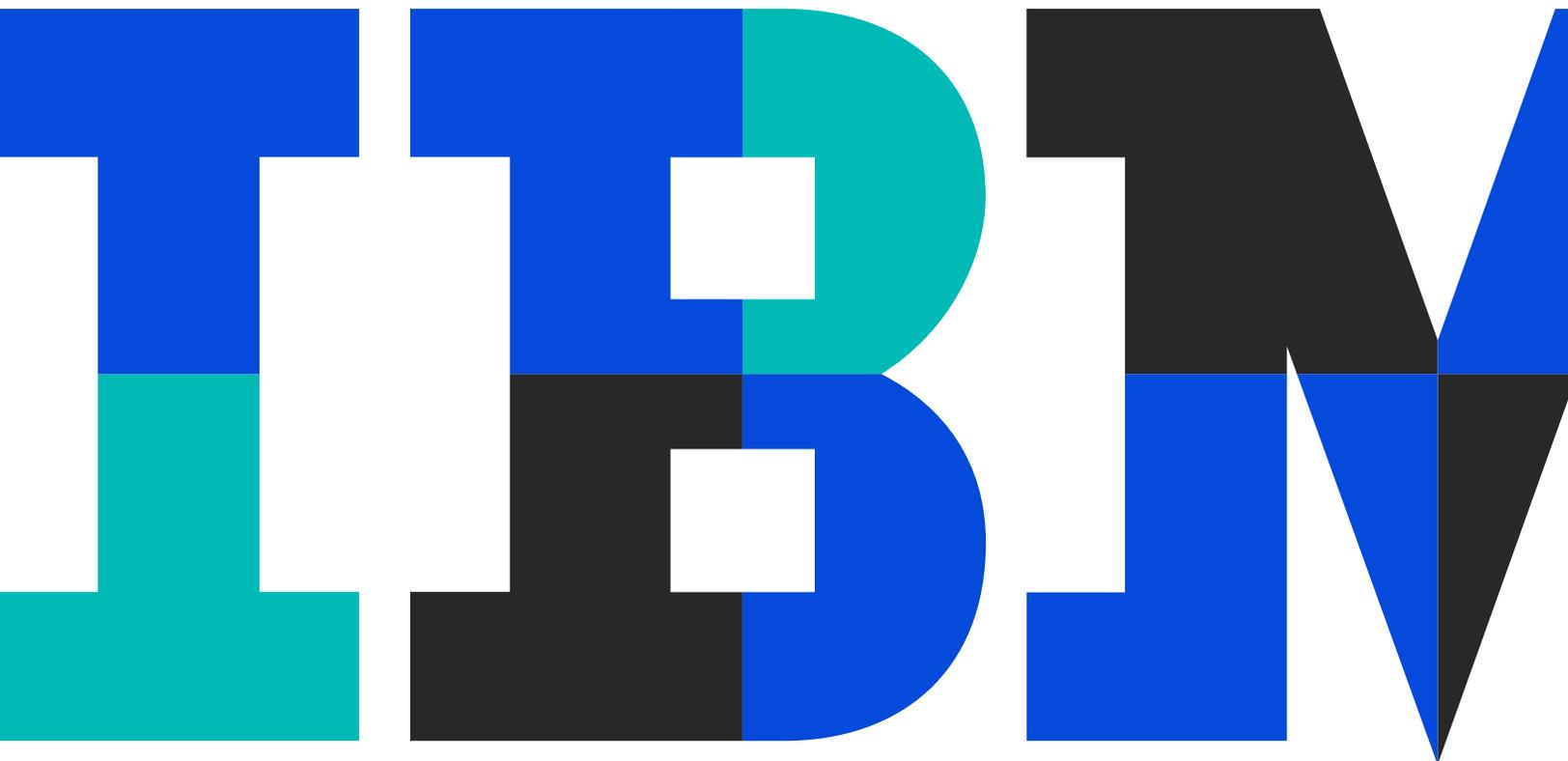


How industry experts are using IBM SPSS® Statistics for better outcomes

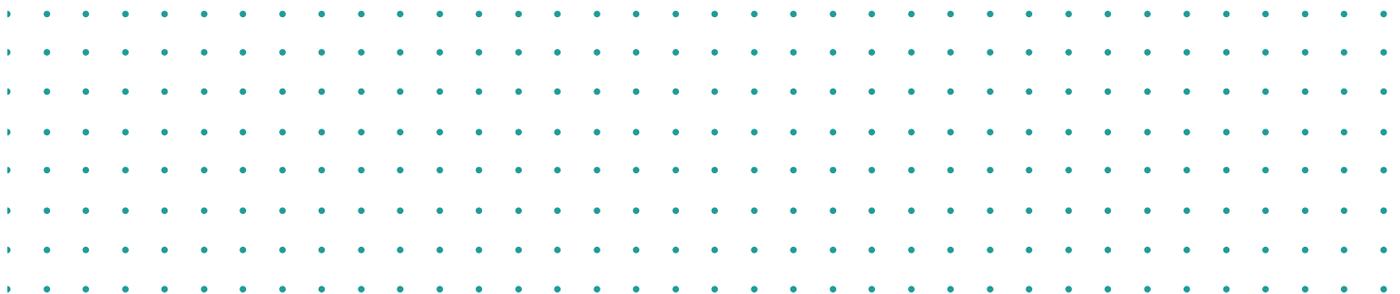


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Introduction

IBM SPSS® Statistics is a fast and powerful solution that propels research analysis in numerous industries. SPSS Statistics is used in education, market research, healthcare, government and retail throughout the entire analytics process, from planning and data collection to analysis, reporting and deployment. This paper explores how these industries are transforming themselves by applying predictive analytics to their decision-making from the point of view of actual users. From their insights, you can determine how you can use it to drive your desired outcomes.



Better outcomes for academia

The pressure on educational institutions to enroll, retain and graduate students increases each year, yet enrollment targets are not being met, possibly due to recruitment resource constraints. If you're nodding your head in agreement with this statement while feeling like you can't get ahead, you are not alone. According to recent surveys and reports, 62 percent of colleges and universities missed their enrollment targets, and as much as 80 percent of four-year institutions have reduced their recruitment and admissions budgets or kept them flat. Although 60 percent of colleges and universities have some kind of analytics-driven initiative in place, 83 percent are not fully satisfied with their ability to use existing data to achieve desired results.¹

Addressing education challenges with IBM SPSS Statistics

For 50 years, SPSS software has supported the data analysis needs of faculty and students at academic institutions worldwide. All U.S. Ivy League schools, 9 out of the top 10 online colleges and 80 percent of all U.S. colleges and universities are currently using SPSS Statistics software.² By enabling your institution to focus on patterns that indicate student success, **SPSS Statistics brings clarity to the combination of factors that leads to dropouts. You can identify at-risk students and intervene to ensure those students not only graduate but also succeed.** Your faculty can also better analyze complex data sets and uncover hidden insights that unlock innovation across myriad areas, such as enrollment and accreditation management, student affairs and alumni development.

How universities are using SPSS Statistics

Watch David Wright, Wichita State professor, explain how SPSS Statistics helps the university with trend analysis, forecasting enrollment, space utilization and tuition revenue and cost.



[Learn more about SPSS Statistics for Academia](#)

“Besides the usual reports and analysis, the real key to how we use SPSS Statistics is the ability to pull SPSS and grab data from our SIS or any data warehouse anytime during a live conversation and contextualize the conversation so that there is information provided to everyone to validate if it is a good idea or a bad idea.”

— David Wright, Professor, Wichita University

Better outcomes for market research

In market research, there is growing pressure to deliver actionable insights to clients who want to make informed business decisions quickly and expect detailed strategic reports within aggressive timelines. Meanwhile, scanning through the data can be difficult, especially considering the rapid rate at which new data is generated every day. Juggling multiple statistical techniques only adds to this challenge. If this sounds familiar, then you're not alone. Rather, you're like most market researchers, who are seeking a reliable solution to help them understand data, analyze trends, forecast and plan in order to validate assumptions and drive accurate conclusions.

Addressing market research challenges with SPSS Statistics

SPSS Statistics helps market researchers gain insights from large-scale customer data with sophisticated statistical analysis. Powerful survey research technology enables more accurate identification of market trends.

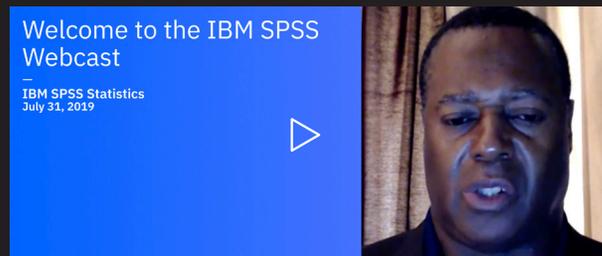
Predictive analysis, statistical learning, perceptual mapping and preference scaling, along with specialized planning tools such as stratified, clustered or multistage sampling, are combined with the ability to model the consumer decision-making process. The result? Your inferences can now be statistically validated. You can visualize and explore relationships in your data to predict outcomes. And you can inform product design with the features and attributes that are most important to clients and target markets.



Powerful survey research technology enables more accurate identification of market trends

How market researchers are using SPSS Statistics

Miles Development Industries Corporation, a consulting practice and venture capital firm, uses SPSS Statistics software to look at behavioral data patterns in consumer, voter and even animal behavior. See forensic marketing expert D. Anthony Miles share his experiences with SPSS Statistics.



[Learn more about SPSS Statistics for market research](#)

“SPSS made sense to me ... I like it because it allows me to identify and predict relationships with structural equation modeling.”

— D. Anthony Miles, forensic marketing expert,
Miles Development Industries Corporation

Better outcomes for government

Did you know that 75 percent of government entities are distrusted by citizens? And that the same percentage of government leaders say traditional business models are not sustainable in the current environment of digital disruption? All over the world, governments are feeling the pain of using outdated technology to address new and different citizen expectations. They also acknowledge that it may take time to re-examine their role in society and re-imagine how to achieve sustained success. All government agencies need deeper insight into citizen needs, the efficacy of government programs and how to budget for those programs as they start on the path to becoming more modern, collaborative and digital.

Addressing government challenges with SPSS Statistics

With SPSS Statistics, a seamless flow of data to government agency decision-makers helps them improve citizen services, make smarter decisions, manage budgets and mitigate fraud and threats.

Linear regression, Monte Carlo simulation, geographical analysis and other statistical methods enable deep insights from data that can improve the quality of life for citizens². The ability to investigate the relationship between variables when studying citizen preferences or analyzing budgets enables agencies to predict and target the needs of citizens more accurately. SPSS Statistics also provides the predictive analytics tools that can help your government agency detect fraud and waste, faster and better.

How governments are using SPSS Statistics

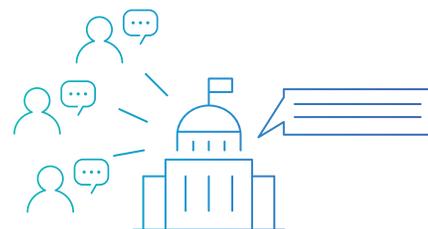
Laura Squier, Consulting Analytics and AI at OZ, shares how she uses SPSS to analyze data for government clients and help them achieve better outcomes.



[Learn more about SPSS Statistics for government](#)

“I used SPSS Statistics across-the-board exploratory data analysis ... I can look at hundreds of variables at once ... to be viewed, copied or pasted into Excel, PowerPoint, etc.”

— Laura Squier, consulting analytics and AI, OZ



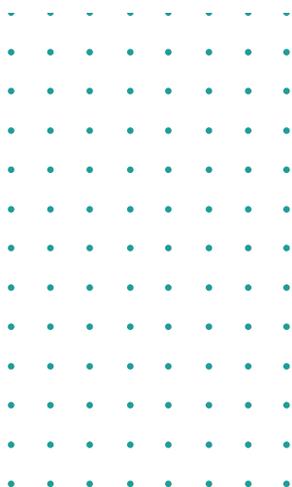
SPSS Statistics enables agencies the ability to investigate the relationship between variables when studying citizen preferences

Better outcomes for healthcare

Implementing and applying solutions for better healthcare delivery and outcomes requires overcoming barriers such as the nature of healthcare decisions, problematic data conventions, outdated practices in care delivery and misaligned incentives for different providers. If you're a provider, you know that analytics can help. But highly sensitive information and the need for timely — and often instant — action means that these analytics must be able to address the very specific needs of healthcare. After all, in many cases, healthcare decisions have life-or-death consequences.

Addressing healthcare challenges with SPSS Statistics

With SPSS Statistics, your healthcare organization can implement a data-driven model of care that improves quality, lowers costs and drives better patient outcomes. A wide range of statistical procedures — including linear regression, Monte Carlo simulation and geographical analysis — can surface critical insights from patient data. You can easily investigate the relationships between variables such as patient treatment and dose responses in clinical trials to improve treatments and better predict outcomes. And, univariate and multivariate modeling techniques can drive the most accurate conclusions when working with data that describes complex relationships.



How healthcare organizations are using SPSS Statistics

Using SPSS Statistics, University Hospitals of Leicester validated and enriched a system called POPS that scores patients' on-risk factors, helping doctors decide which patients need urgent care and which they can safely send home.

[Read the case study →](#)

[Learn More about SPSS Statistics for healthcare](#)

“Our doctors now use POPS [a system enriched by SPSS Statistics] to assess incoming patients, determine the severity of each case and prioritize treatment. Ultimately, this helps us provide better care and improve patient outcomes.”

— Dr. Damian Roland, consultant in pediatric emergency medicine, University Hospitals of Leicester

Better outcomes for retail

The increased influence of social media and mobile apps has transformed retail, ramping up the pressure to deliver omnichannel experiences. Customers are more willing than ever to switch retailers based on a better offer or social media recommendation. Competition for customer dollars is fierce. Meanwhile, your retail business is generating massive volumes of data daily, and you need to translate it into valuable insights that point to consumer preferences or the latest market trends. But if you are like most retailers, using this data efficiently to deliver the experiences customers expect while improving the performance of promotions, campaigns, assortment and replenishment is a major challenge.

Addressing retail challenges with SPSS Statistics

SPSS Statistics can help retailers better understand their customers, make the right offers to consumers and deliver those offers through the right channels. You can determine future changes in selling patterns and quickly translate that into a series of coordinated decisions that go right up the supply chain. SPSS Statistics can also help you profile customers based on their browsing and purchase history, track the responses to different types of offers to discover customer preferences and identify the behavior that converts browsers into shoppers:

- Use market basket analysis to determine target offers that can increase profits.
- Determine the next likely purchase based on your customer profiles and histories.
- Tailor offers to the point of interaction and build cross-channel loyalty with coupons informed by online activity.

How retailers are using SPSS Statistics

Redcats Group wanted to provide its brands with a common, user-friendly predictive analytics tool, so they chose SPSS software to perfect their marketing strategies.

[Watch the video](#) 

“With SPSS software, your energy and intelligence are focused on the best way of getting the best information.”

— Claire Fouquerand, Vice President, CRM and Customer Innovation, Redcats Group

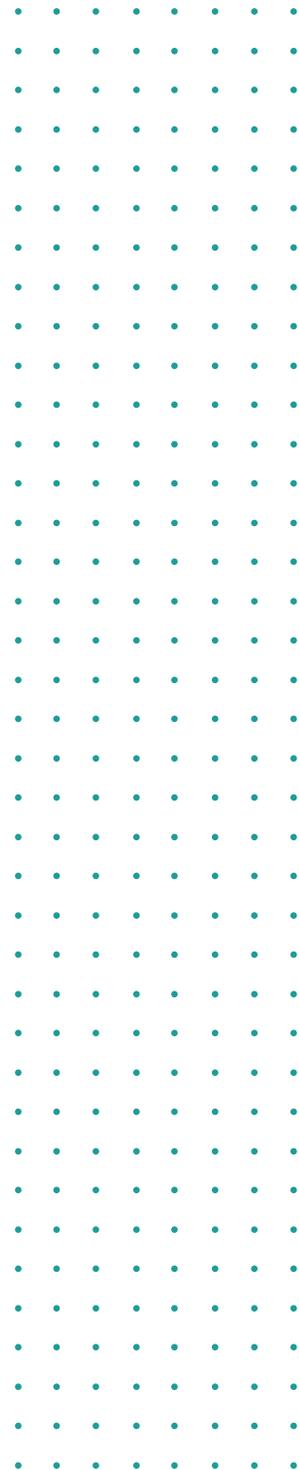


SPSS Statistics can also help you profile customers based on their purchasing history

Conclusion

SPSS Statistics helps data scientists, executives, business analysts and managers alike throughout the entire analytics process: planning, data collection, analysis, reporting and deployment. Whether you're a chief data officer or a market researcher, you can use SPSS Statistics to identify the insights you need to succeed, be it for determining student risk assessment or the next box office hit.

[Start your free trial →](#)



IBM Data and AI

Sources

1. On-Demand Webinar - Empower your educational institution to make the best decision every time using SPSS Statistics
2. Citizens today expect more from their governments. Are you ready?

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