Figure 4: Closed loop of B2B customer profiling — Continuous learning

To keep the results reliable and current, the loop of continuous learning must be initialised and kept constantly running.

FULLY AUTOMATED LEAD PREDICTION

Having built a predictive model that takes all these features into consideration and dynamically calculates a generic 'best customer DNA', different samples of existing customers may be used as training quantities. To this end, customers must be split into at least two groups: good (best) and bad.

If the model is able to detect the best existing customers among all existing customers, it is ready to search for new leads with the same DNA on the web and on social networks — and to learn from its experiences.

Artificial intelligence supports reliability and velocity of predictions

Analogous to the data quantities, the performance (especially the processing speed) of today's computers has increased immensely. This allows the further

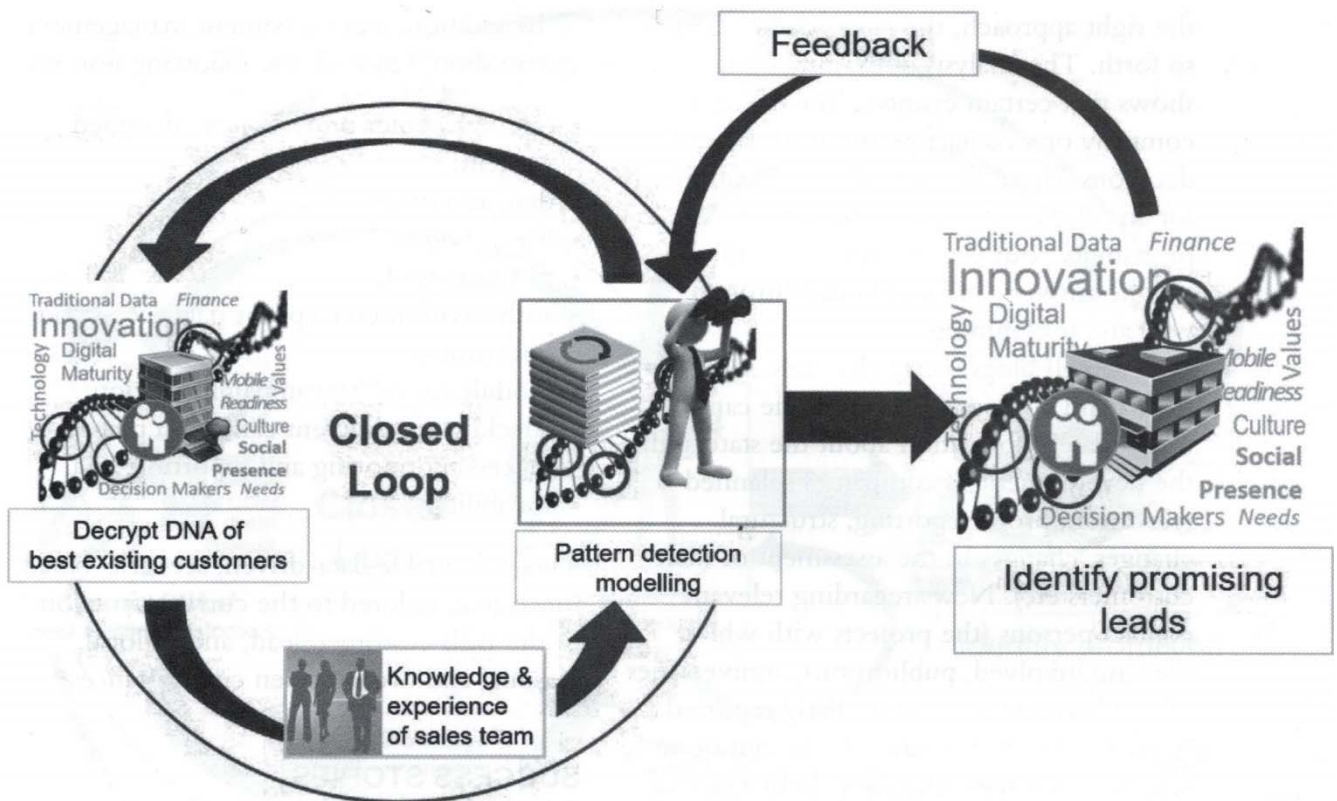


Figure 5: B2B lead prediction — Continuous learning

development of methods, which in their basic form, have been used for a long time in the analytical world.

Machine learning, especially deep learning, is an important pillar in automated lead prediction. The most exciting development is that different neural networks can now be layered, resulting in major possibilities for machine learning and automation.

Procedure

As a first step in fully automated lead prediction, neuronal nets are used to collect and structure as much relevant information about companies as possible from the web and social networks. Following this, the profiles of the contacts are created.

In a second step, the collected data is assessed by different kinds of decision trees, which are continuously trained with different characteristics and on different samples. (We found the best results with a random forest approach.)

The results from these trees are aggregated into a total result and then classified so that the leads found can be ranked according in descending order of their conversion probability.³

Results

This type of lead prediction provides excellent results, because the data base is highly actual and comprehensive, so the model learns steadily and works at the required speed. However, the identification and ranking of leads alone is not enough. The next step is to address the highest-ranked leads at the right time with the right content, and transforming them into customers.

COMMUNICATION

Success factor communication timing

Whether communication is successful (and to what degree), is determined by many factors: the right time, the right occasion,

the right approach, the right tonality and so forth. The analysis of existing customers shows that certain events in the life of a company or a contact person trigger purchase decisions. Therefore, a well-chosen time for an offer is essential for the conversion probability. But when is this right time?

The answer can be obtained through web and text mining.

Through blogs, news channels, social media and company websites, one can find up-to-date information about the state and the development of companies (planned relocation, profit reporting, structural changes, changes in the assessment of their customers etc). News regarding relevant contact persons (the projects with which they are involved, publications, anniversaries of employment etc) are similarly reported.

By means of crawlers, which continuously scan these sources, messages about relevant events are sent to the system in real time to evaluate their impact. Once it becomes highly probable that a company is reacting to a message, the system sets an alert.

The right content

Modular content for trigger-based, relevant communication, highly tailored to B2B leads, must be prepared in advance. Some modules might highlight sustainability and social engagement, others technical expertise or special offers.

The selection of the right communication for a B2B lead requires complex business rules and the capability to assign the corresponding messages based on analysis. This is possible via a highly developed content management system supported by a business rule engine that is able to:

- transform analysis results into business rules;
- link a rule or rules to a template; and
- implement links as a default.

To ensure usability, it is important, that rules and links can be changed without extensive analysis or IT expertise, and that messages can be sent with the appropriate sender address.

In addition, a good content management system should provide the following features:

- option to enter professionally designed content;
- drag and drop;
- live preview;
- planning tool;
- authorisation concept for data access and operations;
- module for *ad hoc* campaign creation;
- checklist for different campaign phases;
- success monitoring and reporting; and
- scalability.

This will enable data-driven, scenario-based messaging, tailored to the current situation of the B2B customer/lead, and to local, seasonal and event-driven circumstances.⁴

SUCCESS STORIES

Publisher

A large publishing house with typical special interest B2B publications has succeeded in opening up new target groups with the help of this technology. It identified a reasonable number of potential prospects that it did not find in traditional address lists at the same time as avoiding a large number of poorly matching prospects. The conversion rate was twice as high as on the conventional list broking path. Through the precisely selected target group, the advertising costs could be reduced radically.

Manufacturer of specialised glass for glass facades

A manufacturer of specialised glass for glass facades wanted to inform architects, developers and general contractors about new products, trends and innovations in a regular newsletter. The new leads were acquired from trade fair tickets.

The company's existing address list was cross-referenced because this kind of glass is not relevant for all architects, and not every general contractor specialises in buildings with big glass facades. The new addresses,

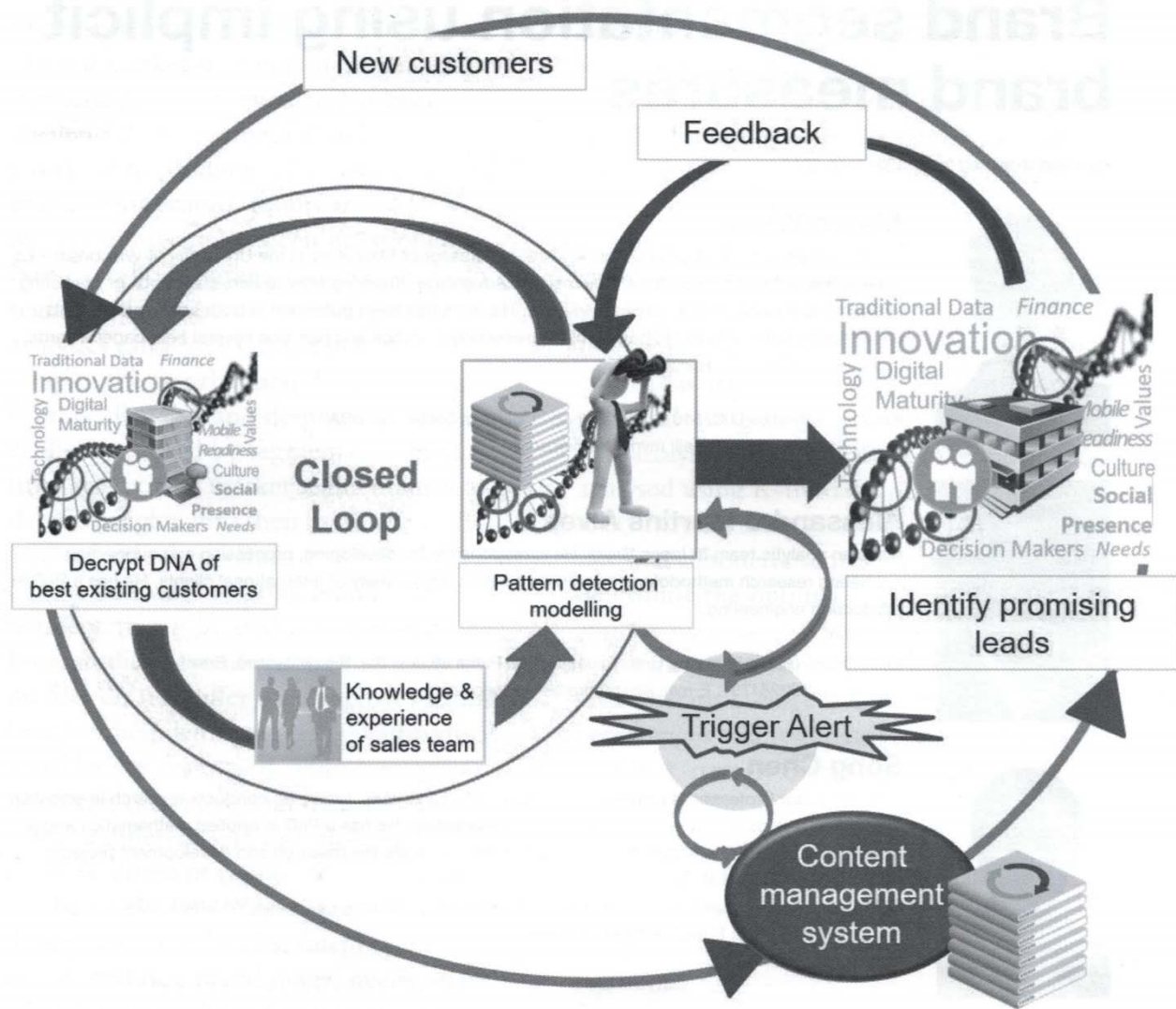


Figure 6: Automated B2B lead generation system

Source: Ahlemeyer-Stubbe, A. (to be published in July 2017) 'Analysegetriebene Unterstützung im Kundenkontakt', in 'Digital Customer Service' (e-book), Editor & Publisher Harald Henn, Marketing Resultant GmbH, Mainz, Germany, <http://www.marketing-resultant.de>.

identified by analysis-based lead prediction, had above-average opening and click behaviour. Two of the new addresses for specific building projects have already made preliminary requests for a fictional solution.

CONCLUSION

Whether a traditional B2B company wants to expand its online business or a manufacturer of special tools is looking for new B2B marketplaces — any company searching for new B2B leads should consider the Big Data analysis approach outlined in this article. Fully automated lead prediction helps B2B companies to address their

existing customers individually, relevantly and at the right time, as well as to find new customers in digital space and inspire them.

References

1. Ahlemeyer-Stubbe, A. and Coleman, S. (2014) 'A Practical Guide to Data Mining for Business and Industry', John Wiley & Sons Ltd, Chichester.
2. Prawdzik D. (2015) 'Sales und Marketing reloaded — Deep Learning ermöglicht neue Wege der Kunden- und Marktgewinnung', White paper, presented on the spring inhouse conference at Datalovers, Mainz, Germany (10.04.2017), daniel.prawdzik@datalovers.com.
3. *Ibid.*
4. Ahlemeyer-Stubbe, A. and Coleman, S. (in press) 'Monetising Data — How to Uplift your Business', John Wiley & Sons Ltd, Chichester.