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All Businesses Are Data Businesses

Posted by Brad Kolarov on September 16, 2015 at 10:00am [View Blog](#)

By Brad Kolarov, co-founder and Managing Partner at B23, a boutique Big Data and Cloud Computing software development and implementation company

Have you seen the Audi commercial with the autonomous mail delivery drones stalking the employees leaving their office? If not, its below.

It's a bit of a stretch, but the commercial is pretty funny and a good example of the technological advances that are on the horizon. To manage a fleet of autonomous mail delivery drones an enormous amount of telemetry, geolocation, artificial intelligence (AI) algorithms, and flight coordination data would be required. This post describes our perspective that all businesses are data-businesses, even the ones that aren't. I will illustrate examples of available data to businesses, and I'll give a story of a seemingly simple business that is a data business but doesn't realize it.

Audi Drone Advertisement: <https://youtu.be/vcV71liAMwc>

Data Businesses?

Daily I speak with a variety of potential and existing customers who see themselves as “normal” businesses. The “normal” businesses range from commercial banks, law firms, maritime logistics companies, communications providers, mobile security companies, along with many others. All of these companies work incredibly hard to serve their customers’ needs in a competitive manner. After speaking to these customers and understanding their typical business problems, we mutually discover that they are no longer “normal” businesses addressing a customer need. Businesses in many different markets are beginning to realize they are all in the business of “data”– and so is your business.

Across all domains we see a common set of questions every business should ask themselves:

- 1) What data can we collect
- 2) What do we do with the data we collect

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3) What insights can we gain from the data we collect

These 3 questions and their associated solutions create a massive opportunity, and the massive IoT – Internet of Anything market.

Types of Data that can be collected by businesses



Driveway Sealing: Maybe data business???

I have a neighborhood friend who makes a very good living as the founder and owner of a large paving and driveway sealing company – let’s call them Paving and Sealing Inc.(P&S). Seems pretty basic, right? How could they be a data business? Below is Driveway Sealing 101, including the data P&S currently utilizes and the data they could potentially utilize.

Sign up:

My driveway needed sealing, so earlier this summer I went to P&S’s website and signed up. Within a few days I had a quote, which I accepted. A couple days before my scheduled date, P&S sent me an email telling me two things 1) “We aren’t sure what time we will seal your driveway because a system auto-generates the most efficient path for our crews.” 2) “You might receive an email the morning of your scheduled date if we need to reschedule.” (due to impending rain – they need 24 hours of dry weather).

Post Mortem:

After the job, I talked with my neighbor about what technology they use both to operate the business and to execute a sealing job. All-in-all, my neighbor does a great job of using data. He recognizes that his real job is weatherman who also happens to do paving and sealing. He might even be more accurate than your typical news weatherman; he is financially incented to be!

What technology P&S uses:

- 1. 3 different weather sites
- 2. Google Maps - Enterprise, to measure driveway area – for quotes, completed manually
- 3. Traffic Route generation system – gives crews most efficient routes to follow to complete jobs
- 4. Website and auto email service

Definitely a Data Business:

P&S is a company driven by data – it is a data business! P&S has even further opportunity to collect data and perform automated analytics. Below are ideas that P&S might use to automate their business and gain competitive advantage over local competitors.

- 1. Geolocation and Customer Data - Utilize Mechanical Turk (or similar outsourcing tools) along with Google Maps to outline the driveways and paving areas in P&S’s service areas – record areas and associate on addresses in a datastore – this will allow for immediate quotes via the website.
- 2. Geolocation, Financial and Customer Data – P&S can invest in researching specific geolocations to understand what areas are more profitable and where they should focus advertising dollars. They can also automatically prepare quotes in advance of crews going out and drop quotes in low

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revenue or high profit locations.

- 3. Telemetry & Telematics Data, Geolocation Data, and Mobile Data - Install OBD II (https://en.wikipedia.org/wiki/On-board_diagnostics) devices (or similar) in each vehicle; each night download the OBD II data via mobile device. This will give feedback on driver and vehicle performance, geolocation, and the amount spent at each job site or just sitting not working.
- 4. Mobile Data – have each worker use a mobile device to rate the level of difficulty of each driveway, i.e. gradient, cracks, holes, etc. Upload this information to the datastore to help optimize the accuracy of future quotes or recommend follow on work.
- 5. Geolocation Data – Upload Waze (or similar) daily traffic patterns to optimize the traffic route generation system.
- 6. Mobile Data and Weather Data – Continue to use the 3 sites, but create a simple input system to record the historical accuracy of each weather site.

These are just a few examples, if you have others I'd love to hear them! Of course, the investment required to execute these ideas and others must be weighed against an expected business return. This is a difficult assessment, but the introduction of analytics into our everyday lives as consumers is making it easier to understand and quantify the role data can play in supporting any mission.

As you can tell from the example, if even P&S is a data business, then yours probably is too. If you agree with my assertion that in 2015 and into the future all businesses are data businesses, then why aren't businesses collecting, processing, and gaining a competitive advantage from the data? In my next blog I'll go into the skill shortage and why companies like P&S aren't becoming data businesses.

You can also find this Blog and other B23 Blogs on Medium: <https://medium.com/@b23llc/all-businesses-are-data-businesses-4920d...>;

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