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Early Origins of Data Management & Analytics

Big data is all the rage these days, and it is tempting to think of it as something radical, that has no precedent anywhere in the past. It is tempting, but it is also misguided.

In fact, using data-driven insights to optimize business processes is as old as the industrial business practices themselves. This can be tracked as early as 1898, when Bethlehem Steel Works, from Pennsylvania, gave Frederick Winslow Taylor (arguably, one of the first business management consultants in the modern sense) a mandate to improve the firm's efficiency by better gathering and analyzing key performance indicators (KPIs).

From that point on, the more data points a business would collect, the more accurate (and sometimes surprising) their analysis would become. As such, it should come as little surprise that every generation of business leaders since 1898 thought that they had a *big* data challenge that they had to solve.

The introduction of the first electronic computer systems (around 1950s) as aids in business management provided the much needed quantum leap and, for the first time, allowed to collect and analyze vast quantities of information. Of course, the "vast quantities" of the 1950s are tiny by modern standards, but one principle still remains to

this day: when you talk about big data, you are always talking about computer systems right on the edge of what's possible. IBM's Sabre (Semi-Automatic Business Research Environment), which was used as a central reservation and asset tracking system by American Airlines, clearly started that trend by making impossible data management feats possible in a now distant past of the 1960s.

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