Analytics & Data Science During a Recession: Maximizing Revenue in Hard Times

Scott Sanders, Ph.D.

Analytics Strategy Data Stories

Increasing revenue seems relatively easy in a growing economy and roaring stock market. Amid ideal market conditions, consumers and businesses generally spend more freely, which creates a rising tide that lifts all boats. However, when indicators point to softening demand and a possible recession, we tend to retreat—cutting costs when investing in analytics and data science is actually the smart move.

How to Think about Recessions

It's important to recognize that most modern recessions last less than a year. Furthermore, due to lagging indicators, we're usually already in one before it is officially recognized. Finally, the natural state of the economy is one of expansion, meaning the strategy used to weather a recession has implications for its subsequent competitiveness.

Research shows that during a recession, highly reactionary strategies—including layoffs and uniform cost-cutting measures—ultimately make companies less competitive and impede post-recession growth compared to companies that balance cost cutting with future investments. In fact, companies that do the best following a recession are those that simultaneously improve operational efficiency while increasing investments in marketing. Analytics and data science are well positioned to do both by allowing companies to monitor their performance and the environment in real-time, make data driven decisions, and optimize marketing and operations.

Develop an Analytics & Data Science Playbook

Your goals during a recession should be to increase efficiency and develop new markets. Fortunately, data-driven decision making, machine-learning optimizations and automations, and investment in digital marketing efforts can help you meet those goals. But you need a proactive game plan.

Here's a rough playbook for using analytics to survive and thrive after a recession:

Collect New Data. Whether it's the result of a global pandemic, a burst market bubble, an international conflict, or another unusual event affecting markets, recessions are by definition abnormal. This means you cannot fully trust extant data and machine learning models when underlying assumptions may have changed. A first step is to ensure that you're capable of collecting new data to assess what has changed and validate previous assumptions.

Use Analytics to Spot Risks and Opportunities Early. Gain a competetive advantage by leveraging traditional business intelligence and analytics to determine what has changed and if it represents a potential risk or opportunity. However, this shouldn't be a fishing expedition—it's easy to spend time combing through data only to turn up empty handed. Instead, approach analytics with focused business questions. For example, have the purchasing patterns of existing consumers changed? Are there indicators that consumers are substituting more expensive products with budget friendly alternatives?

EVOLYTICS
Making a Positive Difference with Data.

contact@evolytics.com
816.778.7300
evolytics.com
contact@evolytics.com | 816.778.7300 | evolytics.com

Optimize Marketing and Operations with Machine Learning Models. Don't waste time developing predictive forecast models while in the midst of an aberrant moment in history. Instead, focus your efforts on machine learning models that optimize marketing and operations. Examples include using multi-armed bandits to optimize email campaigns and website content, recommendation models to increase personalization of product suggestions, and keyword optimization models to efficiently allocate your budget for paid search advertising.

Consolidate Tools. Modern tech stacks involve several discrete tools integrated to move data from the point of collection to analysis. Each tool in the stack typically entails a cost and additional effort to maintain the interconnections between tools and platforms. In some cases, you can gain operational efficiency by moving to an integrated tool or suite of tools from a single vendor at a lower investment than the aggregated costs of an existing tech stack.

Outsource Critical Projects. During recessions it's common for businesses to reduce payroll to control costs. Cutting staff can hurt morale and ultimately raise costs when new employees are hired at increased salaries when the economy rebounds. In contrast, hiring freezes control costs but at the expense of needed manpower for essential analytics and data science work. One solution is to outsource these functions. The elastic, on-demand nature of consultancies does not raise fixed payroll costs but allows you to complete critical projects in a timely manner.

Conclusion

It should be noted that none of the above happens overnight, which means the ideal time to develop an analytics and data science program is before a recession begins! That said, there is much to gain by responding proactively in the face of a recession. Evolytics can help build your Analytics & Data Science Playbook, and partner with you on any analytics or data science solutions. Please don't hesitate to reach out for an initial consultation. Let's talk!

Scott Sanders, Ph.D., Senior Manager of Data Science, uses experimentation and computational methods to help clients make data driven choices. He has published research on brand/consumer engagement via social media, user evaluation of recommender systems, and the factors that determine price premiums in online auctions.

NOTE: The Evolytics website, blog, and social media accounts went offline after the company was acquired by Concord. This is a re-creation of a post from the Evolytics blog for portfolio purposes only.