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**Article**

## Then potential of unstructured data: Embedding voice and deep learning to accelerate sales automation

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# Marketing Review St. Gallen



5 | 2020 **SCHWERPUNKT** Interview mit Guntram Friede (CMO Salesforce) • Sales- und Service-Bots im Vertrieb • Automatisierung in der B-to-B-Marktbearbeitung • Automatisierung in KMUs • Automated Product Suggestions with Needs-based Configurators • Digital-Sales-Enablement • Chatbots as Personalized Sales Agents **INSIGHTS** Oracle: The Art of War & Sales **KOMMENTAR** Die zwei Komponenten der Sales-Automation **SPEKTRUM** Co-Kreation der Marke in Brand-Communities • Kommunikative Ökosysteme

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## Sales Automation



# The Potential of Unstructured Data

## Embedding Voice and Deep Learning to Accelerate Sales Automation

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As voice interactions between humans and computers are becoming more pervasive, there is a potential for businesses to better leverage voice data to automate processes and increase work productivity. Helping companies uncover and integrate data across the sales process is at the heart of what Salesforce does. Through their integrated CRM platform, Salesforce aims at delivering personalized experiences for customers while providing a single, data-driven view of each customer across all business departments. Guntram Friede, Head of Marketing at Salesforce, talks about why voice data provides a powerful opportunity for businesses and how deep learning applications are step-changing audio analysis.

**The Interview is conducted by Prof. Dr. Christian Schmitz, professor for sales management and chair at the Sales Management Department of the Ruhr University Bochum**



### What is unstructured data and where does it come from?

Unstructured data is everywhere. It comes in many formats such as text, images, audio, video, blogs, websites and it has no formal structure like for example, a database. Furthermore, such unstructured data comes from a variety of different sources such as social media, clouds or sensors. In contrast to structured data, unstructured data does not have a predictable structure and is quite difficult to analyze without prior preparation. Recent industry reports indicate that unstructured data represent close to 95% of all global data with a significant growth rate each year.

### What type of unstructured data can businesses leverage to derive value?

There are many different sources of data that businesses can benefit from, and many are not doing it currently. For instance, e-mail is still the most prevalent means of communication between sales managers and their customers. Every e-mail contains information that may indicate an action or measure, but this information is, by the nature of the medium, unstructured.

Or think of all the notes, used as an aide memoire and way of 'structuring thinking'. For such notes to be actionable within a sales automation system however, they need to be taken digitally using general tools or note functions in integrated sales tools.

Another source of unstructured data can be found in audio records from meetings or phone calls. Tools such as Thread, Otter, TranscribeMe, or Spitch can automatically create written transcripts of an entire meeting or conversation which can then be used as a source of information.

More generally speaking, I believe that voice data is one of the fastest growing, and currently most underexploited sources of unstructured data. Most of the larger tech firms such as Amazon, Microsoft, Google, Salesforce and many others have developed a business version of their consumer-friendly voice assistant. So, instead of typing an e-mail, you could let the embedded voice function or smart assistant do the work for you. The same is valid for notes, records, and calendar updates for example. Why? Because voice is intuitive, fast and efficient as a means of communication.

### How do you think voice data will transform business processes? Can you give a specific example?

Take Marketing for example. Marketing has started to use voice technology more extensively in the past years. While

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it is still not possible to ask a smart speaker for the latest sales forecast or to ask the phone how a Marketing campaign is performing, companies are starting to consider how effective use of voice technology, for example by embedding unstructured data such as e-mail or meeting conversations, has the potential to make a step change in improving business productivity and customer engagement.

Consider, for example, the amount of time we spend searching for information and analysing reports. Imagine if we could leverage the ease of use of voice with new data mining methods of deep learning and semantic analytics to raise the analytical value of data to a new level of quality; this could provide important opportunities for process automation. More specifically, the great potential here lies in the combination of voice analysis and machine learning to analyze voice interactions and voice data or other unstructured data, to retrieve insights, and improve business processes.

### What do you think makes voice technology so powerful?

The efficiency and naturalness of speech input is a clear value add. Speech is far easier to understand compared to the written word, and clearly, speaking is far more convenient and faster than typing a message. Additionally, speech is also a more intuitive means of communication.

The “human to computer” interface becomes more intuitive through voice, which is why it is often called a “zero interface” as there is nothing to click or to touch. The data can simply be inputted by speaking naturally into the model or corresponding application. The challenge however is to couple such voice data to the underlying CRM-system the company is working with.

**So how can business better integrate their systems to take advantage of the abundance of voice data?**

Many companies still use multiple systems in their sales process, such as for example for their contact management, calendar organization, calling tools, and e-mails. Hence, sales agents are often forced to navigate multiple screens during

**Future Thinking: What Could Such an Interaction with a Smart Business Assistant Look Like?**

Imagine a sales person, Mike, using Salesforce’s Smart Assistant, Einstein. Mike works at State Street Global Advisors (SSGA). He starts his day by asking Einstein:

*“Hey Einstein, what does my day look like?” Einstein replies: “Your day looks quite open; you have three meetings and make sure that you complete your time sheets today as well. Please note that there is a business at risk alert. Acme’s retirement fund has 78% risk mostly driven by a recent decrease in activity.”*

Now that Mike has been told how his day looks and been alerted about the risk to Acme’s business, he knows that he has to act quickly to retain this business.

In order to see what is really going on, Mike takes a look at Acme’s account record. Einstein shows opportunities related to this account and can accept actions inserted by typing or by speaking, such as “mitigate Acme’s risk”. The smart assistant calculates also the “next best action” and can propose in this example to “set a customer call at 10 am tomorrow”. By just clicking on “accept” Einstein automatically sends the calendar invite to the customer. This means, programs such as Outlook are fully integrated, in order to exploit the maximum of potential automation.

Later in the day, when his meeting with Acme is over, Mike needs to

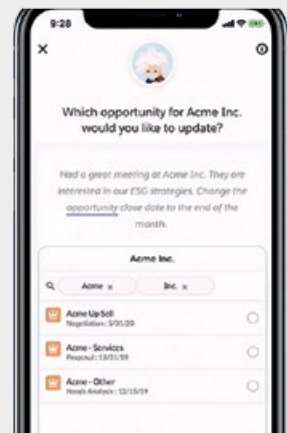
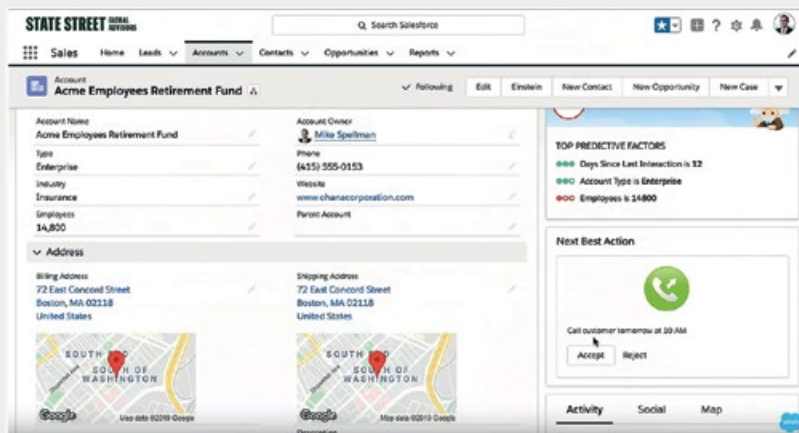
get the meeting notes into the CRM. He does it via his mobile phone and the voice function:

*“Hey Einstein, just had a great meeting with Acme. They are interested in our ESG strategies. Change the opportunity close date to the end of the month.”*

Einstein always asks for confirmation before finalising anything. Mike now has all information reported to the CRM and the state of the account has been updated.

(Example based on Salesforce presentation in November 2019 in San Francisco:

<https://www.youtube.com/watch?v=rPm--W0qeRs>)





“I strongly believe that the key is to gather as much data as possible to have an overall view of the sales process.”

interactions. Aside from personal notes, which the agent captures during a sales meeting, some conversation history will inevitably be lost. Leveraging voice data from phone conversations is still largely ignored by businesses.

I strongly believe that the key is to gather as much data as possible to have an overall image on the sales process. This will enable the sales team to gather useful insights on the customer and take the right decisions at the right time. When using different data sources, it is therefore crucial to setup a structure that feeds all the data into one single system. This is where application programming interfaces, so called API come in. APIs make it possible to link systems and data making IT systems more responsive and adaptable. For example, through Salesforce’s AppExchange you can integrate the whole G-Suite into Salesforce, as well as a contract signing tool or even Slack to include more informal conversations. APIs therefore help with transformations because they can connect core IT systems, and the specific data inside them, to digital platforms.

### **So once businesses have identified and gathered the data within one system, how can they derive value from it?**

The data that is gathered must be processed if businesses are to benefit from customer insights and optimise their sales automation. Essential for this is an efficient infrastructure, and fast and scalable algorithms. Technologies, such as supervised and unsupervised learning including various variants of deep learning and reinforcement learning are important tools here. Embedding deep learning into applications and tools helps simplify complexity, increases efficiency and enables custom models to be built for any use case. For instance, Einstein Sentiment uses deep learning to classify text as positive, negative

or neutral. For sales this can be of use as prospect sentiment in an email can be identified and automatically rank or down. An advantage of using AI is that the model can be taught to learn and improve dynamically through feedback loops – the more data the business gathers and feeds into the system, the more accurate the model will get. Of course, the business needs to supervise the algorithms on a regular basis.

### **In Closing: Can you provide some specific examples of tasks that could be automated by leveraging this combination of voice technology and deep learning?**

An example here could be in the form of a smart personal business assistant, that could evolve and be trained to take over many redundant tasks for the salesforce, or to help individuals keep important updates and notes in mind (see the “Future Thinking” Box below). Such a smart assistant could for example be used to:

- **discover** hidden insights in the data, and provide an overview of the main factors driving customer satisfaction
- **predict** outcomes across every role or industry – for example, knowing which deals are most likely to close
- **recommend** the best action, such as how to keep a customer happy, by giving them the most attractive offer
- **automate** overall business processes and workflows, making agents more productive and customers happier

“The challenge is to couple such voice data to the underlying CRM-system the sales team or company is working with.”

It can also boost productivity by reducing data entry and call wrap-up time. With automated transcription capabilities, sales agents can focus on what matters – addressing the customer’s needs quickly and accurately. Besides improving productivity, it can improve customer engagement and satisfaction by ensuring a seamless customer experience across every channel. 🚀

**Thank you very much Mr. Friede for having taken the time for this interview.**