

THINKING ABOUT A DATA SCIENCE CAREER?

If you're thinking about your [#career](#) and have been reading about [#ai](#), [#datascience](#), [#ml](#), etc. consider this: Over 90 percent of the business population represents small and medium-sized businesses, also known as SMBs (SalesForce, 2019). These are businesses with under 500 employees.

What are the data needs of these businesses?

First, consider where these businesses store their data:

1. Employees, e.g., history, operational information.
2. Individual applications. Companies often buy applications that do one specific task, and these apps store their data in a proprietary way optimized for that application, e.g., [#scada](#) (supervisory control and data acquisition).
3. Various databases. Most applications have databases that can be accessed externally, but this access will probably require specific code developed for a specific task, e.g., transferring data from a permitting system to a cash system, or posting for the cash system to the GL.
4. Enterprise applications. SMBs will probably have at least one enterprise application like [#sap](#), [#salesfore](#) or [#oracle](#) and these applications and their data require an administrator knowledgeable in that application. These applications often take care of payroll, the GL.
4. Document management system (DMS).
5. Geographic Information System (GIS).
5. Drawings.
6. Maps.
7. Websites.
8. Filing systems (paper).

What is this data?

1. Database records. Think [#sql](#).
1. Transactional, e.g., numeric data like payroll, accounts receivable, payables.
2. Graphical, e.g., pictures, maps, drawings, scanned documents.
3. GIS data.
3. Free form text fields. e.g., logs, notes, email.
4. Complex and variable, e.g., addresses.
5. Distributed, or remote, not at a central location, e.g., [#scada](#), vehicle records, fuel consumption data.

So where does a ML, [#datascience](#) skill set fit in? I would say it doesn't, except in rare cases where business owner(s) have enough cash to consolidate and maintain, on an ongoing basis, the data required. So, if you're looking for a career that will sustain you and your family for the rest of your

life, don't chase a [#datascience](#) [#career](#), go where you're needed. Learn how to listen, structure [#data](#), write [#code](#), and be creative!

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October 22, 2022